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THE

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# ORIGINAL LECTURES.

## ON GENERAL AND LOCAL CHEMICAL DISORDERS ARISING FROM PEROXIDATION,

AND ON THE MECHANICAL DERANGEMENTS THEY PRODUCE.

By H. BENCE JONES, M.D., F.R.S.

### Part III.—Lecture IX.

### On Bright's Disease.

The ordinary oxidation which takes place in each texture of the body gives heat and motion sufficient to carry on the ordinary nutrition of the structure: but the smallest increase of oxidation set up by direct extra-vascular or indirect intra-vascular motion through the nerves is followed by altered heat, motion, and nutrition.

The effect of slow, but continued peroxidation may be watched in the skin or in the eye continually; and within the body mechanical alterations show no less clearly what such increased chemical changes can effect. The slightest long-continued mechanical pressure produces not only thickened cuticle, but altered nutrition of the skin itself; or a slight cut may cause a thickening which may last for months or years after the slight inflammation which united the surfaces has passed away. So in the cornea the most chronic inflammation from some slight mechanical cause will leave a thickening which may be perceptible for years. Or if you look within, you may see the most chronic gout, rheumatism, or scrofulous inflammation, when long continued, slowly cause such an amount of thickening in the joints and other parts that the utmost mechanical impediment to motion may ultimately result.

Of all textures the cellular texture is the one in which substances pass most immediately from and to the blood, and in which alterations of oxidation and nutrition are most liable to occur.

In the kidney this cellular tissue constitutes the interstitial structure and the capsule. It is much less developed than in other organs, and it is so related to the vessels and tubes that altered action can hardly be limited to this structure alone.

Still, for clearness, I shall treat of its thickening and cell growth under the head of interstitial nephritis. Dr. Dickinson includes this inflammation in his parenchymatous nephritis; but Virchow has defined parenchyma as "the proper structure" of the kidney, including the tubes, with their epithelium and capillary system; so that, though I shall use Dr. Dickinson's observations, I shall not adopt his nomenclature. In the *Med.-Chir. Trans.*, vol. 43, p. 235, Dr. Dickinson says:—"It is common to meet with kidneys as to which there is a doubt whether they are healthy or not. The capsule is a little thickened, and it is more adherent than it should be. When removed the surface presents a confused, muddy appearance; and it may be noticed that a thin layer of capsule is adhering to the kidney. As yet there is no distinct granulation, though the tendency may be indicated by one or two curved depressions, or by a little general roughness. On examining such a kidney in section, we shall find all the central parts quite healthy, save that closely attached to the inner capsular film; we shall see certain narrow projections insinuating themselves between the tubes. If we observe the position of an external depression or cicatrix, we shall find that from this passes inwards a process of fibrous-looking material, which is seen to involve in its interior the contracted remains of tubes it had embedded in its passage. It looks as if an effusion, small in amount, had commenced in the surface and worked its way inwards among the ducts, numbers of them thus becoming completely surrounded. After a time contraction follows in the wake of the exudation, and the tubes imbedded are reduced to mere microscopic threads. At the same time another result of the contractile tendency appears. The points at which the processes originate become depressed, and when these are numerous and tolerably regularly distributed the result is superficial granulation."

A slight increase of the ordinary oxidation in the cellular tissue leads to increased flow of blood, to increased production of cells and fibrillæ, and when the chemical action is considerable to suppuration. After a time the increased pressure from the effusion and thickening causes diminished supply of blood, and hence imperfect nutrition and oxidation, contraction, and even fatty deposit are seen in the interstitial texture, and ultimately the nutrition and secretion of the kidneys is visibly affected. The kidney becomes smaller than natural, the capsule very adherent, the surface rough and uneven, the stellated veins distinct, the substance hard; frequently the capsules of the malpighian tufts and the basement membrane of the tubes ultimately are involved in the thickening. Interstitial nephritis and cirrhosis of the liver are similar diseases affecting similar structures. In both the mechanical pressure that is produced stops the chemical function and the nutrition of the organ in which it occurs.

### *Causes of Interstitial Nephritis.*

Every substance that enters the stomach passes into the blood and surrounding textures according to its diffusibility. It is carried by the blood everywhere, and again, according to its diffusibility, it passes into every structure of every organ and into every surface by which it can be thrown out.

In its passage in, during its stay, and in its passage out, it acts according to its chemical affinities for the gases, liquids, and solids with which it comes in contact, and the effects produced vary according to the chemical actions that take place.

If the ordinary substances that daily go in are represented by oxygen, water, salt, bread, meat, and stimulants, none of these except the oxygen have the degree of chemical action which so-called stimulants possess. Setting aside tea and coffee, our stimulants are essentially alcohol; and it is the long-continued strong chemical action of this substance on oxygen and on the different textures at the temperature of ninety-eight degrees, that gives rise to that increased motion and increased thickening, followed by contraction and sub-oxidation, which constitutes cirrhosis of the liver and kidney.

Let me for a moment follow a dose of alcohol through the system. It passes through the stomach, and in going through is to a small extent oxidised. The greater part escapes, and enters the circulation, acting there on the oxygen, fibrin, albumen, and blood globules to a small degree. In a few minutes a part passes, still being oxidised, into every secretion, as, for example, into the lungs, kidneys, liver; whilst another part passes into every other texture; and on each substance in each texture the alcohol produces its chemical action, still continually undergoing oxidation, so that in a few hours one part has entirely escaped, and another part has been entirely oxidised in the blood and textures. What has the alcohol during this time done? It has acted chemically on oxygen and on the textures with which it has been in contact. The first action has little to do with the strength of the alcohol. Weak or strong, it combines with oxygen; increased oxidation, increased circulation, increased secretion, increased effusion of lymph, altered nutrition result. The second action depends on the strength of the alcohol. Strong alcohol acts chemically on albumen, fibrin, cellular tissue, etc. It has a powerful attraction for water, and it shrivels up cellular tissue, hardens fibrin, and precipitates albumen by its chemical properties.

To no organs of the body is more alcohol taken than to the kidneys and liver, and in no organs are the mechanical results of its chemical actions more manifest and the consequences of the altered structure more apparent; and the increased oxidation, the increased flow of blood, the altered nutrition are identical in kind with the first actions of inflammation; and when the series of actions are repeated over and over again for years, the result is the same as might have been produced in a shorter time by an ordinary inflammation when no alcohol whatever had been taken.

Dr. Christison states that three-fourths of all the cases of Bright's disease which he saw were produced by the habitual long-continued abuse of drink. Very great occasional excess did not act so strongly as long-continued smaller excess.

No doubt the alcohol acts on the vessels and ducts; but not so powerfully as on the interstitial texture, with which we are at present occupied.

### *On the Symptoms and Consequences of Interstitial Nephritis.*

If the disease could be limited to the interstitial texture, and to that alone, it is possible that no appearance of albumen in the urine might occur. No fibrinous casts might be seen. The kidney might gradually, by its contraction, cease to secrete urinous matter, and uræmia would be the final result. But the affection spreads to the vessels and tubes, and then the pressure in the tufts is altered and albumen is effused, the production of epithelium is increased, and some fibrinous casts appear in the urine.

Usually the specific weight of the urine becomes less and less, and generally this weight may be taken to be directly proportional to the amount of cortical structure that exists;

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so that when the specific weight of the urine is least the cortical structure is least also. Even when hardly any cortical structure is left, an excess of water of the lowest specific gravity may be thrown out, most probably from increased circulation in the mammary part of the kidney.

As long as this excessive flow continues no dropsy occurs, and hence throughout the whole course of the disease no dropsy may occur. The altered blood and the altered lymph may give rise to all kinds of hæmorrhages, thickenings, and effusions, and chemical actions on the nerves and muscles, which may be summed up in the word poisoning, and which I have already brought before you when speaking of uræmia.

At any period during the progress of the disease more acute inflammation may suddenly come on, and in the cellular tissue, more readily even than in the tubes, pus-cells are readily formed, suppuration extends throughout the altered cortical structure, and rapidly that assemblage of low feverish general symptoms which now appears to us to be so inaccurately designated as a typhoid state, is produced.

With regard to treatment, medicine avails little for stopping the effect of alcoholic poison or for removing the thickening of the interstitial structure. No appreciable alteration of structure occurs until the alcohol has acted for months; but as each day produces its infinitesimal effect some good may be done by recognising the disease early and by stopping as far as possible the further action of the poison. Usually the second nature cannot be changed, and the treatment consists then only in alleviating symptoms and in warding off complications as they arise.

Of all the symptoms that of general debility is the one which will most frequently present itself to you, and of all the complications uræmia is the one which is most serious.

The loss of general mechanical power consequent on wrong chemistry of the blood and lymph begins from the very commencement of the disease, and lasts until its final close.

One of the first effects in the blood is the insufficient production of blood globules, on which the passage of oxygen into the blood depends. The gradual diminution of albumen in the blood is a very much more remote cause of symptoms, and as long as food can be taken this admits of an easy remedy; whilst the reproduction of blood globules requires a far more complex chemistry, and necessitates an increased supply of iron for the formation of hematosine.

The accumulation of descending substances in the blood, and still more in the lymph which surrounds and permeates each particle of every structure, must begin from the moment that the kidney begins to perform the function of oxidation and excretion imperfectly. Still it is evident from the experiments in which one kidney is removed and no poisoning occurs that even half the structure may be destroyed by disease without the occurrence of bad symptoms. This is a large margin for safety, but as soon as it is removed the lymph begins to cause wrong chemistry in the textures. Products of downward change from urea upwards keep circulating in the blood and lymph, and these substances produce their chemical actions everywhere. Thus on each mucous and other membrane urea exudes, and in the mouth even it is converted into carbonate of ammonia, and this, with some urinous smelling substance, gives the foul breath that is so frequently observed. The same substances effused in the stomach give rise to sickness, and in the bowels often to diarrhœa. The higher uric acid compounds in the joints produce chronic gout, and the excess of kreatin in the muscles may stop the changes in the syntonin, whilst the still higher compounds as yet uninsulated may in the nerves and brain produce irritant or narcotic symptoms from the slightest cramp or subsultus to the most profound coma. That there is in every case some distinct local action is clear from the amendment or arrest of the symptoms which is occasionally observed. The sickness and the diarrhœa may be stopped, the convulsions may cease, the coma may disappear.

Let us look at the removal of the poisonous substances a little closer. The vomiting and diarrhœa are not to be checked by strong remedies when the ammoniacal and urinous odour tells you of the accumulation of poisons within. You must, whilst endeavouring to obviate the extreme prostration which these actions cause, remember that more serious muscular and nervous actions are at hand, and that except by acting on the skin, you have no other gate through which the poisonous substances can pass out. Warm baths and hot air baths give no immediate relief like vomiting and purging. I have been asked by a patient for an emetic when he was within a few moments of his death from exhaustion. Almost whilst speaking to me another violently relaxed action of the bowels came on, and from the effects of this he died.

By the stomach, by the bowels, and by the skin, all poisonous substances can be thrown out of the blood and lymph, and, according to circumstances, by this or that road a passage must be obtained.

Irritative actions of the nervous system seem to mark a less degree of affection of the nerves than narcotic actions, and cramps, subsultus, and epileptiform convulsions pass away or yield to treatment far oftener than oppression and coma.

To any of you who have witnessed the stoppage of convulsions in Bright's disease by the inhalation of chloroform, the thought must have occurred that the chloroform must have so acted directly on the nerve as to render it incapable of being irritated by the urinous poison. A volatile coma, so to say, is produced. Perhaps the local action of the urinous poison is checked by the substance on which it was acting being altered in composition by the chloroform. But when the urinous poisons are causing both convulsions and coma, then this fixed coma is more dangerous than the convulsions; and all your efforts must be directed to stop the local action on the nerves, and whilst doing your utmost to evacuate the poison, you must try, by counter-irritation, to determine by blisters the largest possible effusion of serum and lymph as near as possible to the spot where the wrong action is taking place.

(To be continued.)

## ORIGINAL COMMUNICATIONS.

### ON

# EXCISION OF ENLARGED SPLEEN, WITH A CASE IN WHICH THE OPERATION WAS PERFORMED.

By T. SPENCER WELLS, F.R.C.S.,
Surgeon to Her Majesty's Household, and to the Samaritan Hospital.

The idea of removing an enlarged spleen first occurred to me at a meeting of the Pathological Society in 1862. Mr. Nunn exhibited a spleen which weighed thirteen pounds and a-half, and appeared to have been the only cause of the death of the patient. My remarks upon the specimen are recorded in the *Medical Times and Gazette*, December 13, 1862. I asked, "Whether (as the patient was apparently being killed by the splenic tumour, and by nothing else) the question of removal by Surgical operation had been considered. The spleen could be removed very easily in dogs and other animals; they seemed to remain perfectly well without a spleen, and there certainly could not be more difficulty in removing a large spleen from the human body than a large ovarian tumour." I added, that if I "met with a case where the patient was evidently being killed by a large spleen, where all remedies had proved useless, and where the dying person was willing to run the risk on the chance of saving his life, I would certainly be disposed to remove the tumour."

At that time I did not know that the operation had ever been performed; but very soon afterwards Dr. Simon, of Rostock, sent me a very elaborate treatise on the extirpation of the human spleen, published in 1857 (a). From this work I learned that Quittenbaum, of Rostock, in 1826, and Küchler, of Darmstadt, in 1855, had each excised an enlarged spleen. These appear to be the only two authentic cases on record. A case is attributed to a Neapolitan Surgeon, named Zaccarelli, who is said to have operated, in 1549, upon a Greek woman, 24 years old, whose abdomen was enormously distended, yet the spleen, after removal, only weighed thirty-two ounces. The report of the case is so meagre and unsatisfactory that almost every writer who has commented on it has rejected it as untrustworthy. Simon suggests that the tumour was probably ovarian, and that it was the cyst, after the contents had been evacuated, which weighed thirty-two ounces. But the cases of Quittenbaum and Küchler are undoubtedly authentic.

Quittenbaum's patient was a married woman, 22 years old, who had been married fifteen months, had menstruated regularly before marriage, had never had ague, but after a severe cold felt acute pain in the left side; the catamenia were suppressed, and the abdomen gradually enlarged for nine months. She was thought to be pregnant; but time passing on, Quittenbaum detected an enlarged spleen, ascites, and anasarca of the legs. He removed the spleen by an incision ten inches long in the linea alba, extending from the ensiform process to three inches above the symphisis pubis. Nine pints of ascitic fluid escaped, and the spleen, which was quite free, was removed after a silk ligature had been carried round the vessels. There was very little bleeding. The intestines which had escaped *were anointed with warm olive oil!* before they were returned. The wound was then closed by sutures, and the ends of the ligature on the splenic vessels were brought out through the middle of the wound. The patient only lived six hours. After death the ligature was found quite firm. It included a small piece of the pancreas. The liver was small and hard, in all probability in a state of cirrhosis. The case was one in which the operation certainly ought not to have been performed. The extent of the ascites and anasarca should have taught the Surgeon that failure was almost certain. The spleen weighed five pounds. In Küchler's case the spleen weighed three pounds. The patient was a man, 36 years old, who, fourteen years before, had suffered for nine months from ague, and soon afterwards from enlarged spleen. The incision was only four inches long, and extended from the costal cartilage along the outer border of the left rectus abdominis. The spleen was non-adherent, and was easily turned on its edge and pressed through the opening. A little serum escaped—the first evidence of commencing ascites—seven vessels were tied, and the spleen cut away. The wound was united by sutures, and the ends of the ligatures on the splenic vessels were brought out as in Quittenbaum's case. The patient rallied well, but two hours after the operation died quite suddenly. At the examination of the body the liver was found to be cirrhosed. The cause of death was the escape of twenty-two ounces of blood into the peritoneal cavity from a small branch of the splenic artery which had not been tied. In both these cases the enlargement of the spleen was complicated by cirrhosis of the liver. In the first case, the patient was so nearly moribund that no severe operation ought to have been attempted. In the second, the tumour was not so large nor the sufferings caused by it so great as to warrant a dangerous operation, while the dependence of the enlarged spleen upon ague ought to have suggested a course of Medical treatment before resorting to operation. Still, the possibility of removing a large spleen without difficulty was proved, and my determination to operate if I should meet with a suitable case was strengthened.

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(a) "Die Extirpation der Milz am Menschen." Giessen, 1857.

In the autumn of 1863 I was consulted by a lady who had a tumour—evidently a spleen enlarged to three or four times its natural size—between the left false ribs and the umbilicus. There had been no attack of ague. The face was very pallid, and there was a considerable excess of white corpuscles in the blood. Bromide of potassium and quinine were each given freely without effect. The spleen rapidly enlarged. Dr. Jenner and Sir Ranald Martin consulted with me in the spring of 1864; but the state of the blood set aside any serious consideration of the question of operation. The patient died in March, 1865, and Mr. Michell Clarke, of Clifton, examined the body at my request, with the express object of ascertaining what would have been the mechanical difficulties encountered if the large spleen had been removed. He reported that "it was very easily drawn through a long incision in the linea alba, and the vessels having been tied in three or four bundles, it was detached. There was not the slightest adhesion to any organ, nor to any other part." In the early part of this year I have seen other cases of enlarged spleen with Dr. Budd, Dr. Boulton, of Horncastle, and Dr. Gill, of Bow. But these were dependent upon malarious influence, have been subjected to Medical treatment, and the patients were not so seriously affected by the tumour as to make a dangerous operation advisable.

At length I was consulted by a patient, who was evidently dying from a large spleen, and who, so far as I could discern, had no other disease. She was a married woman, 34 years of age, who had been married at the age of 19. She had three children, the youngest of whom was born eleven years ago. She had never miscarried. The catamenia had been regular, but very scanty for the last five years. Leucorrhœa was constant. She had always been very weak after her confinements, but had never had any serious disease. Her father and mother were both insane, and she had lost a brother and two sisters with phthisis. She had been as well as usual till the latter part of 1864, when she began to feel ill and weak, and continued to do so; but it was not till last April that any swelling in the abdomen was noticed. It was first observed beneath the left false ribs, and grew downwards, and to the right. At my first visit on October 12, 1865, I found the spleen extending as high as the seventh rib, and so low in the pelvis that it could be felt by the vagina in front of the uterus. The notch was distinctly perceptible a little above the umbilicus. On the right side below the umbilicus it extended within three inches of the anterior superior spine of the ilium. On the left side the posterior border was felt quite free and well defined in the loin. It was impossible to ascertain by palpation or percussion where the enlarged spleen and left lobe of the liver met, nor could any enlargement of the liver be detected. Some dilated superficial veins ran over the tumour and left side of thorax to the left axilla. There was no œdema of the legs, nor any sign of dropsical effusion nor glandular enlargement. The complexion was rather pallid, but the lips, gums, and conjunctivæ were of a good colour; indeed, rather florid. She had been confined to her bed for nearly a month, owing to the pain in the abdomen and general uneasiness; but the appetite was tolerably good. There was a tendency to constipation. I explained the nature of the disease to the husband, and said that nothing but an operation, which had never been done in England, and only twice abroad unsuccessfully, offered a hope of saving life; and I prescribed bromide of potassium once a-day and quinine once a-day. I saw her again in a fortnight. She had been unable to take the quinine, as it caused headache, but had taken the bromide. The tumour had increased a little; otherwise, there was no change. Iron was ordered, and I saw her again a fortnight later, November 11. The catamenia had appeared twice within the month. Her nights had been more disturbed by pain; she had a little cough, but air entered both lungs freely. The heart was pushed a little upwards, and to the right. The urine was acid, deposited urates, and was free from albumen. The spleen was rapidly increasing in size, and I proposed a consultation with Dr. Jenner, who saw the patient with me on November 14. He observed a soft anæmic cardiac murmur, and a small tumour just above the umbilicus, to the right of the notch in the spleen, which we supposed either to be a splenculus or a part of the pancreas. The blood was carefully examined, and a slight excess of white corpuscles was observed, but not greater than is often seen in pale persons.

Dr. Jenner expressed his opinion that the patient could not live long if left to Medical treatment only, but that excision of the spleen did give the "*shadow of a chance*" of saving life. The patient and her husband considered the matter, and I performed the operation, by their desire, on November 20. Mr. Clover administered chloroform, and I was assisted by Drs. Bowen, Ritchie, and Wright. I made an incision along the outer border of the left rectus abdominis, which extended five inches above and two below the umbilicus. Two arteries were tied before the peritoneum was opened. In opening the peritoneum rather a large artery was cut across in a piece of omentum, which was loosely adherent between the surface of the spleen and the abdominal wall. The vessel was tied. The adhering portion of omentum was separated, and by putting in my hand and turning the lower edge of the spleen first through the opening the whole of it was easily removed. The intestines were prevented from escaping by Dr. Wright, who kept the edges of the opening carefully together behind the spleen, which was held only by the vessels and the gastro-splenic omentum. I was beginning to twist the spleen round to bring the vessels into a sort of cord preparatory to applying a ligature, when the splenic vein, which was as large as a small finger, gave way, and blood ran freely from the spleen; but none was allowed to enter the abdomen, and I at once enclosed the vessels in a large clamp, and cut away the spleen. Before tying the vessels temporarily secured by the clamp, I passed eight silk sutures to keep the edges of the incision well together. The peritoneum was thus protected and the viscera retained while I was dealing with the vessels. These were tied in two bundles above the clamp, which was then loosened, and two arteries and a vein were also separately tied before it was finally removed. On taking it off, I found that a part of one end of the pancreas, as large as the end of a thumb, had been bruised by it. All the ligatures, except those on vessels in the abdominal wall, were cut off close and returned with the included tissues. The sutures were then tied, and the abdomen was well supported by plaster, pads of lint, and a bandage.

Mr. Clover told me that the patient was thirty-five minutes under the influence of chloroform, that she had borne it with less evidence of shock than he had often observed during ovariotomy, and that her pulse throughout was between 80 and 90.

The spleen is now in the museum of the Royal College of

Surgeons. It weighed on removal 6 lbs. 5 oz. avoirdupoise; but nine ounces of blood drained out of it, leaving the weight 5 lbs. 12 oz. It measured 11 inches in length, 8 in breadth, and between 3 and 4 in thickness.

For the following notes of the progress of the patient after operation I am indebted to Drs. Bowen and Ritchie, who watched her alternately or together with the most anxious care, night and day, until we were all hopeful that she was recovering:—

"During the first twelve hours the pulse varied from 84 to 88, and was very weak, in spite of the administration of brandy by the mouth, and brandy and beef-tea by the rectum. Pain was by no means a prominent symptom. The stomach was very irritable, but the kidneys secreted abundantly. At least sixteen ounces of brandy were given during the first twelve hours. The surface of the body was kept warm. Thirst was complained of, and relieved by sucking ice.

"Twelve hours after the operation the pulse rose to 100, and the right radial pulse was observed to have a smaller volume than the left. The patient became restless. Stimulants were required as much as before. There was some bilious vomiting, and nothing could be retained in the stomach. During the whole of the first day after operation the pulse remained at 100, the skin continued warm and moist, the urine was abundant, and free from albumen. Early in the day the patient was fed by the rectum, but towards evening she retained in the stomach some milk and soda-water. She slept from time to time. About 10 o'clock there was a slight fæcal motion. There was no tympanites, and flatus passed readily both by mouth and rectum.

"In the morning of the second day (November 22) the rectum had become very irritable; small doses of brandy-and-water were given by the mouth. She sucked ice greedily. About 7 o'clock there was violent spasm of the diaphragm, causing her to cry out with pain. This was relieved by hot brandy-and-water. The pulse gradually rose to 112; the skin was hot and dry, and there was a troublesome wheezing in the chest, with spitting up of mucus. In the afternoon abdominal pain was complained of, which was relieved by ten drops of laudanum given by the mouth.

"The patient slept quietly from 9 p.m. of the 22nd to 3.30 a.m. of the 23rd (the third day after operation), only waking up at intervals to take food and brandy. At 3.30 there was a violent rigor, commencing suddenly with a feeling of cold in the back. The rigor lasted only a few minutes, but reaction did not take place for half an hour, and was followed by profuse perspiration. During the day the patient was able to take milk and soda-water; but at 4 o'clock in the afternoon a second rigor, in every respect similar to the former one, took place. The rest of the evening the pulse remained at 120 to 130, and the urine continued to be secreted in large quantity, notwithstanding the violent perspiration.

"On the morning of the fourth day six grains of quinine were given before the expected attack. There was no rigor, and the patient slept well. In the morning the pulse was only 96. During the day egg beaten up and mixed with milk was given, and relished. In the afternoon Mr. Wells removed the stitches, and found the wound was perfectly united. Some more quinine was ordered and given, but as it produced buzzing in the head it was discontinued.

"During the fifth day the patient was remarkably well. She was able to enjoy the milk and rusk. Pulse continued about 108, rising at night to 120. Some fluid fæces were passed. The patient also continued wonderfully well during the sixth day. Urine in abundance was secreted, and the bowels acted naturally in the morning. Milk given freely. In the afternoon the bowels began to be irritable, and port wine, with ten drops of laudanum, was injected into the rectum. A good deal of flatus passed. At night she was very cheerful and comfortable, and there was some colour in the cheeks. About ten at night she ate some beaten eggs, milk, and rusks with appetite, and slept; but about one on the morning of the seventh day she awoke, complained of cold and of a pain in the back, which she had felt at each of the previous rigors. The bowels acted very freely. The pulse was very feeble and rose to 150, and the respiration to 44. The patient said she was sure she was going to die; she rapidly became weaker and weaker, although brandy was given freely both by mouth and rectum, and she died in about four hours after the sudden change,—158 hours after the operation."

The body was examined, twelve hours after death, by Dr. Bowen, assisted by Dr. Ritchie and by me. Decomposition had advanced with unusual rapidity. Fluid blood and air bubbled from the superficial veins as they were opened. The wound was perfectly united, but the cutaneous edges were separated without difficulty. The peritoneal edges adhered much more firmly. Two ligatures on superficial vessels came away with a very slight pull. A few drops of pus were observed in the track of one of the ligatures. There were no signs of general peritonitis; scarcely any serum, and not a trace of blood being found in the abdomen. Redness and effusion of lymph were entirely limited to the seat of operation. The ligatures on the blood-vessels were found with difficulty, being overlapped by the pancreas, which was large. The liver was also large. The kidneys were healthy. Both pleural cavities and the cavity of the pericardium contained a large quantity of dark red serum. The lungs were healthy, although there were old pleural adhesions at each apex. The heart was large and flabby, and contained soft clots, which extended along the pulmonary artery to the second divisions. This was the only clot found in the body, the blood elsewhere being thin and fluid, and air bubbling out wherever a vein was opened.

The heart, liver, and pancreas were given to Dr. Richardson for examination, as well as some of the fluid from the pleural cavities, and the blood which had flowed from the spleen directly after removed.

The cases of Quittenbaum and Küchler had taught that a large spleen could be easily removed; but, as one patient only lived two hours and the other only six hours, it was doubtful whether a human being would recover from the immediate effects of the operation. The case now recorded does at least make this addition to our knowledge.

It also proves that neither hæmorrhage nor peritonitis necessarily follow the operation. Some alteration in the blood, which becomes fluid, and permits of a rapid exudation of serum into the pleural or other serous cavities, may perhaps prove in other cases, as in this, to be the chief danger to be dreaded.

The principal difference between the operative proceedings of Quittenbaum and Küchler and my own was, in the removal of the ends of the ligatures which secured the splenic blood vessels. In their cases the ends of the ligatures were left and brought out through the wound. I had found a similar mode of dealing with the ligatures which secure the pedicle in ovariotomy to be so very unsuccessful, the threads acting as setons and setting up peritonitis, that I determined (if the clamp made much pull upon the stomach) to cut off the ends of the ligatures, and return them with the included tissues—a proceeding which has led to very good results in ovariotomy. In dogs, two or three turns of the spleen, twisting the blood vessels, are often enough to stop bleeding without any ligature; but, although this may answer with a spleen of natural size in a dog, it could not be thought of, except as a preparative for the ligature, in the case of a large spleen in man. But my trial shows that it would be better not to attempt it, for the splenic vein burst before one turn was completed. If I were to operate again, I would tie the vessels in separate bundles as they enter the spleen, and then cut away the organ.

The parallel between the operation for the removal of an enlarged spleen and an enlarged ovary ends with the operation itself. The successful removal of one ovary is frequently followed by the most perfect health of the woman, who may bear children of both sexes. Whether a human being would enjoy good health without a spleen is a question still waiting for a satisfactory answer. Experiments on other animals may be objected to, although the impunity with which the organ may be removed, and the good health of the animal for years after does seem to imply that the offices it performs cannot be of very great importance, and may be performed by the lymphatic glands or some other organs. Dr. Wilks says that the spleen may be "shrunken into so small a compass, and surrounded by so thickened a capsule, that its enlargement seems impossible, and its appearance would suggest that the functions of such a withered organ had altogether ceased. Yet, if so, there are no symptoms to indicate its loss."—*Guy's Hospital Reports*, Third Series, vol. xi., page 41.

Many cases have been recorded which prove that after partial or total removal of the spleen by accident life may be prolonged, but there is little satisfactory information as to the length of life or state of health of the individuals.

In one remarkable case, a woman 30 years of age, who had fever in January, 1711, had swelling and pain in the left side of the abdomen, followed by swelling of the left foot and leg, and in February by a fetid discharge from the uterus. For the next four months she became thinner, and fluctuation was detected in the abdominal swelling. Ferrerius then made a puncture three fingers breadth below the umbilicus to the left side, from which a discharge of fetid pus was kept up for many days. A second and larger opening, higher up, near the umbilicus, then occurred spontaneously, and the matter was discharged through both. The patient became much emaciated, when the Surgeon saw a blueish body at the upper opening and removed it without much trouble. It was eight fingers in length, two in thickness, and the same in breadth. It was examined by Fantoni and found to be the spleen. The patient began to improve at once, but for several days a portion of her food passed through the opening near the umbilicus, as if the abscess about the spleen had been complicated by a gastric or intestinal fistula. But the wound healed, the patient recovered her strength, had a good colour, the catamenia returned regularly, she became pregnant and bore a healthy child; but from this time the abdomen began to swell again, and during a year different parts of the body, especially the head, were attacked.

This is one of the most complete accounts we have as to the state of health after loss of the spleen. It is quoted by Hecker and Simon from Fantoni's *Opuscula Medica*, published at Geneva in 1738. Cases in which, after penetrating wounds of the abdomen, the whole of the spleen or portions of it have been removed are on record, but I have only been able to meet with two well-authenticated cases where the *whole* spleen was removed. The first was in 1678, by Mathia. It is related by Crüger and quoted by Simon. A watchman, 23 years old, was stabbed. The spleen protruded. The vessels were tied and the spleen cut away three days afterwards. There was free bleeding, but it was stopped by a styptic powder, and the man was well in three weeks. The divided vessels formed a lump of the size of a hazel nut, and adhered to the cicatrix. The man returned to his duties, and was seen in good health six years and a-half after the accident.

The second case occurred in 1815, and is recorded by Lenhossek (Hecker's *Annalen*, Berlin, 1828). A youth of 19 was wounded in the abdomen. The spleen protruded, and, as it was becoming gangrenous, it was cut away after tying the vessels. The wound healed, and in 1818 the man was quite well.

Cases of partial excision of the spleen are much more numerous, but I shall only refer to one recorded by Berthet, in 1844, where a man lived and enjoyed good health for thirteen years after a wound followed by hernia and extirpation of a large portion of the spleen. He died of acute pneumonia, and after death only a small piece of spleen was found, the size of a hazel nut, which was adhering to the stomach. The case is quoted by Gray and Simon from the *Archives Générales de Médicine*, 1844. These cases of partial excision are of far less physiological importance than cases of total excision; for Dr. Crisp has shown that if a portion of the spleen be left it may grow, and the organ may be more or less completely reproduced. This, Dr. Wilks observes, is "quite in harmony with the simple hypertrophy of the spleen; for if an organ of a given size can grow to several times its normal standard, there appears no reason why a small portion remaining after an operation should not again grow to the original dimensions."—*Op. cit.*, page 40. This remark prepared me to leave a portion of the spleen in my patient, if I found it possible to do so, or the splenculus, if, as we thought probable, it had existed. Possibly it might be advisable to act on this principle in a case where it could be done safely.

If it be asked, "In what cases may an enlarged spleen be excised?" the conclusion would seem to be, that they can be only very few. If a large spleen were wounded, or ruptured, or caused obstruction of intestine, the operation might be the only means of saving life. But, in the absence of some such accident immediately endangering life, it is not often that a patient *has* a large spleen and has *not* some co-existing disease of liver, kidneys, or lymphatic glands, which would either prevent the success of the operation, or would destroy the patient soon after the recovery from its immediate effects. Where no such disease co-exists, then probably the ill-effects of the large spleen are either too slight to warrant a dangerous operation, or the general condition of the patient is too bad to give any reasonable prospect of recovery. This is especially true with regard to that form of enlarged spleen which follows ague. Either it is amenable to treatment—or, if the patient be ill enough to induce the Surgeon to think of an operation, the general health is so broken up, and the blood is so altered, that a simple cut or ulcer may lead to dangerous bleeding, and *à fortiori* a serious operation would most likely be fatal. The relation which the enlarged spleen after ague bears to the accompanying leukæmia, hydræmia, or melanæmia, is a problem which has still to be solved; and, even in the leukæmia which occurs independently of ague, it is still a matter of doubt whether the enlargement of the spleen or the alteration in the blood bear always the same relation of cause and effect. But, as it has been proved experimentally that the blood which issues from the spleen by the splenic vein does contain a much greater number of white corpuscles than the blood in the general circulation, and it is known that in simple hypertrophy of the spleen there is a great increase in the proportion of white to red corpuscles in the blood throughout the body, it would seem to be a fair presumption that removal of the spleen, by cutting off the supply of the white corpuscles which are in excess, might save the life of persons who would otherwise die of leukæmia.

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# CONDITIONS UNDER WHICH CHOLERA APPEARS IN ITS HOME.

By Dr. JOHN MACPHERSON.

HAVING spent more than twenty years in that portion of India where cholera is endemic—in fact, in its hot-bed, Lower Bengal and Calcutta—I have had the disease constantly before me. The first death of a friend, was that of the chief officer of the ship in which I had arrived, of cholera; the first Hospital case seen was a European child struck down by the disease, and crying feebly for water, and the last cases treated before leaving India were two children with a threatened attack.

But while thus able to write of familiarity with the disease, it is not in my power to say what is its treatment. If there be any special one, I have failed to discover it. There are very few modes of treatment that I have not, at one time or other, tried, or seen tried,—some of them attended for a time with marked success, which was, however, pretty generally followed by as marked failure. It cannot honestly be said that all the experience of our Professional brethren during the former epidemics in Europe led to much practical result in helping us to a better treatment; nor is there much of novelty in any of the curative measures that have been lately indicated, whether in the public prints or in the Professional journals. One main cause of disappointment with the effects of remedies in this disease is,—that the success of every mode of treatment varies according to both the intensity and the stage of the particular case to which it is applied, according to the nature of the particular epidemic, and also the period of it. Thus, I have often been gratified by the seeming good effects of remedies in the decline of an epidemic, and then in the onset of the next one found them of no avail.

But as it is not the object of these notes to discuss the treatment of the disease, it need only be said in passing, that much may be done to check its invasion; that much also may be done when the disease is fairly established, but that at that stage, although there are a few rules generally applicable, the treatment must be adapted to the particular circumstances of the case.

Although, then, I have no novelty to propound regarding the treatment of the disease, and, in fact, nothing on any point that is really new to any one having extensive experience of it, yet at this time, when the progress of the disease is being carefully studied in Europe,—when the assemblage of a Congress is proposed, and the idea has been broached of attempting to strangle the disease in its cradle—it may be well to call attention to some of the generally-acknowledged facts concerning it, to ascertain some of the conditions under which it occurs in its own home. This it is proposed to do succinctly, without referring to any theoretical views regarding its nature or mode of propagation, or to its manifestations in other parts of the world, or even of India, as far as possible avoiding facts of partial application, and illustrating the subject from my own experience, which was mainly confined to the Lower Provinces of Bengal.

*Cholera Epidemics Influenced by Season of Year.*—It may be well to say that Jessore, in which district cholera is considered to have made its first appearance, is in the Delta of the Ganges, about eighty miles from Calcutta, and having much the same climate as that place—indeed, the climate and the soil of Lower Bengal are wonderfully uniform. Also, to make what follows more intelligible, that the year in Calcutta may be divided into four hot months—half February, March, April, May, half June; hot and wet four months—half June, July, August, September, half October; and cold months—half October, November, December, January, half February. These half months unfortunately cannot be represented in returns; or, perhaps, the simplest division is into dry and wet—the dry ones being November, December, January, February, March, April, May; and the wet ones, June, July, August, September, October.

Cholera is always present in Calcutta. There is not a month of the year in which deaths do not occur from it, both European and native. It is the cause of one-third of the total deaths, which vary from 11,000 to 16,000 per annum. The native population of Calcutta within the town proper is roughly calculated at about 400,000. The deaths from cholera have been—in the period from 1840 to 1850, 46,697 natives; in the period of 1850 to 1860, 45,823. The smallest mortality during the whole of the twenty years was in the month of July, 1843, when the deaths amounted only to 46.

Although, however, cholera is never absent from Calcutta, it has its seasons of maximum and minimum prevalence very strongly marked. It is found that, taking round numbers, of the 92,000 deaths above referred to, 65,000 occurred in the seven dry months, and only 17,000 in the five rainy ones, and that in twenty Aprils there were 16,193 deaths, in twenty Augusts only 2586.(a) These rules of prevalence apply to the course of the disease in both Europeans and natives. It was observed on the first outbreak of the disease that, though it appeared to die out by the end of October, yet it broke out again with renewed virulence before the end of next February; and, indeed, the first cholera noticed in the Jessore district in 1817 was in the month of May. This, therefore, appears to be a steady habit of the disease from its very commencement. Again, attempting the division into cold, hot, and wet months, we find in round numbers that about twice as many die in the cold as in the wet months, and that more than four times as many die in the hot as in the wet months.

Among both natives and Europeans, there is always a slight increase in the return of cholera cases in the months of February and October—the months when the hot and the cold seasons commence. While, however, both Europeans and natives suffer most during the hot weather, natives differ from Europeans in suffering to a greater extent in the cold months than the latter do. The Europeans usually have much less of it at that season, unless they are placed in particularly unfavourable circumstances. For instance, there was always some cholera among the unfortunate invalided soldiers passing through Calcutta in the cold weather, caring little for themselves and little cared for, or among drunken sailors staggering about the bazaars; and I remember an outbreak in Her Majesty's 18th following some Christmas festivities. But owing to the peculiarity, which we shall presently have to mention, of cholera mainly attacking the floating, not the resident Calcutta European population, we have no data that enable us to speak as positively about them as about the natives.

While its epidemics appear to follow the laws above mentioned, yet cholera is at all times to be met with in Europeans as well as natives. I shall give a few examples of the sporadic cases among the former, these sporadic cases occurring most commonly at the season of the greatest prevalence of the disease.

*Sporadic Cases.*—The first case of the season may very likely show itself in February, just as the season begins to get hot. You will probably have but a single case in a house, perhaps, two children, or rarely a man and his wife, attacked at the same time. It is generally difficult to find fault with anything local to the house, or to discover in what the particular house differs from others of its class (although some think differently on this subject, and almost always do discover what is wanted—a palpable cause). Thus of first-class houses in the best situations that I have known for a series of years, I recollect one in which a lady died just fourteen years ago at the epidemic season. There has been no death by cholera in it since. The house next it was certainly free from cholera for twelve years, when there was the solitary death of an infant also at the epidemic season. In another house, standing in the centre of a park, free from jungle and away from all drains, a lady at the same season of the year suddenly fell a victim. Of course it was accounted for by her having tired herself shopping in Calcutta. The house had always been healthy before, and continues to be so. In another instance, while the hot winds were blowing as strong as they ever do in Calcutta, a retired Medical subordinate officer living in the Hospital quarters was seized. He had taken an aperient that he was accustomed to use, and to this he ascribed the attack, of which he died. He had not been inside the Hospital for many weeks, and there was no cholera in Hospital; but on the day of his seizure a woman in a very airy ward, a patient for ophthalmia, was seized with cholera and recovered. In neither case did the disease spread. I give these as average cases, showing that even during the epidemic season the disease does not usually spread in good houses, or when there is no congregation of people. The same applies to natives; perhaps one or two servants (they are far more numerous, of course, than the Europeans) would die in the outhouses of the mansions just spoken of every two years or so, seldom more, and the disease would not spread.

*Climatic Influences.*—It seems hopeless to attempt to ascribe the epidemic or sporadic occurrence of the disease to any meteorological changes or to local conditions more special than the general laws of climate operating on a crowded, undrained city in the tropics. What appeared to apply in one case was absent in another, or the conditions were reversed. So much, however, I may venture to say that the hot winds do not blow cholera away; that the heavy fall of rain for a couple of hours has often stopped an outbreak—at all events, for a time; and that I always looked forward with pleasure to the coming of the rains, if it were only for the certainty that they would relieve me of much of the anxiety always attending the treatment of cholera. Still, if we are only to state what is beyond all doubt and not open to cavil, we must for the present be satisfied with the one general law in Bengal, that cholera is far more prevalent among all classes in the dry than in the wet months, and that the change from the cold to the hot season, and from the wet season to the cold, both seem to favour its development.

*Who most Liable to be Attacked.*—Having ascertained at what periods of the year cholera prevails most, we turn next to consider whom it is most likely to attack; and as our last figures were derived from Mr. H. M. Macpherson's valuable inquiry into the mortality of Calcutta, and figures derived chiefly from the native population, so also the main fact now to be announced is from the same source, but the figures are necessarily got from European returns. Mr. Macpherson has analysed the deaths by cholera among Europeans in Calcutta, and ascertained that 76 per cent. of the deaths occur in the floating population and only 24 per cent. in the fixed population; but as, to the standing shame of Government, we have no census even of the fixed European population that is in the slightest degree reliable, these facts are deprived of half their value. Cholera is most likely to attack—

1. New arrivals, or those who have lately come from sea. The great majority of deaths occur among sailors whose ships have just come in, but this I shall have to allude to hereafter. A new regiment is very fortunate indeed if it passes through Calcutta without losing some men. It would be easy to multiply examples; for instance, H.M. 96th Regiment, which arrived from New South Wales in April, had not landed thirty-six hours before cholera of a virulent type broke out. Every Professional man in Calcutta must have met with many cases of cholera in private life among those recently arrived. Some of the most striking cases of this kind have happened in young women and children.

2. Those who are travelling are specially liable to be attacked. New arrivals might perhaps be considered to come under this head, but they are even more liable to suffer, than people who have been some time in the country or natives, when they are moving about. It is notorious that among Europeans more cholera occurs in hotels and lodging places than elsewhere. Many of these houses are no doubt defective in sanitary arrangements, but I believe that the fact is attributable more to something in the condition of the travellers than to the state

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(a) The average temperature of April may be taken at 84·6°; average range at 14·7°. The average fall of rain, 1·13 inches. The average temperature of August is 82·9°; average range, 5·2°; average fall of rain, 14·4 inches. December and January, the two coldest months, have nearly the same temperature. The average temperature is 67°; range of temperature, 17°; rain fall, 17 inches.

of the houses they resort to. I have seen persons from the provinces die in Calcutta in the airiest and loftiest private houses. Under this head come travellers dying at staging bungalows; the readiness with which, in certain districts, both European and native troops get cholera on the line of march. It is well known how pilgrims on their way through Lower Bengal and Orissa strew the road to Juggernaut with their bones. Natives travelling are just as likely to suffer as Europeans.

3. Those who are overcrowded suffer most. There is something in the massing of people together that favours the development of disease. This is especially true of cholera. Just as in 1785, long before the disease became fixed in Lower Bengal, an epidemic of cholera broke out at the great fair of Hurdwar, so, according to my friend Mr. Stewart Clarke, a fresh outbreak takes place nearly every year. The more closely packed a regiment is, the more likely is it to suffer severely from cholera, just as separating the men is one of the first steps towards stopping an outbreak. It would be easy to multiply instances of this in crowded barracks, in gaols, and in ships, or among ill-housed railway labourers; but I shall merely refer to a very frightful attack of the disease at Dum Dum in September, a month when, as we have seen, the disease does not usually prevail. In this instance the disease was mainly attributable to over-crowding and the various evils engendered thereby, for the men who were in roomy barracks escaped. It is, however, not to be forgotten that an outbreak, though on a much smaller scale, occurred at the same time at a station only ten miles off, where the accommodation was ample. Instances of the effects of overcrowding both in the European and native population must be familiar to every Medical man in Calcutta. I shall presently give the details of what appears to me a very instructive case that occurred in my own practice.

4. It might be presumed that those who are weakened by any cause would be likely to suffer from cholera. This is the case; at least in Hospitals, instances of it are common. Many cases of dysentery, a few of fever, and one or two of phthisis swept off by it are fresh in my memory. The prisoners in unhealthy gaols readily become victims to it. Excessive action of the bowels from purgative medicine, or any disorder of the digestion or bowels from excess in eating or drinking, would come under this head, as instanced in H.M. 18th suffering at Christmas time. And here it may be remarked that most violent cases of vomiting, purging, and cramps simulating cholera have been clearly traced sometimes to eating bad shell fish and sometimes to copper poisoning from the cooking utensils. But though irregularities in diet may sometimes be fairly blamed, it should be remembered that patients or their friends are so anxious to have some cause for an attack assigned, and Medical men are so often as it were compelled to assign a reason for their satisfaction, that irregularities of diet are often discovered that never existed, and it would be hard to say what article of diet has not at times in Calcutta got the credit of having produced cholera. Those who are most alarmed are most likely to be seized. But no strength of constitution, no regularity of life, no supposed acclimatisation, no excellence of a dwelling-house, no previous attack of it, no age, no sea gives security against this pestilence.

Cholera seizures appear to be most frequent in the early morning, but there are no statistics on the subject.

(To be continued.)

**University of Cambridge. — Scholarship for Natural Science.**—There will be an examination on Oct. 9, at Sydney College, in Natural Science (electricity, chemistry, geology, anatomy), and two scholarships of the value of £40 a year each will be awarded. There will also be an examination, at the same time, in classics and mathematics for other scholarships of the same value. The examinations are open to all students, provided they have not commenced residence at the University. Further information to be obtained from the Rev. J. C. Ellis, tutor of the College.

**Presentation to Dr. Ussher.**—Dr. Ussher was on Friday evening, December 29, presented with a handsome salver, bearing the following inscription:—"Presented to Dr. Ussher as an offering of regard and esteem from grateful patients." The gift, which was electro-plate, was purchased by some of the members of the Wandsworth Provident Dispensary, to which institution Dr. Ussher has been Resident Medical Officer for three years. This feeling recognition of his services was the spontaneous act of very poor persons, and not that of his committee.

# REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

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## THE LONDON HOSPITAL.

### RESUME OF A WEEK'S ADMISSIONS,

BEING THE SUBSTANCE OF A CLINICAL LECTURE DELIVERED DECEMBER 20, 1865.

(Cases under the care of Mr. HUTCHINSON.)

[Reported by Mr. Warren Tay.]

Gentlemen,—The following is a list of our admissions during the week which ended yesterday:—

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| Strangulated hernia (femoral) | 1 |
| Fracture of base of skull | 1 |
| „ humerus (comminuted) | 1 |
| „ „ into elbow-joint | 1 |
| „ „ femora and pelvis | 1 |
| „ neck of femur (impacted) | 1 |
| „ ribs | 6 |
| „ tibia and fibula | 5 |
| „ „ (only) | 1 |
| „ fibula (only) | 2 |
| „ patella (transverse and comminuted) | 1 |
| „ inferior maxilla | 1 |
| „ toes (compound) | 1 |
| „ metacarpus and phalanges (compound) | 1 |
| Retention of urine | 1 |
| Orchitis | 1 |
| Scalds | 3 |
| „ of throat | 1 |
| Burns | 4 |
| Ruptured eyeball | 1 |
| Erysipelas | 2 |
| Concussion of brain | 1 |
| Laceration of scalp | 3 |
| „ knee | 1 |
| Inflamed leg | 3 |
| „ bursa patella | 2 |
| Contused abdomen | 1 |
| Contusions | 5 |
| Stricture of urethra | 1 |
| Ulcers | 2 |
| Eczema | 1 |
| Scabies (pustular with ecthyma) | 1 |
| Rheumatic disease of hip-joint | 1 |
| Carcinoma of breast | 1 |

The total number of admissions was 59, but in complicated injuries one or two cases have been mentioned twice.

The week has, on the whole, been rather a heavy one. Many of the cases have been severe; we have already had five deaths, and three other patients are in a critical condition. Amongst the more interesting of our cases we may select the following:—

On Thursday a boy was admitted, having been knocked down in the street and possibly run over. He had a fracture in the upper part of his left humerus, with great displacement. He was in collapse when admitted, but conscious and without paralysis. I directed your attention to the fact that both his upper eyelids were purple from extravasated blood, and that he was also bleeding a little from the nose, and remarked that as there was no external bruising about his eyes to account for the ecchymosis, as the ecchymosis was on both sides, and his lower lids were quite free from it, we might regard this symptom as almost pathognomonic of fracture of the base of the skull in its anterior fossa. The plates of bone at this part—those constituting the roofs of the orbits—are very thin, and are very easily broken, and when they do break hæmorrhage into the cellular tissue of the orbit is a very frequent consequence. More usually the blood first shows itself beneath the ocular conjunctiva; but sometimes it is limited to the lids. In this instance there was not on either side any ecchymosis beneath the conjunctiva; but, as I have said, both upper lids were distended and livid with extravasation. The boy had no bleeding from either ear, and his symptoms were those of the collapse stage of concussion of the brain. He complained of pain, and resisted our attempts at examination. The treatment consisted simply in keeping him warm, so as to favour his rallying. I ought to have stated that there was no laceration of his scalp, and that the chief bruise was on his left temple, indicating perhaps that he had been struck there. He could both hear and see. He passed the rest of the day and the following night in great restlessness; he tossed about in bed, and undid the bandages which had been put on his arm.

On the following day we found him still very pale, and with a cool surface. He would take his food, but was very unwilling to be disturbed. He complained much when I examined his arm, and begged me "not to pull it so much." We now found that he could scarcely see with the right eye, and that his right pupil, which on the previous day had been of the same size as the other, was widely dilated and fixed. We made this examination as to his sight about three o'clock in the afternoon, and he was then quite able to answer questions as to what he could see, etc. About eight the nurse gave him some bread and milk, and he took it well. At half-past eight the House-Surgeon found him insensible and apparently dying. His breathing was now difficult and irregular, but there was no stertor; his pulse was rapid, upwards of 170. Within a few minutes, and whilst Mr. Dawson was with him, he died.

You will see that beyond the symptoms which usually attend cases of severe concussion of the brain (accompanied as they frequently are by more or less of contusion also), we had had had none excepting the dilatation of the right pupil. The boy had been conscious up to within about half an hour of his death; he had had a rapid pulse and great restlessness throughout; he had had no observable paralysis.

A week ago, at a clinical lecture, I had the opportunity of illustrating one cause of unilateral dilatation of pupil after injury to the head. A man had died in whom this symptom was present, and in whom we found a large clot of blood between the dura mater and the bone pressing forwards upon the sphenoidal fissure, and no doubt compressing the trunk of the third nerve. In our present case, singularly enough, the cause of this symptom proves to be the same. As we had diagnosed, there is a fracture across the anterior part of the base of the skull, in some parts, taking the line of the junction of the lesser wings of the sphenoid to the orbital plates of the frontal bone. This fracture on the left side has crossed the trunk of the meningeal artery, and a large clot of blood is found between the dura mater and the bone extending downwards into the sphenoidal fossa. I have not dissected it, wishing not to spoil the specimen, but from the position of the clot there can be little doubt that the third nerve is compressed, and thus the dilatation of the pupil is explained. These two cases, so exactly parallel, seem to supply us with a new and very valuable symptom indicative of effusions of blood in this situation. Regarding the case now with the light which the autopsy has thrown on it, we can have little hesitation in assuming that the cause of death was compression of the brain. The quantity of blood found is quite sufficient to account for death. It would seem probable that a second hæmorrhage had occurred immediately preceding his death; and the state of the clot, one half much softer than the other, seems to favour this view. I drew the attention of those who were present at the autopsy to the fact that the brain substance was exceedingly pale, remarking that in all probability the manner in which compression proves fatal is by squeezing the blood out of the brain substance. This case adds another to a considerable series which we have recently had showing that the orthodox symptoms of compression of the brain, absolute insensibility, stertor, slow, laboured pulse, and hot surface, are not by any means always met with. In the early stage of this case we had before us probably symptoms which were a mixed result of a slight degree of compression together with a very considerable degree of concussion. The blow by which the base of the skull was fractured must of course have severely concussed the brain; indeed, we had evidence of this in the existence of a few small patches of ecchymosis into the brain substance, beneath the anterior lobes. These were in themselves trivial, but become important as proof of the severe shake which had been received. I think you will agree with me in holding that we were not to blame for not having diagnosed the presence of blood in the situation where we found it. The symptoms were so altogether different from those supposed to be usual in compression, and so closely similar to those of severe concussion, that it was impossible to establish a differential diagnosis; nor can we, perhaps, boast of having learnt much which may aid us in the diagnosis of future cases, with the one exception of having discovered the meaning of the one dilated pupil. This point we will store up carefully for future use.

Our next case is one of femoral hernia; the patient, a woman; a hernia not so large as an egg, strangulation tight, of fifty-three hours' duration, and the symptoms severe. The taxis had been fairly tried before her admission, and I tried it again, under chloroform, before proceeding to the operation. Finding that the hernia did not yield in the least, I at once adopted the latter measure. After notching Gimbernat's ligament, and then dividing some tight bands below it, I succeeded in effecting reduction without having opened either the sac or the fascia propria. As the hernia had been strangulated a considerable time, and the strangulation was tight, I was quite prepared for the occurrence of that form of peritonitis which is consequent on the return of damaged intestine into the peritoneal cavity, but I thought, on the whole, it was better to run this risk than to add the danger of direct traumatic peritonitis by opening the sac.(a)

On the morning following the operation I found the patient in a satisfactory state, having no sickness whatever, but with a little tenderness of the abdomen immediately above the hernia. We therefore applied some leeches and ordered ca'omel and opium every three hours. On the next day she was better and almost free from pain.

On the third day we struck off the pills and ordered her a mutton-chop, as she seemed quite out of danger. During the next night, however, she had an attack of diarrhœa, and passed motions which were slimy and contained blood. She was now feeble, her surface being very cool. I ordered her some brandy and a suppository of opium every four hours. To-day, six after the operation, she is quite comfortable, and I think we may consider her out of danger.

We have had several severe cases of fractured ribs. In two of these the danger has consisted not so much in the accident itself, as in the fact that the patients had previously suffered from chronic bronchitis and emphysema. One of these, a man aged 41, has died. It is very unusual for us to lose a case of simple fracture of the ribs. This man had a barrel-chest and a very clear percussion note over all parts in front, indicating the existence of extensive emphysema, and we had the history that he had often been laid up with attacks of bronchitis. He had fracture of only one rib (the ninth), and there was no laceration of the pleura or lung. He came to us two days after his accident, because his breathing was getting worse. He was very dusky in the face, and breathed with great difficulty. We discussed the point as to whether it was a case in which venesection would be likely to relieve; but the history of old bronchitis deterred me from it. We kept him well elevated in bed, and contented ourselves with giving him small doses of antimony. His symptoms of bronchitis, however, increased; and he died on the fifth day after admission, and the seventh from his accident. We found the lungs most extensively emphysematous, but their posterior lobes were congested, and on the left side there was positive pneumonia, the lung tissue being solid, soddened, and much softened. It is worthy of note that this occurred on the side opposite to that on which the rib was broken. On both sides there were a few fibres of recent lymph on the pleural surfaces. I do not think that we need regret not having used the lancet.

We have another case now under care with almost precisely similar symptoms and history, and in this case I shall not venture to bleed. In these cases of broken ribs, with previously existing damage to the lungs, it becomes an important question whether the chest ought to be bandaged or not. I do not know that we can have any better rule on this point than the patient's own feelings and the progress of the case. If he says that he has less pain with it on, keep it on; if, however, his breathing shall be steadily getting worse, I think then that it would be wise to remove the bandage for a time and note the result.

We will next take a case of contusion of the abdomen, in which the diagnosis of rupture of the liver was made. Henry R., aged 27, was admitted about midday, December 18, having received a violent blow on the right side of the lower part of the chest from a bar of wood. He was in a state of collapse, and had vomited immediately after the accident. He was very pale, and his pulse was very weak. There was a bruise to the right of the epigastrium over the false ribs, and there was one spot that seemed very soft, as if there was a deficiency of the abdominal wall. No fracture of ribs was detected. He continued very sick, but rallied somewhat from the severe collapse. He passed water which did not contain blood. He died on the evening of the next day. I should have mentioned that a short time before death emphysema in the cellular tissue of the chest and abdomen was noticed.

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(a) See clinical lecture on the "Causes of Death after Hernia Operations" in the "London Hospital Reports," vol. 2.

At the post-mortem this afternoon we found a rupture of all the muscles of the abdominal wall and of the parietal layer of the peritoneum sufficient to admit three fingers. The skin was not involved. There was no fracture of ribs. There was a large quantity of bile in the abdominal cavity, and diffuse peritonitis, the intestines being everywhere glued together. The intestines were most carefully examined, but no rupture was found. No rupture of the liver or gall-bladder was found before removal, but afterwards we discovered a hole in the common duct, which, I believe, was not made in taking out the liver, and it accounts for the quantity of bile found extravasated. There was a considerable amount of dark blood about the right kidney, but no torn vessel was seen. I should have mentioned that at the time of admission a swelling over the epigastrium was noticed, and attributed to the ecchymosis in the abdominal wall; this was fully confirmed by our examination.

There was one interesting peculiarity that remains to be noticed—namely, that at first we could not find the left kidney. By tracing up the ureter we came to the diminutive one which I now show you. Part of it seems quite atrophied and replaced by cellular tissue, the other part shows evident kidney structure, though very small. The right kidney, as you see, is congested, but otherwise healthy, and not of particularly large size. The pelvis of the left kidney is much dilated, and suggested that he had formerly had a calculus imbedded there. A large sound was introduced into his bladder, and neither a calculus nor any stricture of the urethra was detected.

His death was evidently caused by intense peritonitis, set up by the extravasation of the bile, the emphysema of the cellular tissue being probably produced by decomposition.

The case of fracture of the patella bears out what I have often brought before your notice, that we mostly get a combination of muscular action and direct violence in the production of a transverse fracture of the patella; not muscular action alone. The patient while walking in the street slipped forwards and struck his knee violently on the flat pavement, at the same time having his quadriceps extensor in full action. A transverse fracture resulted, with much effusion into the joint, and the lower fragment is broken into at least two pieces. We are treating it in the usual way, a broad, straight splint being applied behind the knee, and the fragments being brought together by means of strips of plaster passing obliquely from above the upper and below the lower one to the splint. The leg has not been elevated on an inclined plane. Owing to the effusion, we do not aim at a very close approximation at present.

The fracture of the inferior maxilla is situated just to the right of the symphysis. Excepting that there was rather more displacement, and the right division more moveable than usual, I do not know that it differs from the majority of cases we have here. It is satisfactorily treated with a gutta-percha splint and four-tailed bandage.

Of the four cases of burn, I will only notice one, a poor fellow who received such severe injury to his head, face, chest, arms, and lower extremities that he died in about twenty-four hours. When admitted he was in extreme collapse, sensible, but greatly excited, and very soon severe rigors came on. They were so severe that most who saw him thought he could not rally from them. He did, however, do so to a certain extent and for a short time, then became comatose and died. He was a maker of fireworks, and it appears that some gunpowder became ignited and exploded. He jumped out of a window, but two of his comrades were killed on the spot. Another patient, a child, suffering from a severe burn, is in a critical state.

Amongst the committee cases we will only mention the case of carcinoma of the breast and that of stricture of the urethra. The subject of the former, a woman, aged 70, you have just seen in the operating theatre. Though the disease had progressed rapidly, and the patient was old, I agreed with Mr. Little that it would be well to remove the growth, as there was a tendency to ulceration, and we might hope to relieve her of the pain consequent on cancerous ulceration.

The subject of the next case, a very tight stricture of the urethra, was a man, aged 41, who had been liable to symptoms of stricture for about three years. Two days before admission Mr. Webb, of Poplar, introduced a No. 2 catheter. On Thursday last I failed to pass a No. 3, but the day before yesterday I succeeded with a No. 2. I then introduced Mr. Holt's dilator, and dilated the stricture gradually to an extent probably equivalent to a No. 10 catheter; this was about three o'clock. I ordered him half a drachm of laudanum to be taken immediately. He did not have it for two or three hours afterwards, and then felt so comfortable that he was loth to take it. About 7.30 he was seized with a violent rigor, lasting for some time. Some brandy was given him, and he somewhat rallied.

The next morning when the House-Surgeon saw him he examined his perineum carefully, but could detect no extravasation of urine, neither could I when I saw him later on in the afternoon, but I was then very much alarmed by the state of extreme collapse in which I found him. He was almost pulseless, pale, and his surface cold; he had passed some urine which was coloured with blood. I have often remarked to you that rigors in connexion with any affection of the urethra are not usually of much consequence. It seems to be a peculiarity of that part that any interference with it may cause a rigor, but then usually the rigor is a single one and the patient soon rallies, but in this case we had our patient in extreme collapse twenty-six hours after the operation.

The one treatment let me impress on you for these rigors and the collapse which follows them consists in the administration of repeated doses of hot brandy and water. I increased the quantity ordered by the House-Surgeon and this morning I found our patient better, and again still better this afternoon, though he is as yet in a somewhat critical state. Although the occurrence of collapse which this case examplifies is usually quite transitory, yet the Surgeon cannot afford to neglect it, for now and then, unless the proper measures be adopted, the patient will die in it. After any operation on the urethra the patient ought, therefore, to be carefully watched.

## OUR REPORT ON FRACTURES AND DISLOCATIONS.

As an addition to our reports upon cases as they occur in the practice of the different London Hospitals, we propose to lay before our readers a series of papers or reports on the "Treatment of Fractures and Dislocations," remarking on any differences of treatment in special cases which may come under our notice. Not that the various methods applied differ to any great extent in any Hospitals, or under any Surgeon, but some useful hints in some particular cases may often prove of great service where emergency, or the want of the appliances usually adopted, renders one method more favourable than another. It is our intention, therefore, to take the bones of the upper and then of the lower extremities, the fractures and dislocations to which they may be subjected, *seriatim*, and make some remarks upon their treatment and reduction, noticing the *reasons*, surgically and anatomically, upon which this or that peculiar method is based. No physiological order of arrangement will be adopted, for our intention is that of commenting as we proceed upon the actual methods employed in the various Hospitals. We shall probably commence with the more common, and keep the rarer forms in reserve for the completion of our series. Especial notice will be taken of these accidents in children, as those who have had experience in this particular recognise their difficulties and importance.

To those of our readers whose residence in the country renders access to a Hospital impracticable, we trust these papers may be of service, and any suggestions which might occur to them, or to any of our friends, we should consider of the greatest assistance.

We also sincerely trust that every help may be rendered us by the House-Surgeons, or those in office at the various Hospitals we visit, with a view of helping us in our task.

Statistics of the union or non-union of the various fractures treated is obviously impossible, as in many cases patients will leave Hospitals before, in the judgment of the Medical officer, they are fit to do so, and desire to get about too soon after the fracture has united; but this hardly comes under our province, which is merely to report upon the treatment of the fractures and dislocations, as pursued in the Hospitals.

We should esteem it the greatest assistance if we could have the co-operation of those in office at the County Hospitals, especially manufacturing towns, where such accidents are of more frequent occurrence, at least in proportion, than in the metropolis.

**THE SOCIÉTÉ IMPÉRIALE DE CHIRURGIE DE PARIS.**—M. Giraldès has been elected President, and M. Follin Vice-President for the ensuing year. MM. Guyon and Dolbeau are the new secretaries.

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Medical Times and Gazette.

SATURDAY, JANUARY 6.

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## ANNUS MEDICUS, 1865.

The two most prominent events of the Medical year just closed have been the invasion of England by the Rinderpest, and the first droppings of a cholera epidemic.

The first cases of the "Cattle Plague" occurred in the month of June, in an Islington dairy, among some cows which had been purchased about a week previously in the Metropolitan Cattle Market. By the end of July more than a hundred cows in that dairy had died of the disease, or been killed on account of it; it had spread to other London dairies, and it had appeared at several places in the country. Authorities differed as to what the disease really was, some believing it to be the Rinderpest, or Steppe-murrain of Russia, while others declared that it was identical with the typhoid or enteric fever of man. Continuing to spread rapidly, and exciting considerable alarm by its intensely fatal character, a Royal Commission, composed of men of high scientific and social standing, was appointed on October 6 "to investigate its origin and nature, to ascertain as far as possible the mode of treatment best adapted for the cure of the affected animals, and the regulations which may, with the greatest advantage, be made with a view of preventing the spread of the said disorder, and to avert any future outbreak of it."

Early in November the Commission published a very valuable preliminary report. In this it was proved that the disease is undoubtedly the Rinderpest; that it belongs to the class of specific contagious fevers; that its "contagious matter is subtle, volatile, and prolific in an unexampled degree," and that it is extraordinarily fatal. That no means of cure, nor any markedly successful method of supporting an animal through the attack, had yet been discovered, but that the experience of foreign countries had shown that by slaughtering all diseased animals, and by resolutely and perfectly isolating all centres of contagion, the spread of the malady might be absolutely put a stop to. Six out of the seven scientific members of the Commission, with the Right Hon. R. Lowe, dealing logically with the evidence before them, recognised the conclusion that the prohibition, for a time, of all movement of living cattle through the kingdom would be a certain means of preventing and eradicating the disease, and they boldly recommended its adoption as the only measure equal to the occasion. The remaining scientific member, with three others—whom we may distinguish as representing the agricultural and landed interests,—while they agreed with their colleagues in their opinions as to the nature and character of the disease, and believed in the efficiency of the means recommended by them, quailed before the difficulties and inconveniences that would attend its adoption, and recommended measures similar in principle, but less stringent and efficacious. They were guided by what seemed expedient rather than by what seemed necessary. The remaining member of the Commission, Mr. M'Clean, the President of the Institute of Civil Engineers, thought that a great deal too much was made of the danger, and that the existing Orders in Council would, if properly carried out, fully suffice to arrest the evil.

The report also presented a graphic picture of the fearful and wide-spread destruction the plague had formerly caused in this country and in foreign lands, and showed how uniformly all measures short of the complete stoppage of the movement of cattle had failed to arrest its progress.

Government had not the courage to act decisively, and the progress of the plague continued. When the report was issued, at the end of October, there were about 200 infected spots; by the end of November these had increased to 4000, the disease had caused the loss of some 30,000 head of cattle, and 5000 fresh cases occurred weekly.

The farmers, and the people of England in general, have faced the evil with calmness and courage, but the "organs of public opinion"—as the daily journals love to be called—in too many instances set them anything but a good example; and the "leading journal,"—so-called—excited by the presence of cattle plague and by threatenings of cholera, justified its right to that title by displaying a mixture of childish unreasonableness, petulance, and agitation such as might have led to a perfect panic. It refused to recognise patent facts; it rejected angrily the possibility of the importation of the disease; it maundered over theories of "spontaneous origin;" it derided and scorned the advice and experience of distinguished Veterinary Surgeons and men of science, and opened its columns to any and every babbler and quack who would write to it; and, losing apparently all sense of dignity and calmness—actuated, we suppose, by the same emotions as lead ignorant and excited multitudes in times of pestilence to accuse the Doctors, or any other prominent class, of poisoning the public sources of water—this great and infallible entity distinguished itself by a furious philippic against the impotence and backwardness of Medical science, and the ignorance and gross darkness of the Doctors. No old lady of Billingsgate could have scolded with greater virulence and volubility, or with more complete ignorance of what she was talking about. The inexorable logic of facts was, however, too strong for even the *Times;* it gradually altered its tone, and at last came to speak of the measures recommended by the majority of the Royal Commission as the only measures worthy of adoption. "Our great agriculturists"—thus it wrote early in December—"have to fall back on common sense . . . . inquiry as to treatment, etc., is not to rest. . . . . As to transport, everything is to be done to reduce it to that in dead meat." Its leading articles on the subject were written, as time went on, in a much higher and truer spirit, and it published communications of a really scientific and valuable character, foremost among which is the able letter by which the honoured President of the Royal College of Physicians gives the support of his name and position to the Royal Commission recommendations; though the journal has not been able yet to acknowledge honestly and simply that the disease is only known to spread by contagion, and that, in the fact of there being no known *cure* for it, it is only like small-pox, measles, and other contagious eruptive fevers; and its columns are still open to letters recommending such absurd "remedies" as the hanging of a bunch of onions round an affected animal's neck.

It is not often that an English Government is timid and irresolute in the actual presence of calamity, but in this instance our Government seems stricken with most inexplicable feebleness and hesitation. It is perfectly well known that this plague is frightfully fatal, and frightfully contagious; that it spreads only by contagion; that the contagion must be carried from or by a diseased animal; that if this carriage of contagion is stopped the disease must die out;

that to be successful this stoppage must be complete and absolute; and that the main and principal source of contagion is the movement of cattle from place to place; and that if this movement is altogether and everywhere stopped the pestilence will be arrested. The Royal Commission recommended that "some high officer of Government" should be invested "with the power of suspending for a limited time the movement of cattle from one place in Great Britain to another, for extending or shortening such period, and for renewing the prohibition as often as circumstances may render necessary;" the farmers have almost unanimously demanded from Government the adoption of "stringent and uniform measures" of the character recommended by the Commission; and the press now supports this demand; and still Government hesitates, and only issues Orders in Council, such as were uselessly issued when the same pestilence ravaged the country in 1745. The last Order, dated December 16, empowered "local authorities" to prevent, if they see fit, all movement of cattle in their respective districts; but we know how "local authorities" may differ, and how they have failed before. Suppose that in every place in the land but one they stopped the movement of cattle, that one exception would again infect the whole country. The case demands, if ever a case did demand it, "uniform and stringent measures," proceeding from one central authority.

We have said that the Royal Commission recommended such measures, for while every hour has shown the wisdom of their recommendation, it may be now regarded as being nearly unanimous. Mr. M'Clean's opinion may be entirely put on one side, for subsequent events have shown its utter fallacy; and Mr. Read, one of the expediency-minority, when present with a deputation to Sir George Grey a few days ago, said "that he had not altered his opinion, but that circumstances had changed, and that what he had considered impracticable at one time might be made practicable now."

Meanwhile, while Government thus hesitates, the pestilence spreads with fearful rapidity. According to the official statistics for the week ending December 23, the disease had appeared during that week in 434 fresh places, and 6256 fresh cases had occurred, of which 574 were killed, 4123 died, and 960 recovered. The total statistics for Great Britain were 8442 centres of disease, and 63,593 cattle attacked, of which 13,137 were killed, 34,861 died, 5803 recovered, and 9792 were still suffering from the disease.

It is worthy of note that homœopathy, which declared itself fully able to cope with the disease, has been fully and fairly tried in Norfolk, and utterly failed; out of sixty-six animals on whom that "system" was tried sixty were dead, and the remaining six "by no means recovered" at the date of the the last report of the experiments.

It seems almost certain, however, that out of all this great evil and loss, one great good will result—viz., that the Rinderpest epidemic will free our cities and towns from live-meat markets and slaughter-houses, for it can hardly be supposed that these will ever again be permitted if they are suppressed for any length of time, and it is unnecessary to point out how great would be the sanitary gain therefrom.

Epidemic cholera broke out early in May among the vast concourse of Mussulman pilgrims aggregated at Mecca; shortly after it appeared at Alexandria, next at Cairo, and early in June at Ancona. On July 1 it was imported into Constantinople also, by a Turkish vessel from Alexandria. From these points it spread to several places having with them the freest intercourse, and communication by water. It attacked Malta, Gibraltar, some places in Spain and Portugal, Naples, Marseilles, and Toulon, and then Paris, and on September 22 a case occurred at Southampton. The epidemic did not spread much in Southampton, and quite ceased there by the end of October. The only other place in England at which it appeared was Epping. Mr. Groombridge arrived at his residence in Thoyden, a sub-district of Epping, on September 26. He had been staying at Weymouth, and on his way home passed through Southampton. On September 27 he was attacked by cholera. Within a very short time eleven cases of the disease occurred in his house and some adjoining cottages, eight of the cases proving fatal, but there the plague was stayed; and by the middle of November the Registrar-General's Returns were free from all report of cholera. It did not visit either of the above-mentioned places, however, without taking a toll of victims from our own Profession. At Southampton Mr. Francis Cooper, Officer of Health for the Borough, and at Epping the elder Mr. McNab, both died of the disease, attacked by it in the earnest and fearless discharge of their duties to their suffering fellow-men. But though cholera has ceased in England for the present, it is but too probable that it will, as on former occasions, return next year, and then, as formerly, instead of counting its victims by tens, it will count them by thousands. Meanwhile, the approach of it has given a fresh impetus to sanitary work, and infused some new vigour into boards of health and parish vestries. If we have not yet learnt how to cure cholera, we have learnt well what kind of places it most loves to visit and to riot in; we know that overcrowding, filth, bad drainage, and tainted water-supply as certainly make a cholera-haunt as they do a fever-nest; and so, though infinitely too little is being done, yet is there some increased effort being made to set our houses in order, not to welcome and foster, but to repel or starve epidemic cholera. France has already suffered this year far more than we have; and the Emperor of the French has not only taken the subject of cholera epidemics into "his royal consideration," but has inquired and thought about it for himself, and, looking at the apparent origin and the course of this and some other epidemics, he, with a happy audacity worthy of genius in power, has proposed to the various foreign courts to hold at Constantinople an International Scientific and Diplomatic Conference on Cholera, in order "to attack the disease at its fountain-head." The Conference is "to investigate the primary causes of cholera; to determine its principal points of departure; to study its characteristics and its march; lastly, to propose practical means for confining the disease and stifling it at its origin." All the powers addressed have, we believe, given in their adhesion to the Conference. The calling together of such a meeting—the first Congress on the subject of disease—is a truly grand idea, and does infinite honour to the Third Napoleon. By thus leading the thrones and powers in a war on disease, he will win for himself and the second Empire a far truer and more lasting glory than Napoleon the First gained out of all his victories and conquests.

It is indisputable that more than one cholera epidemic has appeared to originate in pilgrim gatherings at Mecca, and that "the present organisation of the sanitary service in the East" demands extensive "reforms;" but can any one avoid suspecting that, had the annihilation of distance by the modern powers of locomotion been somewhat more advanced, His Majesty of the French would have proposed one of our Indian capitals as the seat of the Conference instead of Constantinople? All that is said or hinted at in the communications from the French Government concerning barbarism, filth, and superstitious practices in Arabia applies with increased force to India. We must hope that the covert rebuke to us conveyed in the French proposition may rouse our Government into adopting active sanitary measures in our Indian Empire. The incredible filthiness of Indian cities and villages is known well enough to the powers that be, and most startling exposures have been lately made of the condition of the "City of Palaces" and the other seats of Government. Some of the details were even too revolting for publication; but very little has yet been done to remedy the evil. Here and there, however, the authorities are acting vigorously, as at Bombay, where the duties of Officer of Health have been entrusted to a most able and energetic Surgeon of the

Bombay Army, Dr. Gillum Hewlett, and an army of labourers—from 1500 to 2000 men—have been placed under his orders.

Typhus fever has been very prevalent in parts of the metropolis throughout the year, and it will most probably continue largely to swell the Registrar-General's weekly return of deaths; for so long as railway companies are permitted to bring their lines through the most densely populated parts of London, and to carry out wholesale evictions of the inhabitants, without making any new provision of house-accommodation, so long must the poor crowd together like cattle in a railway-truck; and such over-crowding will most surely generate and propagate typhus.

In the early part of the year much alarm was excited by reports that a mysterious and extremely fatal epidemic had broken out at St. Petersburg and about the Lower Vistula, and was advancing towards this country. Answers to inquiries made through the Foreign Office showed that there was undoubtedly a very unusual mortality in those places, and Government sent out Physicians to St. Petersburg and Dantzic. From their reports, and accounts published by various foreign Physicians, it proved that the former city was suffering from a severe epidemic of relapsing fever, and that the epidemic prevailing about the Lower Vistula was acute cerebro-spinal meningitis.

Besides the Commission on the Cattle Plague, a Royal Commission on Venereal Disease in the Army has been diligently sitting and taking evidence, but has not yet issued any report. It is understood, outside, that they will report in favour of a periodical examination of soldiers, as well as of prostitutes. It is said that such a proposal will be exceedingly distasteful to the Army Medical Officers, who speak of it as being "humiliating" to them. Very much, of course, will depend on the manner in which such a duty is to be carried out, but we cannot see why it should necessarily be a "humiliation" to our military brethren to carry out measures calculated to prevent disease. Were Surgeons to refuse duties because they are distasteful or repulsive their usefulness would be sadly curtailed.

The Commission is expected to include in their report the much-mooted question of syphilisation, the courteous and enthusiastic promoter of that system of cure, Professor Boeck, having been before them for examination. The Professor has for some months been residing in London, at a great sacrifice to himself, in order to give English Surgeons the opportunity of becoming acquainted with syphilisation as he practises it, and the beds of the Lock Hospital were with laudable liberality placed at his disposal for the purpose.

A "Committee" has been appointed, and sat at the Admiralty, "to inquire into the condition of the army and navy Medical officers, as respects their rank, pay, etc." We do not know how the Committee was appointed, nor what are the differences between a "Committee" and a "Commission;" and the necessity for either Committee or Commission is not very apparent to the outside world. Through deputations, memorials, and other communications from the Colleges of Physicians and Surgeons and the British Medical Association, both Horse Guards and Admiralty are already perfectly acquainted with the causes that have brought their Medical services to the very verge of a dead-lock, and with the required remedies; and for further guidance they have only to go to the minutes and recommendations of the late Lord Herbert on the subject. But no doubt their mightinesses are far above using information derived from these civil sources; it might seem like acknowledging that such meddlers in things beyond them had had truth and justice on their side, and it might encourage similar troublesome pertinacity. Whatever the Horse Guards and the Admiralty do must be based on knowledge gathered by themselves, and arise out of their own spontaneous and generous liberality. Well, we must try to take thankfully whatever good such gods provide us, and not criticise too narrowly the manner and spirit of the gift. It is a matter of congratulation, at any rate, that the authorities are at last convinced that they must do something to revive the spirit and recruit the ranks of the two services.

Of the national Parliament, the most noteworthy facts are the dissolution of the old one and the election of a new one. "*Le Roi est mort; vive le Roi!*" At the general election several members of our Profession were candidates for the honour of the M.P. Sir Charles Locock endeavoured to deliver the Protestants of the Isle of Wight from the danger of being represented by a Roman Catholic, but for once in his life was unsuccessful. Mr. Mitchel Henry offered to the electors of Woodstock the freedom of advanced Liberalism instead of the chains of Conservatism, but they were too bigotted to listen to his charming. Mr. Alfred Smee also failed at Rochester; but Dr. Brady was re-elected by his old constituents, and Mr. Clement, an eminent and popular provincial Surgeon, was returned without opposition for Shrewsbury; so that Medicine has one additional, and a very able and fitting, representative in the new House of Commons. It is, however, much to be regretted that the other three Medical candidates were not also successful, for until the Profession is more powerfully represented and better able to make its voice heard in the national councils, its rights and interests will be pooh-poohed or passed over as they were in the last Parliament. The way in which the claims of Naval Medical Officers to a share in the distribution of good-service pensions were set aside in the Greenwich Hospital Bill was a well-marked specimen of the treatment our Profession has always received from Government. Its claims were sneered at, laughed at, or met by evasion or—prevarication, we should say, were the word parliamentary—according to the temperament of the Government official who had to reply to them. And thus will it continue to be unless influence, such as Medical men throughout the kingdom can wield if they will, is used to put pressure on the Government, especially, judging from past experience, so long as the Government is what is called a "liberal Government."

Our own little Parliament, the General Medical Council, met very early, and talked very fluently. At the dinner of the Fellows of the College of Surgeons the very able and efficient President of the Medical College was "happy to say that they were gradually settling down;" the length of time they have required for this, some seven years, does not say much for their gravity; light bodies float long.

The Council were called together early in the year in order that an amended Medical Act might be obtained from Parliament during its then present session. The attempt to do so failed, the Home Secretary declining to introduce the proposed Act to amend the Medical Acts; and not a few thought the failure fortunate. The most important part of the proposed Amendment Act was a clause to make registration compulsory.

The Council refused to admit to registration the new degree of Bachelor of Surgery of the University of London; a proceeding which, considering the high character of the degrees of that body, caused not a little surprise. More efficient arrangements were made for the registration of Medical students, which have not, however, prevented licensing boards from continuing to vex students with a multiplicity of registrations. A fixed period of forty-eight months from the date of registration to the final examination was agreed on as the duration of Medical study; and arrangements were made for the supervision of the examinations of the various licensing boards.

Mr. Cesar Hawkins is now a member of the Medical Council as the representative of the Royal College of Surgeons, in place of Mr. Arnott, who has retired from the labours and well-earned dignities and honours of the Profession to the repose and pleasures of a country life. May he long enjoy them!

At the election into the Council of the College of Surgeons nine candidates stood for the three vacancies caused by the resignation of Mr. Arnott, and the retirement, by rotation, of Messrs. Quain and Shaw. Mr. Quain was returned, as the head of the poll, by such a majority has must have been to him a very gratifying proof of personal regard and confidence on the part of the Profession. Mr. Paget, and Mr. Turner, of Manchester, were the other successful candidates; one more Country Fellow thus obtaining a seat at the Council Board.

Some beginnings have been made in the improvement of the management of workhouses, and especially in the construction, arrangements, and management of the workhouse infirmaries. The inquiries into the shocking cases of Timothy Daly and Gibson have done much to compel a change for the better by setting before the public, with painful distinctness and urgency, the enormous difficulties with which the Medical Officer of a workhouse has to contend; the extent to which he is overworked and underpaid; the wretched places his patients are herded together in; the insufficiency and miserable unfitness of the means and appliances at his command, and the no-system of nursing. There is some ground for trusting that these infirmaries will in future be arranged and managed more like hospitals, and that the infirm and sick will be given the advantages—the necessities rather—of a more liberal dietary and of skilled nurses.

The larger and more liberal arrangements forced from the guardians of London parishes for the relief of the houseless poor deserves to be noted here, not only as a remedy of a crying evil, but also because the temporary refuge thus given from want and exposure saves numbers from occupying beds in our Hospitals and Infirmaries.

There have not, happily, been any trials at common law worthy of special notice as concerning the Profession, though as usual there have been some illustrations of the hardships and dangers attending the treatment of lunatics.

The trial and execution of Dr. Pritchard for poisoning his mother-in-law and his wife was a terrible proof of the fact that the belonging to the most humane and self-denying of Professions may not always keep a weak and wicked man from giving way to his worst passions, and employing his knowledge and skill to destroy instead of to save life.

The death-roll for the year was a remarkable one, at home and abroad; the two most prominent names on it were those of our veteran Premier, Lord Palmerston, an eminently sagacious and English statesman, and of the King of the Belgians, formerly so closely allied with the hopes and interests of this empire, and of late a most valued and trustworthy councillor and friend of our Queen. And in our own Profession many men of mark and note have gone to join the many. Among them were Dr. Jones Quain, Mr. Grainger, Dr. F. W. Mackenzie, Dr. E. E. Day, Dr. H. H. Southey, Dr. R. Ferguson, Sir John Richardson; Messrs. J. P. Garlick, C. W. Crowdy, F. Cooke, M'Nab, and D. Saunders; Mr. T. J. Pettigrew, Dr. Hugh Falconer, Dr. Daniel, the African traveller; Mr. King, of Eltham; Mr. Tegart, Dr. Herbert Barker, Dr. J. A. Easton, and Dr. Hutton, of Dublin; and latest and most melancholy of all, Dr. C. G. Ritchie, taken in the flush of youth, when his life seemed full of hope and promise. Abroad, too, some great men have gone to their rest; as Valentine Mott in America, Gratiolet and Malgaigne in Paris, and Remak in Germany.

To turn to a brighter subject, we may note some of the honours bestowed on the Profession. Dr. A. Taylor and Inspector-General Hilditch have been knighted, and William Fergusson has been elevated to a baronetcy, "on account of his distinguished eminence and merit as a Surgeon." The whole Profession has felt gratified by the honour thus done to English Surgery.

For ourselves, we have endeavoured at all times, and in every way, to uphold and promote the best interests of the Profession, and faithfully, honestly, and impartially to perform our duties as journalists. We have not hesitated to blame whenever blame seemed justly due, and we have diligently laboured to present a faithful record of the intellectual life and progress of the Profession. Besides records of Hospital practice, and reports of the proceedings of the Medical Societies, we have been able to present to our readers communications from such men as Laycock, Pirrie, Spencer Wells, Lionel S. Beale, Chapman, Keith, Allingham, Lawson Tait, Hine, Gant, J. W. Ogle, J. Y. Simpson, Dr. Murray of Newcastle, Haynes Walton, Dr. Boeck, C. G. Ritchie, and Furneaux Jordan. Further, we have had special satisfaction in being the means of making public Dr. Harley's valuable and practical lectures on "Urine and the Urinary Organs," and lectures of great interest and weight by Dr. L. S. Beale, Dr. West, Dr. Bence Jones, Mr. Paget, Dr. Pavy, Dr. Handfield Jones, and Professor Lyon Playfair. "The Medical History of England" has been continued, and its able author has also contributed a series of papers on the "History of Cholera." In a succession of leading articles, entitled "Modern Dermatology," "Modern Chemistry," and "Rough Notes on Syphilis," we have also made our readers fully acquainted with the modern doctrines and practice of those important subjects.

We have every reason to believe that our labours have been acceptable to the Profession; and, while heartily thanking all our valued coadjutors for their assistance, we assure our readers that no effort will be spared by us to make the journal as worthy of their support in the future.

## THE ACUPRESSURE CONTROVERSY.

We print elsewhere a correspondence between Professors Syme and Simpson and the Editor of the *British Medical Journal* which, we fear, will not give posterity a very exalted notion of Professional courtesy at the present day. Professor Simpson is well known to be a man of great originality and inventive powers. Having made known many new medicines for internal use, and many new forms of treating uterine disease, and having discovered the anæsthetic which European experience has shown to be the best, he has also set to work to explain the causes of that mortality after operations which robs the Surgeon of the results of his most brilliant efforts, just as puerperal fever robs the Accoucheur of his most interesting patients. Having established the identity of Surgical fever with puerperal fever, and shown that each springs from similar causes, he attacks them in detail; and finding that the ligature employed to stop hæmorrhage keeps wounds open, encourages suppuration and ulceration, on however small a scale, not to mention the protracted agony it sometimes causes (as in Lord Nelson's case) he sets to work and invents a method of sealing arteries which shall be as safe as the ligature for its immediate purpose, and capable of being removed when no longer necessary, so that the wound need not be kept open whilst waiting for separation by sloughing. All this, one would think, was well meant, to say the least—some would say meritorious;—and allowing that further experience is required to test its efficacy in *all* cases, yet it has been tried in a sufficient number by Professors Pirrie and Watson, and Mr. Dix (whose plan is a modification, perhaps an improvement), to render it at least a thing not to be rejected rashly. But it is in vain for Professor Simpson to raise his voice. He is an *obstetrician!* and what right has an obstetrician to meddle with arteries? Then his pamphlet was summarily "executed," not by the hangman, but by a brother Professor, before a class of students, in the one-thousand-eight-hundred-and-sixty-fifth year of the Christian era, within the city which men call Edinburgh, but gods, the modern Athens. This "execution," which the whole civilised world deplored as unworthy of the man and the times, has actually been alleged by Professor Syme as a reason why Professor Simpson deserves no civil answer! It is much to be regretted that the Editor of the *British Medical Journal* should have allowed such a letter as Professor Syme's to appear in the *Journal* of that Association.

## IS THE CATTLE PLAGUE SMALL-POX?

DURING the last three weeks there has been great excitement on the question of the identity or otherwise of the cattle plague with the small-pox. Strange to say, small-pox is at a premium! A patient ill with this loathsome malady, who would of late have been shunned as a plague, is now eagerly sought after for the sake of the *matter;* and cows and calves are being subjected to inoculation and vaccination daily. Early in the last century the occurrence of eruptions on the skin of animals ill of the cattle plague was noticed by Ramazzini and other observers. Neither have these phenomena been overlooked in the present epidemic—witness Mr. Gamgee's observations, and the Report of the Norwich pathologists, and that of Dr. Smart, of Edinburgh.(a) If the Rinderpest be small-pox, it will be a singular fact in the history of pathology that observers so experienced should not have been struck with the resemblance to that exanthem, but absolutely should have affirmed that it resembles scarlatina! And this not once only, or in one place, but by different observers at different places! The opinion, however, that it is small-pox is held by such men as Drs. Quain, Richardson, and Murchison, and Professor Simmonds; whilst it is denied by Professor John Gamgee and Dr. Sanderson. The matter clearly demands investigation; and during this, for our own part, we take the liberty of suspending our judgment.

In treating of this matter, the first thing to arrive at is a definition of small-pox, and this may be got in one of two ways. We may define small-pox by its visible characters, or by the physiological effects of its poison, just as a toxicologist might depose to the presence of poison by the *post-mortem* appearances in its victims, or by the effects it produced on animals subjected to experiment with it.

Following this formal division of the subject, let us ask what are the essential characteristics of small-pox, using the word generically, to include that of animals as well as of man? The absolute divergence of opinion on the part of the ablest pathologists, as to whether the visible, tangible, measurable lesions of the Rinderpest come within the category of small-pox, give a sufficient answer to the former question. As to true, well-developed small-pox, as with scarlet fever, gout, cancer, typhoid, and every other malady under the sun, there can be no mistake. But with these diseases in an ill-developed, irregular condition, their nature is often matter of inference.

As to the *behaviour* of the poison, that must be ascertained by a combination of observation and experiment combined. Hitherto writers on this matter have suggested negative experiments only—for example, that cattle shall be vaccinated and variolated, and then be exposed to the Rinderpest. A truer method would be to take cattle which have had the Rinderpest and recovered, or which have been well exposed to it and have not taken it, and ascertaining whether they can take variola or vaccine. One affirmative experiment of the latter kind would settle the question. Experiments will soon be forthcoming. Meanwhile it would be a great pity if the question were made a party or personal one. We should all rejoice at a positive solution of this problem, and especially at one which showed a way to escape a great national calamity.

## THE SICKNESS OF THE TROOPS AT HONG-KONG.

OUR readers will, no doubt, have remembered a leading article in the *Times* referring to the great sickness and mortality among our troops in China, the defective arrangements—or rather, the want of all arrangement and ordinary precaution —in the accommodation of the troops, and the absence of the senior Medical Officer during a time of unusual pressure. With some portion of the public, at any rate, these evils have been placed at the "Doctor's door," and the shortcomings of other departments have been debited to that of the Medical. Now, we believe from all we can gather, that the hands of the Army Medical Department are quite clean of this matter. The deficiency of accommodation was pointed out to the authorities by the Medical men, who remonstrated against a second regiment being sent to Hong-Kong, and predicted what the results would be. There can be no doubt that the senior Medical Officer was at Japan with the General-Commanding, but, we presume, he was there upon duty, and he returned as soon as he knew of the prevalence of serious disease among the troops at China.

## THE WEEK.

### HISTORIES OF MEDICAL SCHOOLS.

IN the year 1862 our journal contained histories of most of the chief Medical Schools in London, in the English provinces, and in Scotland and Ireland. The history of each School was entrusted to some gentleman who had been an old pupil and partisan—or who, to use students' language, was a "regular *Guy's* man" (or whatever other School might be treated of). These articles were anonymous, but not editorial; it is understood that each writer was to have in turn the privilege of saying all he chose to say in favour of his own *Alma Mater*. The accounts we gave of most of the Schools excited a good deal of interest, and we have often and often been asked why any were omitted. Amongst the latter were University and King's Colleges—Schools the foundation of which marked a very palpable era in the history of the Medical Profession. To-day we have the pleasure of publishing an account of University College from an accomplished writer and distinguished pupil of that School, and we shall soon follow it with a history of King's College. Articles such as these keep alive many a genial anecdote, and enable many a hard-working man to live his younger days over again.

### PATHOLOGICAL SOCIETY.

THE meeting of the Pathological Society on January 2 was an important one for many reasons. It was the annual meeting for the election of officers. These proceedings were more formal than usual, and were most noticeable as a hindrance to a discussion in which the members were much interested. Dr. Quain brought before the Society a Veterinary Surgeon, Mr. Hancock, of Uxbridge, who had inoculated the back of his hand whilst dissecting a cow which had died of the Rinderpest. Dr. Quain read a report of the case, and urged that it tended strikingly to show the relationship of the Rinderpest to variola. The nature of the eruption, he considered, was characteristic, and had been considered to be vaccine by a Surgeon at Uxbridge who saw Mr. Hancock's hand soon after the eruption appeared, and also by Mr. Ceely, of Aylesbury. Dr. Quain then showed several drawings to illustrate the resemblance of the eruption to that of cow-pox. The case excited great interest, and after Mr. Hancock had left, Dr.

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(a) "*The Character of the Disease*, as deduced from the morbid appearances which it presents, bears no resemblance to the ulcerative typhoid fever of man. As regards human typhus, the analogy likewise fails. The morbid conditions are undoubtedly peculiar. In so far as any resemblance to human disease exists, it points to a condition of the internal lining membrane analogous to that of the skin in acute scarlatina, and the disease might not inaptly be termed an internal or mucous scarlatina. The general congestive but non-inflammatory state of the mucous membranes, the epithelial desquamation from the mucous surface, the increased temperature of the animal in the early stage of the disease, and the incubation period and critical days, are facts which all tend to support this view; while the condition of the kidneys and the invariable presence of albumen and blood cells in the urine lend additional confirmation to it."—"Reports to Lord Provost," etc. Edinburgh: Maclachlan and Stewart. 1866. Price 3s, 6d.

Quain made further observations on the subject. He said the question of the resemblance of the cattle plague to small-pox was not a new one. It had been raised by Ramazzini in 1711, and by Dr. Layard in 1758. But he thought the case of Mr. Hancock was the only case in which anything like satisfactory proof had been given. In the newspapers there had been plenty of statements to the effect that the Rinderpest was variola, but they were mere surmises. There were, however, other arguments. It had been observed that some cows had a remarkable immunity from infection, and it had been ascertained that in some instances the animals had had vaccine disease in early life. Dr. Quain concluded his statement by remarking on the great importance of this question to the community. If the Rinderpest really was variola, vaccination would put a stop to the epidemic. Dr. Sanderson next spoke. He thought not only that the eruption in Rinderpest was not a vesicle, but that it could not even be mistaken for one. On this Dr. Sanderson spoke very emphatically. Whatever relation there might be betwixt the cattle plague and small-pox in human beings, there was, he held, no evidence of resemblance to be founded on the eruption of the two, as they were quite unlike. Moreover, the eruption in Rinderpest was not like the eruption in the small-pox of sheep. Mr. Gamgee said there were two points to which he wished specially to draw their attention. First, the cutaneous eruptions of the cattle plague were not overlooked by him, even at the commencement of the present outbreak; and not only did he specially notice it, but Continental observers and writers have commented on the observations of Rammazzini, Vicq d'Azyr, and others in relation to the appearances occasionally noticed. Dr. Murchison had, indeed, referred to one specimen which he saw at the Albert Veterinary College, and in which the tuberculated eruption was very remarkable, with well circumscribed nodules, flattened and even depressed in their centres. But there is a marked difference, as Dr. Sanderson had mentioned, between the Rinderpest eruption and a variolous one. The changes occurring on the skin, or, more correctly speaking, in the epidermis, were changes similar to those in which the epithelium of the mucous membrane was involved. Not only on the general surface of the membrane, but in their glands, as distinctly seen in the fourth stomach, the cells undergo granular degeneration, masses of nuclei are formed, and there is a detachment and desquamation of the entire epithelial structure. There was nothing analogous to this in small-pox. He had seen the whole small intestine deprived of its epithelium, which could be traced in flocculi or caps of the villi in the intestinal contents. There was a similar separation of the epidermis, which he noticed and described last August. But the cutaneous eruption bears no relation to the severity of the disease. It is not, as in all known variolous fevers, the index of the progress and severity of the complaint, but rather the reverse. It is seen to be most severe, most confluent, in mild cases, and has been witnessed more in Holland than in England during the past few months. The eruption often heals as the disease becomes aggravated and the animal dies. The second point to which he wished to call attention was the frequency with which eruptions occur from handling animals affected with various diseases or dissecting animals after death. He held in his hand the first volume of the *Veterinary Review*, in which there was a drawing, and of an ecthymatous eruption on his own arm, contracted by passing the arm into the vagina in a cow in a case of protracted labour. Although his case was widely different from the one before them that evening, there were reports of eruptions occurring with the same periodicity as variolous forms. It was not new to him, for one, and indeed for several, individuals to contract pustules very similar to the one on Mr. Hancock's arm, and from animals which he had had under treatment for cutaneous and other diseases. It was, indeed, necessary to be very cautious in drawing inferences from a post-mortem inoculation, which he held in this case could not be regarded with anything like positive assurance as one of communication of the Rinderpest poison to man. He trusted that such a case might not divert them into vain trials of another method of dealing with the plague short of the true plan which ought to be adopted in this distressing calamity. Dr. Murchison admitted that the eruptions of Rinderpest and of human small-pox were not identical in appearance, but he thought their differences were most probably caused by the differences in the structure of the skins. Besides, Dr. Murchison added that the resemblance of the diseases (if we may still call them two) was to be found, he believed, in their general history, and not in the eruption only. He drew attention to the fact that in India it was admitted that cattle suffered from small-pox, and that it was very fatal. Moreover, experiments in India had shown that matter from cows thus suffering produced in the human subject sometimes vaccine disease, and sometimes small-pox. Dr. Sanderson drew attention to the fact that he had stated not only that the eruption in Rinderpest did not resemble that of small-pox in the human subject, but that it did not even resemble that of small-pox in sheep.

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### FROM ABROAD.—DEATH FROM CHLOROFORM AT BERLIN—THE CATTLE PLAGUE IN THE PARIS JARDIN—OUTBREAK OF TRICHINOSIS AT HEDERSLEBEN.

At a recent meeting of the Berlin Medical Society, Dr. Hüter related a case of death from chloroform which occurred in the Surgical Polyklinik. A boy 4½ years of age, who some time since had an attack of scarlatina followed by œdema of the extremities and albuminuria, was brought on account of retention of urine, none having been passed, according to his mother's account, for two days. Slight œdema still existed, and the child looked pale and ill. On examination there was found to be distension of the bladder, but the boy was so restless while it was made that it was deemed prudent to administer chloroform before passing the catheter. This was given by an assistant accustomed to its exhibition, a napkin being moistened with a small quantity—this being, in fact, less than children of this age usually require, and not to be compared to that employed in operations. The abdomen was examined again, and a catheter was passed into the bladder, from two to three minutes at most having elapsed since it was determined to employ chloroform. At this moment, however, the lips were observed to become blue and the jugulars distended, while the pulse and respiratory movements ceased. A deep inspiration was caused by passing the finger down to the epiglottis, but this could not be renewed, a second one, however occurring upon opening a vein of the neck and discharging an ounce or two of blood to relieve the turgor. Tracheotomy was now resorted to (a third inspiration occurring during its performance) and artificial respiration performed, the diaphragm being at the same time stimulated by the induction apparatus, and the face kept sprinkled with cold water. Electricity was also applied in the region of the heart, and this was followed by acupuncture of the organ by means of two long needles. The heart's action, which had ceased to be audible, was seen by the regular and isochronous movements of the needles to become temporarily revived. These, however, soon ceased. All these means were most energetically applied by able assistants, and Dr. Hüter does not see that in a similar case that he could do otherwise, excepting, perhaps, that he would resort to acupuncture of the heart at an earlier period. No account of the autopsy is furnished. He does not think that so exceptional a case of death from chloroform should influence our general employment of this agent—this, indeed, being the first instance on record of a child under five years of age dying from the effects of chloroform. Deaths under chloroform may be ranged in three categories,—those in which this agent really exerts no essential effect, the patient dying not through, but during, the narcosis, in consequence of some other circumstance accompanying or preceding the operation; those cases in which the narcosis only operates mediately—*e.g.*, through the flow of blood into the anæsthised glottis during operations on the throat; and those cases in which the narcosis is the direct cause of death. It was so in the present case, although the patient had inhaled so little of a chloroform the entire purity of which has been ascertained.

In a communication to the Academy of Medicine, M. Leblanc read a memoir in which he shows that the cattle plague, termed by him, in common with all the French writers, "the typhus of horned cattle," is not confined to these animals, and may be propagated to other species. The following is the summary of the facts he observed at the Paris Jardin d'Acclimatation;—

> "On November 15 two Indian gazelles, contaminated by the typhus virus in England, were introduced amidst a collection of 135 animals of very varied race and species - ruminants, pachyderms, rodents, and carnivora. Of these 135 animals 34 were attacked with more or less severe typhus, and all were sacrificed except one, without any treatment having been put into force. Two dogs and two peccaries were also killed which were not ill. One only of the animals affected, a male auroch, survived. Those attacked were 12 oxen, 9 goats, 5 antelopes, 3 stags, 2 kids, and 2 wild boars. The disease was propagated with extraordinary rapidity, and from December 14 there remained no diseased animal. The promptitude of the slaughtering of the animals affected certainly contributed to the arrest of the extension of the scourge. It results from these facts that various species of animals, appertaining to different genera and families of the class mammalia, may be attacked by this disease. The ovine species does not seem very apt to contract it, for not a single sheep of the twenty-five inhabiting the infected locality was attacked."

An eye-witness gives, in a recent number of the *Deutshe Klinik*, an interesting account of a severe epidemic of *trichinosis* which occurred at Hedersleben, in Prussian Saxony—a place containing about 2000 inhabitants. A butcher having slaughtered two pigs, most of the consumers, among whom were many factory hands, ate the chopped flesh in a raw condition; and soon afterwards many persons at the factory were seized with a similar illness. One of the Doctors of the town immediately suspected trichinæ, but others called in consultation declared the affection to be cholerine. However, as out of 37 cases 20 soon died one after the other, the autopsies amply proved that the disease really arose from trichinæ; and three weeks after the first case the whole number had amounted to 300, with 40 deaths. (According to another account, there were 100 deaths.) This does not represent the whole numbers, for several persons, alarmed by the cholera panic, left the town, and of these several have died at the places they repaired to. At the autopsies, even three weeks after the outbreak, numerous "parent trichinæ" were found in the intestinal mucous membrane, the great bulk of the animals being in the intramuscular structure. The number of children affected, going down even to the third year, was remarkably great, yet they all recovered. As on other occasions, some of the patients, through exhibiting all the characteristic symptoms, denied having eaten pig's flesh, while some admitted only to have partaken of the fat. The immediate cause of death seemed to be paralysis of the inspiratory muscles; the most alarming symptoms, besides the loss of motion, were the profuse sweating and complete sleeplessness. There was delirium only in one case, and the convalescence resembled that of typhus. It seems that in examinations which have been recently made of beetroot, which forms the principal food of pigs, numerous animalcules have been found, but these are said to present quite different characters to those of the trichinæ.

**Royal College of Surgeons.**—The next primary and Pass Examinations for the Diploma of Membership will take place on Saturday the 13th and 20th respectively.

## UNIVERSITY COLLEGE AND HOSPITAL.

(*From a Correspondent.*)

For us as Medical journalists, University College means University College Medical School. We are not anxious to step out of our vocation by expressing the faintest opinion as to the political principles on which the College in Gower-street was instituted. Its story, as far as it invites the attention of the Medical reader, may be traced without allowing political bias to affect the narrative. It may be that the success of the College as an institution for general education has fallen somewhat short of the expectations and hopes entertained by its founders, but the position it has taken as a Medical school has always been far above mediocrity, whilst for a long period it bid fair to outstrip all its rivals. Although its history does not date back fifty years, it has enrolled amongst its professors in the Medical faculty, some of the greatest names in science, whilst a large proportion of the foremost men of the day as Medical teachers, writers, and Practitioners in Great Britain and the colonies have been amongst its *alumni*.

We suppose that most readers are familiar with the situation and appearance of the College and Hospital. The former has always been in an unfinished condition. The wings, intended to give completeness to the handsome but somewhat pretentious front, have as yet existed only on paper, and the mutilated ends of the building contrast oddly with the magnificence of the central dome and portico. The College stretches north and south, and is divided by the central dome into two halves, of which the northern is devoted to the Medical school, whilst the southern is the "Arts end." In front is a large open space, intersected by gravel walks and grass plots after the most approved academic pattern. The Hospital is separated from the College by the road. It is a plain building, but very well adapted to its purpose, and were it not that it is too closely surrounded by houses on the north, west, and south, and that it lacks a sufficient open space for the exercise and recreation of convalescent patients, its external appearance and proportions would insure it a favourable criticism; as it is it gives one the idea of a good useful Hospital, situated in a densely populated, but neither squalid nor unhealthy quarter —a building that has already done good service and that is destined to do a great deal more as years roll on—yet an appendage to the College, erected where it is rather for the sake of the students than of the patients.

Although, as we have said, University College has not existed more than forty years, it has a history. Our personal acquaintance with it does not date back much more than half that period, but we have seen many changes and events there which have more than a local or narrow interest. We remember well the time when, coming up to London a raw country lad, we looked with awe at the portico, the theatres, and the dissecting-room, and with triple awe at the Professors seated in formal phalanx at the introductory lecture. At that time the Master of the Mint was the Professor of Chemistry, Liston and Samuel Cooper shared the Surgical Chair, Richard Quain taught Anatomy, Dr. C. J. B. Williams lectured on Medicine, Dr. Walshe on Pathological Anatomy, Lindley on Botany, and Anthony Todd Thomson on Materia Medica. Each of these professorships has now another incumbent. Some of them have changed hands more than once since 184-. Liston, Cooper, Lindley, and Anthony Todd Thomson are dead, and the rest have retired after long and successful services. Other stars have arisen in their places, but, excepting the mediæval Hospitals, there are few British Schools of Medicine which can show a more noble roll of past worthies than can University College—modern as it is.

A truce at present to personal reminiscences. On the 1st of October, 1828, the Medical Department of University College was opened by Mr. Charles Bell, the Professor of Physiology and Surgery, who delivered an introductory address in the largest theatre of the institution, built to hold 800 persons, which was filled to overflowing on the occasion. So says a contemporary journal, and *certes* a great Medical school could not have been opened under better auspices. We have no doubt that the distinguished physiologist was listened to with breathless attention, and applauded vociferously. Bell's connexion with the College was not, however, of long duration. The team does not seem to have pulled together very amicably at first; at least, a good many changes occurred in the earlier years, and one or two squabbles were talked about and even written about out-of-doors. Bell retired early in the Session of 1830-31, and Dr. Southwood Smith temporarily supplied his place in the Chair of Physiology. He went back to the Middlesex, was knighted, and chosen Professor of Anatomy to the Royal College of Surgeons. But the University School cannot afford to forget that it was opened by a man who, amongst British Physiologists, ranks only second to Harvey.

The College at first bore the name of the London University, and it was originally intended that a charter should be obtained for the purpose of enabling it to grant degrees. When the University of London was instituted and endowed by the Whig Government in 1836 the name was altered to University College, but no little confusion was caused to the public by the alteration, and few uninitiated people knew the difference between the two institutions.

Besides Charles Bell, the following composed the Medical Faculty during the session 1828-29:—Mr. G. S. Pattison taught Anatomy; Dr. Conolly, the Nature and Treatment of Disease; Dr. D. D. Davies, Midwifery; Dr. A. T. Thomson, Materia Medica; Dr. Edward Turner, Chemistry; Mr. T. R. Bennett, Practical Anatomy; Dr. Watson, Clinical Medicine; Prof. Grant, Comparative Anatomy; Prof. Smith, Medical Jurisprudence; and John Lindley, Botany. The students obtained their Hospital practice at the Middlesex Hospital, and Dr. Watson and Mr. Bell delivered clinical lectures in the University on the cases which occurred in the Hospital. The number of students entered on the College books was 193, and on looking down the prize list for the year we find the name of Edwin John Quekett third in honours in Anatomy and obtaining the first silver medal in Chemistry. Mr. Quekett was afterwards known as an original observer in Microscopical Botany and the Lecturer on Botany at the London Hospital, where he educated his more celebrated brother, the late Conservator of the Hunterian Museum. He died at the age of thirty-eight. To have given the first impetus to such a career was alone a tolerable share of success for the first year.

In this journal we have never been great advocates of the prize system. We regard its extensive introduction into the system of Medical education as by no means an unmixed good. Early honours have sapped the vital powers of many an active brain, and left it irritable and partially exhausted for life.

But certainly there are some robust natures, some elastic intellects with whom forcing seems to agree. All high wranglers do not become useless members of society nor forgotten in science, and when on looking down the prize and honour list of University College, during the first twelve years of its career, we find the names of Quekett, George Viner Ellis, William Baly, of Lynn Regis, Norfolk, George Newport, of Canterbury, John Taylor, of Huddersfield, Thomas Bevil Peacock, Thomas Morton, J. Philip Potter, Erichsen, W. B. Carpenter, William Jenner, E. A. Parkes, Durancé George, Edwin Lankester, Frederick John Mouat, and Richard Quain, junior, we are bound to confess that there must have been a race of young giants in those days who stood the training admirably, and came out of it with powers of thought and observation and work strengthened by the trial. All horses are not for the racecourse, and we want hackneys and carriage horses; but abolish the turf and the strain of thoroughbreds would soon get impoverished and disappear.

Other changes besides Bell's retirement took place in the Session 1830-31. Dr. Conolly resigned, and was succeeded by a Physician whose name is identified with the early career of the Institution. Dr. Elliotson soon obtained in the Chair of Medicine the zenith of popularity and a European fame. His genius and acquirements can now be appreciated by a study of his lectures. But by his old pupils he is still remembered as perhaps the most popular teacher of his time. How attractive his teaching was is proved by the fact that the number of students in the class of Medicine increased from 90 to 197 during his tenure of the Professorship. It little becomes us here to speak of one who is still amongst us. The causes which led to his resignation in 1838 were widely discussed at the time, and although he retired as the apostle of an exploded fallacy, he left behind him a name as a practical Physician and teacher which will last when Mesmerism and phrenology are finally consigned to the limbo of alchemy and astrology. In the same Session Professor Pattison retired from the Chair of Anatomy. His retirement, we believe, was compulsory, and the curious in squabbles may read the story in the dusty volumes of the *Lancet* at the College of Surgeons. Professor Bennett died, and in the following Session we find Dr. Jones Quain occupying the Chair of Anatomy, and Mr. Richard Quain superintending the department of Practical Anatomy.

The Session 1831-32 saw the Army veteran and the most learned Surgeon of the age, Samuel Cooper, inducted into the Chair of Surgery. Our recollections of Mr. Cooper date a good many years later than the time of which we are writing. Well do we remember him—bald and white haired, somewhat infirm, but still in a green old age, intelligence and kindness sharing his face as he walks slowly into evening lecture, sits down, crosses his legs, and, without note or book, begins a discourse full of practical maxims, illustrated by all the rich experience of the battle-field and Hospital, and all the varied stores of learning which went to compose the Surgical Dictionary. What a favourite he was with the students! There was a tradition in our day—we do not vouch for the truth of it—that after he had been somewhat roughly attacked on one occasion by the redoubtable Editor of the *Lancet*, the men had unhorsed his carriage, and, taking the place of the horses, dragged him to his own door!

On May 22, 1833, the first stone of the Hospital was laid by the Duke of Somerset, and it was opened on November 1, 1834. In Elliotson's address at the close of the Session, he says that already 2464 patients had been treated in it, and 116 students had taken tickets for Hospital attendance. The success of the new Hospital was doubtless due to many causes. There was the fame and reputation of the staff—the *prestige* of the College and the attractions of novelty. But apart from all these, the founders of University College Hospital had established a principle which made the whole body of Medical students their debtors. By throwing open the whole of the Dresserships, Clinical Clerkships, and House-Surgeoncies to be competed for by the most deserving students without the payment of special fees, they had given the key of the surest path to practical knowledge to hundreds of young men whose want of pecuniary resources would have cut them off from attaining it at the older institutions. Nowadays things are altered: the University College principle is adopted everywhere, or with very few exceptions; but we must not forget the honour due to the inaugurators of a great reform. The appointment of House-Surgeons by the French system of *concours* was another happy innovation well adapted to attract able, ambitious young men. It will be readily allowed that these were not amongst the least powerful of the causes which for a time carried the College ahead of all competitors. Already the tide was setting in, for in the Session of 1835-36 there were 424 students entered on the books.

Two great names were added to the list of the Faculty of Medicine during the session 1835-36. Dr. Carswell, afterwards Sir Robert, delivered his first course of pathological anatomy in the summer session of the latter year, and Robert Liston was appointed Professor of Clinical Surgery. Every one who has visited the College has been shown the unequalled series of pathological drawings with which Carswell enriched the institution. With the wax models by the Tusons, father and son, they form an almost unrivalled collection. Except, perhaps, in the hands of Sir Charles Bell, art had never been rendered so subservient to pathology as in Carswell's drawings; and in becoming possessed of them the College received a treasure, a faithful transcript of nature, of which the value can never diminish. The name of Liston, ἄναξ ἀνδρῶν, would alone stamp dignity on the history of any school. No doubt he is still fresh in the memory of most of our readers; but for those who are entering their Professional career we may attempt a description of the greatest Surgical genius of modern times. Of gigantic form and proportions, a noble, upright bearing, handsome, large featured, with a grand head of the dolicho-cephalic type; bald, a sharp, scrutinising grey eye, forehead well proportioned, but not unduly predominating; a wonderfully determined mouth and brow usually wearing a stern expression, but which could break into the most winning smile; hands that would have served a son of Anak, but thoroughly well proportioned, powerful as a gorilla's but flexible and delicate of touch as Paganini's; he was one of the few men who not only are sufficiently marked to set their personal identity above the risk of being mistaken, but who are so unlike all others that they do not even suggest a resemblance. Liston was Liston, not only in person, but in dress, gait, bearing, voice, manner; there was a grand simplicity about the man which was like no one else. Even to the plain black riband of his watch, he scorned ornamentation. See him at 7.50 on a frosty morning in spring coming to lecture on Operative Surgery, in red neckcloth, shooting coat, and gaiters, after a sharp walk round the park, or at two in the afternoon stepping from his dark brown chariot, with the tall bays, at the Hospital door in spotless linen, loose black silk neckerchief, plaid trousers, with half-a-dozen Surgical instruments concealed up his capacious coat sleeve, there was no occasion to ask, "Which is Liston?" How the students used to rush after him up the Hospital stairs, or on field days swarm into the operating theatre! Watch him at lithotomy—see how carefully he examines his instruments, looks to the tying up of the patient and other preliminary details! He passes the sound and then sits down, whilst every voice is hushed in the crowded theatre and every eye directed on the bald head and those marvellous hands! A decided cut, one or two lesser ones, and in a moment the huge left forefinger is in the bladder, and the forceps is following it, whilst a deep-voiced "Steady, steady," reassures the groaning patient. With wonderful adroitness the stone is seized and extracted, and a short tube introduced into the wound, and the great operator looks round as calm and unexcited as if he had been carving at the dinner table. We have seen splendid lithotomies in London and elsewhere, but we never saw anything which came up, in simplicity, rapidity, or certainty, to Liston's operation.

"Facta non verba" might have been Liston's motto. He never was a fluent lecturer. His sentences were short, broken up, abrupt, colloquial; but they were *remembered*—a higher virtue than belongs to the efforts of many a voluble orator.

That he did many wonderful Surgical feats is as mere a truism as that Napoleon fought many wonderful battles. But we recollect one which is of some historical interest. One day it was noised abroad that Liston was going to remove a ball from the head of the thigh bone of an old foreigner which had been imbedded for a great number of years, and had resisted the operating skill of Dupuytren and other Continental Surgeons. The theatre was accordingly crowded, and after a time a greyheaded, thin old man, in a red nightcap, was assisted into the area by the Hospital porters. We heard that he was a Pole, and that his name was Bem, and that the ball had been received in a duel fought some twenty years before. The operation began—there was no chloroform in those days, but not a murmur escaped from the patient. After the preliminary incisions, which extended deep down through the muscles of the thigh, some minutes were occupied in bone cutting and gouging, and then Liston looked up with the ball in his hand. It had been lodged deep in the bone in the neighbourhood of the great trochanter. We fancy we can see now the flicker of triumph that came over Liston's usually impassive face. Hæmorrhage is stopped, the flaps replaced, and some water dressing placed on the wound; and as the old man is carried out he takes off his red nightcap and waves it to the students, who give him a cheer that must have startled the patients in the adjoining wards. Not many seasons after all Europe had heard of the storming of Hermanstadt, and that the best troops of Russia and Austria were in rapid retreat before the victorious national legions of Hungary led by General Bem.

Love of athletic exercise was a strong passion in Liston. To ride a restive horse or hunt a rough country were to him delight. A little danger only added zest to the pleasure. He did not always escape unscathed, and it was supposed that his fatal illness was precipitated by the exertion of taming an unmanageable horse. He met with more than one serious accident whilst hunting, and on one occasion fractured his pelvis. But his Surgical instinct never forsook him. He used to relate in his lectures that when he came to himself after fracturing his pelvis his first thought was to ascertain that his bladder was uninjured. In his last illness it was he himself who suggested the true cause of the dysphagia and hæmoptysis that accompanied it. The writer recollects to this day with devout gratitude one of Liston's hunting stories. He was undergoing the ordeal at the College of Surgeons, where Liston at the time was an examiner. One of the Court, who shared a table with Liston, was posing the candidate very unmercifully about some particular fracture of the lower extremity, when Liston broke in, and related that he had met with the same accident, and, rising, showed how he had managed to limp about during its cure. The good-natured diversion had the most happy effect. The conversation, which before had taken something of the complexion of a cross-examination at the Old Bailey, became a pleasant chat, and everything went smoothly until the President's bell rang.

Many stories are told of Liston's enormous muscular strength; we recollect an instance of its exercise which created some amusement at the time amongst the students. It used to be a favourite trick with many of the men to climb over the railings which surrounded the area of the operating theatre after operations were over, and thus make a short cut into the corridor outside. This had at last become a nuisance, and was accordingly forbidden by the Hospital authorities. One day, however, a luckless youngster, of not very tall stature, made a bolt over the railing before Liston had left the theatre. In a twinkling of an eye the hapless wight was suspended in the air by his coat collar and quietly deposited on the other side of the railing, amidst a roar of laughter from the bystanders. Liston was the favourite of the students generally; but his House Surgeons and assistants almost worshipped him, and he became warmly attached to many of them. Few things affected him more than the death of Philip Potter, who was Junior Demonstrator of Anatomy, and had as a student achieved a brilliant reputation both in the College and at the University of London. Potter died from dissecting wound. His bust now stands in the lobby of the library of University College, close to that of his great master. He was as handsome as Apollo Belvidere, a first-rate anatomist and Surgeon, and as gentle and kindly natured as a knight of romance. Not long after Potter's death Liston's House Surgeon and one or two more of the senior students were dining with him. After dinner the party drew round the fire. Liston sat for some time moody and silent. At last he rose, and, filling a bumper of claret, said to his guests, "Do as I do"—"Poor Potter!" He drank the wine and dashed the glass on the floor. It was never to be profaned by a less solemn use.

But we must return to University College. It has always been the good fortune of that institution to secure the services of one of the best men of the time in the Chair of Chemistry. The first Professor was Dr. Turner, the author of the most popular text book of the time, and an exceedingly able teacher. Old pupils of Turner's still speak of the wonderful clearness with which he could impart a knowledge of those elementary principles which most students find it the most difficult part of the business to grasp. Of course organic chemistry was then in its infancy, and the "Doctrines of Modern Chemistry," with which the readers of the *Medical Times and Gazette* may be charitably supposed to be now familiar, were sleeping unborn in the pregnant womb of philosophy. But in teaching the old-fashioned "$KO\,SO_3$" no one was more successful than Turner. He died in 1837, and was succeeded by Mr. Thomas Graham, of Glasgow, the future Master of the Mint, and acknowledged one of the most philosophical chemists of the day. The great attraction in Professor Graham's lectures was the beauty, perfection, and certainty of the experiments by which they were illustrated. They never failed, and more than compensated for the Professor's moderate pretensions as an orator. On his retirement he was succeeded by Fownes, the benefactor of Medical students by his admirable Manual, and of University College by the bequest of a valuable chemical library. The premature death of Professor Fownes again left the Chair vacant; but fortune again proved auspicious, and a worthy successor to the chair of Turner, Graham, and Fownes was found in Professor Williamson. The facilities offered in the Birkbeck Laboratory for the study of chemistry render University College one of the best training places in Europe, not merely for the students who study chemistry as a branch of Medical science, but for men who are to make it the business of their lives.

The Session 1838-39 was an eventful one in the history of the College and Hospital. Professor Elliotson resigned in consequence of the discharge of one of his mesmeric patients by the Hospital authorities. The students were divided into two parties: one favouring the Professor, the other siding with his opponents, and several stormy meetings took place. Dr. Copland was selected to continue the course which Dr. Eliotson had left unfinished. His first lecture was delivered amidst a storm and counterstorm of hisses and cheers that would have silenced a man of less cool head and less determined will. Like one of the Scandinavian heroes from whom he is descended, with burly form and unblenching brow he stood confronting the hurricane. In vain did Dr. Sharpey interpose and enforce the claims for learning and ability of the new lecturer. The *fracas* lasted until the termination of the hour, but was never repeated. Dr. Copland persevered, and conducted the course to a successful termination. Dr. C. J. B. Williams succeeded to the Chair. The appointment was hotly contested. Among the candidates were Dr. Marshall Hall and Dr. Craigie. Dr. Williams held the Chair and the office of Physician to the Hospital until his large practice rendered their further tenure impossible, and he was replaced by Professor Walshe, who had succeeded Dr. Carswell, on his appointment as Physician to the King of the Belgians, in the Chair of Pathological Anatomy. Dr. Walshe retired from the College and Hospital a few Sessions back, and Dr. Jenner now ably performs the duties of Professor of Medicine.

The next events which it behoves us to notice are the changes which followed the death of Mr. Liston, which took place in December, 1847. This was the heaviest blow that the College had received in its whole career. Mr. Cooper's health was failing, and he had obtained the assistance of his son-in-law, Mr. Morton, a very talented Surgeon and amiable man, who was already Assistant-Surgeon to the Hospital, in the delivery of the lectures. The authorities of the College, however, rightly thought that Liston's successor should be one who had already achieved a high reputation. They were determined to have the very best man they could obtain. They accordingly made overtures to the Surgical Autocrat of the North. Mr. Syme acceded, and came up to London, and was elected Professor of Clinical Surgery and Surgeon to the Hospital. His tenure, however, only lasted a few months. After the undisputed sway he had enjoyed in Edinburgh, the rivalry of London Professional life was probably distasteful to him, and he set his countrymen the almost unprecedented example of returning to Scotland. Mr. Cooper, naturally, perhaps, hurt at a supposed neglect of his son-in-law's claims, also tendered his resignation, and he shortly afterwards died. The Chair of Surgery was then filled by the able Surgeon Mr. Arnott, who quitted the Middlesex Hospital at the invitation of the Senate. He, however, retired in 1850, and Mr. Erichsen, an old pupil of the College, who had already obtained a high reputation at the Westminster Hospital, was elected to the Professorship, which he still holds.

About the time of Mr. Arnott's retirement Mr. Quain resigned the chair of Anatomy to Mr. Ellis, retaining only the office of Special Professor of Clinical Surgery to the Hospital. Many years before—in 1836—Dr. Jones Quain had vacated the Professorship of Anatomy and Physiology, and the Council were fortunate enough to obtain the services of the greatest physiological teacher of the age—Dr. Sharpey. When Dr. Sharpey began to lecture, minute anatomy, in its modern sense, was unknown in England. He was the first teacher who demonstrated to an English audience the wonders which Henle, Schleiden, and Schwann had brought to light in Germany by microscopical research. His classical article on Cilia had stamped him as an original observer in the same field, and the Professorship gave him the opportunity of utilising the results of his wide and varied acquaintance with biological science. It is not within our province to speak much of the living, but our sketch would be imperfect did we not refer to the lustre thrown over the whole College by its present Professor of Physiology.

In 1849 the College and Hospital sustained another loss by the death of Dr. Anthony Todd Thomson. Dr. Thomson was a perfect cyclopædia of Medical knowledge, a diligent and painstaking lecturer, and a successful Physician. Before his death his health and powers had been failing, but in the zenith of his energies he had contributed greatly to the success of the College. Originally a general Practitioner at Chelsea, he had by his writings elevated Materia Medica into a science, and in this country pioneered the path which has been so successfully followed by Christison, Pereira, and Garrod. He was very kind to the students of his class—inviting them in batches to his house, where he entertained them with Scottish breakfasts and good talk. In the Hospital, skin diseases which nobody else could cure vanished before his well-remembered "*Pergat in usu medicamentorum.*" No man knew better than he the value of remedies or applied them with more skill. He was succeeded in the chair of Forensic Medicine by Dr. Carpenter, and in that of Materia Medica by Dr. Garrod, whilst Dr. Parkes filled the vacancy caused by his death at the Hospital. All were men who had done honour to the College in which they had been educated by earning first-rate reputations as scientific writers and observers. Dr. Carpenter was succeeded on his retirement by Dr. Harley, who had previously been commissioned to give lectures in the College on the microscope and its applications to Medical science, and Dr. Garrod by Dr. Sidney Ringer, a distinguished pupil of the school. The readers of the *Medical Times and Gazette* need not to be reminded of the debt which Medical science owes to Dr. Harley.

We have said little hitherto of the means, appliances, and advantages for Medical education possessed by the College. First and foremost is the noble dissecting-room, 98 feet long by 38 feet wide, well ventilated and lighted from above, so that a dozen students might work round a subject without overshadowing each other. Then there is the Birkbeck Chemical Laboratory, fitted with every requisite for carrying on at one time the education in Practical Chemistry of a large number. The Museum and Laboratory for Materia Medica, the Laboratory for Practical Physiology and Histology, furnished with a series of microscopes, the old Museum for Comparative Anatomy, rich in Invertebrata, all deserve notice. Carswell's collection of coloured pathological drawings, about 700 in number, with a systematic catalogue and histories of the cases, arranged by the collector himself, has already been alluded to. But besides all these, the College possesses a Museum of Healthy and Morbid Anatomy which might be the envy of many an older institution. It was founded on the basis laid by Sir Charles Bell, and contains many of his preparations and drawings, with their original catalogues. The wax models and the series of brains cast in wax, from dissections made by Professor Sharpey; the skeleton of Harvey Birch, which the poor misshapen acrobat left to Liston, and which is described in the Medico-Chirurgical *Transactions* by Professor Ellis; the splendid set of preparations illustrating utero-gestation made by Dr. Davis; a valuable collection exhibiting the anatomy and diseases of the arteries; an extensive series of calculi, including, besides many others, halves of all those removed by Liston—are amongst the treasures it contains. Capital Medical and general libraries, with every facility for quiet study, are open to the students. Neither is the outer man forgotten. They have an excellent dining-, and common-room, a fives'-court, and a well-furnished room for a reading-club, to which students are admitted by ballot. The College, also, is rich in treasures of art. The glorious Flaxman collection, the Murvelt portrait of Harvey bequeathed by Mr. Field, the statue of Locke in the general library, prove that utilitarianism is not the only goddess worshipped within its precincts.

The Hospital contains ten wards and 136 beds. There are six large wards, each 63 feet long, 24⅓ wide, and 14½ high. Twenty beds in each gives 1160 cubic feet for each patient, and 11¼ feet from foot to foot of each bed, but the number of patients in the wards has never, we believe, been so great. Of the ten wards, four are Surgical and six Medical. There is a small ward, containing three beds, for obstetric patients, an ophthalmic ward for six patients, and two beds are allotted to skin disease. As we have before hinted, University College Hospital is, *par excellence*, a Clinical Hospital, and, although comparatively small, it affords the student a thoroughly well-worked field for the study of disease.

But we must bring our sketch to a close. We know how imperfect it is, and should have been glad to have paid our slight tribute to the memories of Lindley, the great practical botanist of his time and country; of Jones Quain, the accomplished anatomist; of John Taylor, Professor of Clinical Medicine, whose crucial observations first shook the popular belief in the value of mercury in pericarditis, and of several others who have passed away; and amongst the living, to the eloquent and venerable Professor of Comparative Anatomy, who, with Drs. Watson and Conolly, are the sole survivors of the original Faculty. We should have liked, also, to have dwelt on the career of many of the students of the College who have carved, or are carving, for themselves niches in the Temple of Fame. Of such men as George Newport, the entomologist and comparative anatomist; Stocks and Griffiths, the Indian botanists; Herbert Barker, of Bedford; or, to come nearer home, of Professor Ellis, Henry Thompson, Humphry Sandwith, of Kars, Cadge, of Norwich, and many more. But time and space fail us. As we close our manuscript, our thoughts wander back to many pleasant memories and associations which we owe University College. Fondly and gratefully we take leave of Alma Mater. That our feeling will be shared by all who have had the advantage of studying within her walls we feel certain. She has nobly fulfilled her mission as a Medical School, and if future success is to be predicted from past history, centuries hence will see her then, as now, in the van of the great educational institutions of England,—

> "To lead her sons to all the Castalies,
> And feed them with the milk of every Muse."

# RINDERPEST NOT SMALL POX.

(*From a Provincial Physician.*)

In attentively considering this subject, it at once strikes us as remarkable that this disease should have appeared in our country at a time when the human small pox is disappearing, or has disappeared, from amongst us; and that whilst variola has been raging on all sides for some two or three years past, it has now for several months almost ceased its ravages; so that, in fact, just as the epidemic constitution of the atmosphere has become unfavourable to the continuance and existence of small pox in man, it has (on this supposition) become so favourable to its development in cattle, that an epidemic of the utmost virulence has appeared amongst them, spreading and destroying, as if it were flourishing under the most favourable possible influences.

Again, we must not overlook the fact that a disease known by the name of, and believed to be true, small-pox is already known in sheep; a disease, too, in which very strong analogies with the human variola unquestionably exist, but which does not appear to be communicable to the ox tribe by inoculation. On the other hand, the Rinderpest of sheep is most readily and freely conveyed to them. So, too, the cattle plague is very readily communicated to sheep, as well as to other ruminants, such as goats and deer, both by inoculation and by making them breathe infected air; the result being the development in them not of variola ovina, but of a disease identical in all its leading features with that of the ox, from which it was derived. If, then, the disease called variola ovina be true small-pox in sheep, and if this cannot be conveyed to oxen, whilst the Rinderpest of sheep can be so conveyed, and if, again, the cattle plague can be communicated back again to sheep, where it developes not small-pox but its exact bovine analogue, we may well pause before coming to any conclusion as to the identity, or even intimate alliance, of the two affections.

Another very strongly marked point of divergence between the two diseases as appearing in man and beasts is, that in the small-pox of man the eruption is, as it were, *the* disease; in animals, on the contrary, it is its least marked feature—so much so, indeed, that it is only quite recently that the eruption has attracted any attention at all. If it is varioloid, therefore, in beasts, it must be a suppressed eruptive disease—a *variola* almost *sine variolis*. In sheep, on the contrary, as in man, the eruption is the marked feature of the pox; the fever is evidently symptomatic of the eruption; and the eruption itself presents many and close analogies with that of human variola.

It has been said that the texture of the skin of bovine animals is such as to prevent the development of ordinary variolous eruption upon it. We ask, is there any proof of this? In sheep the eruption appears without difficulty, and runs through its various stages of papules, vesicles, and pustules, not only without apparent hindrance, but the latter become even larger and, if possible, more fully matured than in man; yet sheep and oxen belong to the same ruminant class, and, consequently, have the same class of integument. Moreover, in oxen nothing like a true variolous eruption appears on the nostrils, eyelids, or other spots where the skin is thinner, and where, consequently, we might expect a struggling eruption to develop itself in its more distinct and proper character.

Let us look also to the eruption itself. It will be found that this, in its whole course and duration, differs most widely from that of true variola. Thus, in man, the eruption of small-pox in its first appearance is both peculiar and distinctive. The papules come out in a crop; they are dense, often feeling like small shot in the skin, and giving the integument a very peculiar, finely-nodulated feeling. In Rinderpest oxen the eruption is always comparatively scanty. When first discoverable, it consists of very small, fine, and by no means hard or dense papules; and as it developes, forms minute acuminated vesicles, which present little or no analogy to variola, and none to vaccinia; which more nearly resemble minute vesicles of eczema than anything else, and which run through their course far more rapidly than human or cow pox, quickly becoming or drying up into small semi-purulent acuminated pustules.

In the small-pox of sheep the vesicles and pustules are large and flat, and occasionally umbilicated, thus showing exactly the contrary condition to that found in Rinderpest animals. In man the eruption of small-pox specially affects the face, and its appearance here gives the type to the disease; in oxen the eruption, when it appears at all upon the face, consists of a few small vesicles, chiefly upon the nose, which quickly run their course, leaving only little white spots or scars behind, instead of passing the prolonged stages of maturation and desiccation seen in man.

In many other respects this disease in oxen presents the widest differences from the variola either of man or sheep. Setting aside the congestions seen in the tracheal and intestinal mucous membranes, and which may present a certain analogy to those seen in virulent small-pox, nothing that has ever been noticed in the latter disease has shown any approach to a resemblance to the remarkable purplish-red discolorations which are invariably found in Rinderpest in the mouth, the ilio-cæcal valve, around the vaginal orifice, and elsewhere. These discolorations may be, and doubtless are, in some way due to the changes effected in the constitution of the blood, but they are nevertheless more peculiar, more constant in their seat, and more truly characteristic of the disease than the eruption or even the intestinal congestions.

The purple patch upon the edge of the ilio-cæcal valve has in our experience been so definite in appearance and situation and so constantly present as almost to constitute a diagnostic sign of the disorder; and, moreover, almost sufficiently definite to justify the idea of its being a portion of a distinct intestinal exanthem or rash, rather than an accidentally-placed bit of inflammatory congestion; subject, indeed, to laws, which, from its nature and type, are fixed and definite, rather than to the ordinary and variable course of typhoid inflammation or congestion. In this respect there is an undoubted analogy to the faucine blush of scarlet fever. But this analogy is by no means perfect, except perhaps as to its specific nature, for whereas the redness of a scarlatinal throat disappears in a few days—with the cutaneous rash, in fact—this discoloration in the mucous membranes of Rinderpest animals lasts for a far more lengthened period, and we have recently seen this very purple patch remaining in great intensity and distinctness upon the edge of the ilio-cæcal valve of a cow which, having survived an attack of the disease six weeks, and being nearly convalescent, was killed for economical reasons, the congestion of the mucous membrane of the stomach and bowels having all but disappeared, and left only a dirty, muddy, yellow discoloration behind.

All observers have agreed in describing the smell emitted from the diseased oxen as most peculiar and offensive; and, indeed, it is so peculiar as in our opinion to form another point of separation between this disease and variola. The variolous smell is most peculiar, sickening, and characteristic; so is the Rinderpest smell peculiar and characteristic; but it has not the sickening odour of human variola, and it is in our opinion perfectly different in character from it. Moreover, the smell of variola is emitted in greatest intensity by the skin, that of Rinderpest by the abdominal viscera of the carcass, and by the breath of the animal when alive.

One more point remains to be noticed. In human variola, except in the most virulent and malignant types, no such ecchymoses beneath the skin and mucous membranes are met with as are constantly found in Rinderpest; or if by chance petechiæ, vibices, etc., do occur, they are generally accompanied by true hæmorrhages from the nose, mouth, etc., or by other signs of a defibrinised or a plastic state of the blood.

In Rinderpest they are nearly always found; but at the same time the blood is firmly coagulable, and apparently hyperfibrinised, the hæmorrhages which do take place being confined to a very slight escape of blood in the urine, or to the discharge of a small quantity mixed with the mucus of the dysenteric stools.

We have said enough, we think, to show with what difficulties this subject of cattle plague is still surrounded. For several months the attention of some of our best pathologists and acutest observers has been directed to it, yet its very nature is still undecided, and except in a negative sense no progress whatever has been made in a therapeutical point of view. Were it to be determined that the disease is either true bovine small-pox or its equivalent, we might hope that the problem of preventing its ravages was about to be solved. It may, indeed, be that in spite of the great, the marked—we had almost said the intrinsic, differences between the manifestations of this disease in oxen and variola as seen in the kindred race, the sheep, and in man, the bovine constitution may be found to create and explain them all by its modifying influences (and so important is this point that it must be cleared up at once by the only accurate test of experiment); yet without venturing to express a positive opinion upon the point, we cannot help feeling that the differences are so great as to damp the hopes which such an idea at once suggests, and to make us fear that we have rather in Rinderpest a disease allied to small pox it may be in its nature, like it in many most remarkable features, yet withal essentially distinct from it, *sui generis*, and specific.

**Dr. Romberg.**—A testimonial was presented to this distinguished Physician on the occasion of his reaching his 70th birthday by a deputation composed of the *élite* of the Berlin Professors and Practitioners, and headed by Langenbeck, Virchow, Von Graefe, and other celebrities. In his reply he observed one of the warmest desires of his life was to secure the love of his pupils and the friendly esteem of his colleagues. These could not be attained by science and knowledge without the aid of integrity of character, and it was for this reason that he felt so much honoured by the demonstration.

## REVIEWS.

*Narrative of an Expedition to the Zambesi and its Tributaries, and of the Discovery of the Lakes Shirva and Nyassa*, 1858—64. By David and Charles Livingstone. With map and illustrations. London: John Murray. 1865. Pp. 608.

It would be out of place in a Medical journal to attempt a regular analysis of this very interesting volume. The heroic Dr. Livingstone, who has devoted his life—we may say, who has given one dearer to him than his own life—to the exploration of Eastern Africa, with the purpose of making known its geographical features, of ascertaining its produce, developing its commerce, studying the character of the native races, and imbuing them with the light of Christianity; and besides, of putting down the infamous slave trade, which is carried on under the auspices of the Portuguese;—he, we say, tells us in this volume of his adventures between March 10, 1858, when he left England, and June, 1864, when he arrived at Bombay on his way home. The Doctor headed a missionary and scientific expedition, of which Mr. Charles Livingstone, Dr. Kirk, and Mr. R. Thornton were members. He speaks generously of their co-operation, and leads us to hope soon for an account from Dr. Kirk's pen, of the botanical and other natural history specimens which they met with. His tone throughout is bold and uncompromising; he can see no excuses, nor admit the possibility of failure. Readers of the *Medical Times and Gazette* are aware of the disastrous results of the Oxford and Cambridge Mission to Central Africa; how Bishop Mackenzie lost his life; how the missionary party were cut up by fever and famine, and the scheme abandoned, at least for a time.

Much of this disaster is ascribed by Dr. Livingstone, and apparently with great justice, to want of experience in the missionaries; to want of knowledge how an European—a tender exotic—could maintain life in Central Africa. It is true that to attain great ends lives ought not to be weighed in the scale; but if experience has anything to teach, ought not the missionaries to have learned it before starting?

Neither, however, the mishaps of missionaries nor the villainies of slave hunters can be treated of in these columns; but we may notice a few passages which we have marked as bearing on Medical topics.

Fever is the curse of the country, and is met with at every step. The mouths of the Zambesi River are, like those of the Nile, channels through an enormous delta of sand. Some members of the expedition were obliged to remain three months on a small island a few miles up in this delta. "Here some had their first introduction to African life, African fever. Those alone were safe who were actively employed."—P. 23. A few miles higher up Dr. Livingstone was requested to take the Portuguese Governor, who was very ill of fever, across to Shupanga."—P. 27. His Excellency was a disciple of Raspail, and insisted on taking nothing but a little camphor; so he became comatose, and whilst thus helpless his chief officer dosed him with quinine, so that by the next morning he was "cinchonised and better."—P. 28. At Shupanga, "in 1826, poor Kirkpatrick, of Captain Owen's Surveying Expedition, died of fever; and here, in 1862, died of the same fatal disease, the beloved wife of Dr. Livingstone."—P. 31. A little higher, the expedition came to Senna—a dull, sleepy place; of which, says the Doctor, "one is sure to take fever in Senna on the second day if by chance one escapes it on the first."—P. 35. For some time the expedition had its head quarters at Tette, about 250 miles up the river. "There," says the Doctor, "a good deal of fever comes in with March and April; in March, if considerable intervals take place between the rainy days; and in April always, for then large surfaces of weed and decaying vegetation are exposed to the hot sun. In general, an attack does not continue long, but it pulls one down quickly, though when the fever is checked the strength is as quickly restored. It had long been observed that those who were stationed for any length of time in one spot, and lived sedentary lives, suffered more from fever than others who moved about and had both mind and body occupied." "We observed that we were often all affected at the same time, as if from malaria. This was particularly the case during a north wind; it was at first confidently believed that a daily dose of quinine would prevent the attack. For a number of months all our men except two took quinine regularly every morning. The fever sometimes attacked the believers in quinine, while the unbelievers in its prophylactic powers escaped. Whether we took it daily, omitted it altogether for months, made no difference; the fever was impartial, and seized on us in the days of quinine as regularly and as surely as when it remained undisturbed in the medicine chest; and we finally abandoned the use of it as a prophylactic altogether. The best preventive against fever is plenty of interesting work to do, and abundance of wholesome food to eat. To a man well housed and clothed who enjoys these advantages the fever at Tette will not prove a more formidable enemy than a common cold; but let one of these be wanting, let him be indolent, or guilty of excesses in eating or drinking, or have poor, scanty fare, and the fever will probably become a more serious matter." Although not a preventive, "quinine was found invaluable in the cure of the complaint as soon as pains in the back, sore bones, headaches, yawning, quick and sometimes intermitting pulse, noticeable pulsation of the jugulars, with suffused eyes, hot skin, and foul tongue began." P. 72.

The Doctor gives a curious picture of the mental effects of the fever poison on certain persons—despair, apathy, and irritability are not to be wondered at; but something like hallucination seemed to be one of the earliest symptoms. The line of treatment which seems to have been pretty successful was first the administration of pills, to which the Doctor gives the name "rousers"—composed of six to eight grains of resin of jalap, the same of rhubarb, and three each of calomel and quinine—then quinine to cinchonism. The only cases in which he was completely baffled were those in which obstinate vomiting occurred. He made full trial of "Dr. Warburgh's fever drops," and found them useless. "In the shivering stage it caused warmth, but did not cure. One old man seemed cured, but died a day or two afterwards."

In March, 1859, when the main body went on a prolonged trip, they found on their return that the quartermaster who had been left in charge of the ship, was dangerously ill with fever. Dr. Livingstone gave him twenty grains of calomel with excellent effect, and speaks of its virtues in causing an abundant flow of bile. On the whole subject of the relation of different modes of treatment to each other—the antiphlogistic, the calomel, and the quinine—the facts related by Dr. Livingstone confirm the views of Surgeon-Major Hare, as given in the *Medical Times and Gazette* of last year. They thoroughly vindicate the character of Medicine as a beneficent art, advancing by slow experiment, age after age;—and they show that the doctrines and practice laid down by Dr. James Johnson, and other writers of his time, on Tropical Diseases, were not false, though they were only partially true. "Wisdom is justified of her children;" and the longer we live, the more truth and reason we find in the practice of our predecessors, making allowance for the light they enjoyed. Bleeding does good, calomel does good, and quinine does good; each under certain limitations. There is no such thing as an *absolute* remedy.

Dr. Livingstone says that in a similar case, a blister put on the pit of the stomach, may bring out serum black as porter, from being impregnated with bile.

There are many remarks scattered through the book, with regard to causes, which show that Dr. Livingstone does not believe that stink *per se* will cause fever. For example, on their way home, they were compelled to halt at an offensive spot, where the water was black as ink, and the air filled with sulphuretted hydrogen. Paint and metal were all turned black, but it was found by the Doctor and averred by the natives that this stench caused no fever. There are two curious sources of it mentioned; one is a plant called *Pedœvia fetida*, of extremely foul smell, the effluvia of which cause headache and fever. The other is *coal*—though the deleterious emanations from coal are not here noticed for the first time. "Fever broke out," says Dr. Livingstone, "on board the *Pioneer*, at the mouth of the Rovuma, as we thought from being anchored close to a creek coming out of the mangroves; and it remained in her till we completely isolated the engine-room from the rest of the ship. *The coal-dust rotting sent out strong effluvia, and kept up the disease* for more than a twelvemonth."—P. 350.

Not to linger further on the fever, we may say that Dr. Livingstone's book is full of points which would interest Medical men. He mentions the wonderful tenacity of life of some animals, and how a waterbuck would run after part of its heart had been blown out by one of Jacob's shells. His accounts of old diseased buffaloes banished from the herd to die in solitude are curious. Mr. Annandale may learn that diseases of the fingers and toes are not unknown even amongst these children of nature, and that corns and distorted toes are met with where no bootmaker ever was seen. P. 313. The true leprosy was met with in the person of a chief, and seems not to be uncommon; and it is worth notice that Dr. Livingstone and Dr. Kirk, while dressing the leprous chief's sores, were attacked with something so like the early symptoms in their own fingers, that they were glad to use a liberal allowance of caustic to save themselves. The observations on the habits of crocodiles, and on the flavour of their flesh and eggs, on the flesh of the eland and other wild animals (Dr. Livingstone does not like eland), on the use of filtered and distilled water, on moon-blindness, snakes, and mosquitoes (some *midges* are used as food), are all worthy attention, and may entice the busiest Practitioner to read this book whilst he reposes from his day's fatigues.

*Photographs (Coloured from Life) of the Diseases of the Skin.* By ALEX. BALMANNO SQUIRE, M.B. Lond., Surgeon to the West London Dispensary for Diseases of the Skin, Lecturer at St. Mary's Hospital Medical School. Twelve Parts. London: John Churchill and Sons. 1865.

THE excellence of these photographs of skin diseases has already been noticed in the articles on "Modern Dermatology" which appeared a short time ago in this journal; but we cannot forbear from saying a word or two more in their praise, now that the number proposed to be published has been completed. In the "advertisement" to his work, Dr. Squire says: "The great difficulty hitherto experienced in producing illustrations adequately portraying the various diseases of the skin induced me to try if greater accuracy and more life-like representation might not be obtained by means of photographs of the disease coloured from life by one of our best artists. . . . It soon became evident that excellent results were to be obtained by this means, and that they might be rendered more widely available by publication." The author well merits a high compliment on the admirable manner in which he has carried out his project, and on the good service he has thus rendered to the Profession. The student of skin diseases cannot have a better guide and counsellor in his endeavours to obtain a precise acquaintance with, and knowledge of, the classes of skin diseases than is afforded by these photographs and the well and clearly-written, though concise, descriptions, histories, and notes on treatment that accompany them. All the illustrations are good, far more truthful and "life-like" than any representations of skin diseases previously published, but some are specially admirable: such as No. 2, Impetigo Figurata; No. 3, Lichen Inveteratus; No. 8, Papular Syphilide; and No. 9, Nævus Vascularis. We hope that Dr. Squire will feel encouraged to continue his labours and to give us from time to time similar excellent portraits of the diseases of the skin.

## GENERAL CORRESPONDENCE.

### FURTHER CORRESPONDENCE REGARDING ACUPRESSURE BETWEEN PROFESSORS SIMPSON AND SYME.

LETTER FROM PROFESSOR J. Y. SIMPSON.

[To the Editor of the Medical Times and Gazette.]

SIR,—I shall feel obliged by your inserting in the *Medical Times and Gazette* the following further correspondence regarding acupressure.

In order that you may understand the correspondence, let me premise that my former letter to you (see *Medical Times and Gazette*, December 16th, 1865, p. 667) was a copy of another sent to the Editor of the *British Medical Journal*, with this sole difference: that the arrival of the post hour prevented the last two or three paragraphs from being transcribed. Both copies were sent off by the same post. You kindly inserted the letter, but I was treated with very different courtesy by the Editor of the *British Medical Journal*. After two days' delay he wrote me that absolutely he would not admit my reply to Mr. Syme into his *Journal* unless I permitted the removal from it of many strong personal allusions, and left in the scientific points only—forgetting, as he did, that the initial letter of Mr. Syme, which he had at once admitted, consisted of strong personal allusions only, and had not one scientific point in it. Not having any desire that he should write my letters, I telegraphed him to insert the letter as a paid advertisement. He answered that it was too late that number; and I received back the manuscript. Early in the following week I sent the letter back to be printed, and paid for as an advertisement. He then wrote that he would not admit it either as an advertisement or as a communication. But, to my surprise, he nevertheless printed it in the columns of his *Journal* on Saturday last. He added to it, however, a little Editorial note, the great inexactitude of which will appear from the following letter, which was sent to him early last week, but which he has had the injustice to delay the admission of into his columns, and possibly intends to exclude altogether. I am, &c.,

Edinburgh, Jan. 2, 1866. J. Y. Simpson.

*No. I.—Letter of Professor Simpson to the Editor of the "British Medical Journal," in answer to the Editor's Criticism on his Letter in the "Medical Times and Gazette" of December* 16.

"Sir,—In an editorial note appended by you to a letter of mine in last week's *Journal* you observe,—'Professor Simpson's letter would have appeared in the *Journal* of last week had it not, as originally forwarded to us, contained some very strong personal allusions which we declined to publish.'

"This note is calculated, however unintentionally, to mislead, in my opinion, very gravely the members of the British Medical Association.

"My letter is printed exactly as sent to you with three trivial alterations only—namely, (1.) You have omitted the single word "vituperative" as applied by me to Mr. Syme's ungenerous language regarding Dr. McKinlay. (2.) You have omitted in the same paragraph a simple critical remark to the effect that it was, perhaps, not right in you to open your columns to Mr. Syme's censurable observations upon that excellent Surgeon" (see the paragraph printed in full in my copy of the letter in the *Medical Times and Gazette* for December 16, p. 668); "and (3) you have omitted, simply because it was not sent to you in the last copy, a sentence suggesting a doubt whether it was right in Mr. Syme by his letter to mislead the English brethren of the Association so much upon such a Scottish question as the spread of acupressure in Scotland. This sentence was in fact unnecessary, as the idea stands in my letter in another form.

"After refusing to publish my letter as sent to you, either as a communication, or, latterly, as a paid advertisement, you printed it—somewhat to my surprise. The primary letter which you inserted from Mr. Syme in your *Journal* of December 2 contained little, or, indeed, nothing whatsoever, but strong personal allusions against accupressure and its abettors; and having once—in my opinion, indiscreetly—admitted that communication, you were bound, I think, to admit an answer to it. You must excuse me if I add that your strong resistance to the publication of such an answer has appeared to me as extraordinary and unjust as your annotation on my letter. "Yours, &c.

"Edinburgh, December 26, 1865. "J. Y. Simpson."

*No. II.—Letter from Professor Syme to Professor Simpson's Letter in "Medical Times and Gazette" of December* 16. *To the Editor of the "British Medical Journal."*

"Sir,—Your obstetric correspondent can hardly expect that, after the *public execution* of his obnoxious pamphlet, any amount of personal abuse or Professional misrepresentation proceeding from him should be deemed worthy of my notice.

"I am, &c., "(Signed)

"Edinburgh, December 26, 1865. "James Syme."

*No. III.—Answer by Professor Simpson to Professor Syme's Letter. To the Editor of the "British Medical Journal."*

"Sir,—All who are acquainted with Mr. Syme's peculiar mode of speaking and writing will at once perceive in his last note to you a virtual acknowledgment on his part that he had not succeeded in detecting a single flaw in the facts or arguments adduced by me regarding the recent history, etc., of acupressure; or, otherwise, he would at once have rejoiced to expose any such error in my statements.

"Assuredly I should not have again taken up my pen to trouble either himself or you with the matter had it not been that Mr. Syme has, in his last note, introduced a new element into the discussion, raising in it a question, not in Surgery, but in ethics.

"Some twelve months ago, when discoursing to his class on the subject of acupressure, Mr. Syme finished his remarks by fiercely tearing in pieces with his fingers a pamphlet of mine on the subject. (See *Medical Times and Gazette* for March 4, 1865, p. 236.)

"When lately called upon to write to you regarding Mr. Syme's bitter opposition to accupressure, I purposely abstained from alluding to this very petty but very discreditable piece of mediæval vandalism—believing, as I did, that Mr. Syme could only have acted so deplorably under an ebullition of passion; and hence under circumstances which, in all charity, ought to be forgotten and forgiven.

"But in his note to you of last week Mr. Syme gives entirely a new aspect to this misconduct of his, as he now proudly speaks of his unhappy violence as being the "*public execution*" of an "obnoxious pamphlet," which saved him from further reply to me. In other words, he seemed to hold that in any controversy regarding Surgical facts and practice the tearing in pieces, before a class of students, of the paper on which the opinions of your opponent are written or printed, gives you forthwith the double right (1) of subsequently publishing on the matter any misrepresentations which you please, and (2) of refusing to allow of the correction of these gratuitous misrepresentations by others.

"Without stopping to show how painfully and carelessly Mr. Syme here contradicts himself—forgetful, as he apparently is, of having already written and re-written on the subject to different public journals *since* this alleged "public execution"—let me add that Mr. Syme seems strangely callous and unaware of the humiliating and wretched position in which he gratuitously places himself before the Profession by such a self-conviction and self-adulation as he has now been guilty of uttering in your paper.

"Though thus curiously blind to the character of his own avowed conduct, I feel sure that if Mr. Syme will honestly inquire in regard to the matter among either his Professional or non-Professional friends, here or elsewhere, he will find among them one universal feeling of deep regret, both at his formerly assuming the character of a public executioner in the sense he speaks of, and latterly in his glorying in the shame of being so. It is well known in Edinburgh that even his staunchest adherent and defender, Dr. John Brown (who was present at the original pamphlet scene), has, to his honour, frankly confessed that he witnessed the tearing portion of the transaction with grief and sorrow that his old teacher should so misconduct himself.

"You, Mr. Editor, as a friend and supporter of Mr. Syme's, must have felt like all his other friends in this respect, for at the time you kept all notice of Mr. Syme's unhappy proceedings cautiously excluded from your pages. And, for one, I do think it was the very reverse of kind in you to Mr. Syme to allow him at last to denounce and expose himself so grievously regarding the transaction in your *Journal*. For, after all, the public execution which he has performed is a public execution upon his own character, and not upon acupressure, which lives and spreads steadily, in spite of all his vain opposition to it, and is, on the whole, promoted, I believe, rather than retarded, by that opposition. The only other gentleman in Great Britain who at present enjoys the character of a public executioner—Mr. Calcraft, of London—would, I fear, looking to the certainty of *his* 'ligature,' consider the Scottish aspirant to the same honours as rather an unsuccessful operator.

"I am, &c. "J. Y. Simpson.

"Edinburgh, January 2, 1866."

## ON THE SMALL POX AND RINDERPEST POISONS.

Letter from Dr. B. W. Richardson.

[To the Editor of the Medical Times and Gazette.]

Sir,—In reply to the queries which you have done me the honour to ask of me, I would state:—

1. That the view of Dr. Murchison, to the effect that the cattle plague may be derived from small pox poison, is quite consistent with the theory of the mode of origin of the disease-producing poisons which I have ventured to place before the Profession. Dr. Murchison's views, if proved to be correct, would, in fact, be demonstrative, as by experiment, of the catalysis theory.

2. Dr. Murchison's views are enunciated with such masterly skill and judgment that one can hardly hope for less than the realisation of their correctness. The result of experiments will soon settle the question. If animals that have been subjected to simple vaccinia, or human small pox, will not take the Rinderpest on inoculation with the poison of Rinderpest, the correctness of the view is virtually confirmed.

3. Presuming that experiments made in this direction do not, however, succeed, we need not give up research in despair. If the original poison be not that of small pox, it is a poison as near at hand, and is to be found if properly looked for. It may be the secretion of farcy or of glanders; or merely secretion in a decomposing state derived originally from the mucous surface of an animal subjected to local disease.

I have been so much absorbed in the study of two questions—one relating to the restoration of muscular action after some forms of death, and the other in relation to the nature of the animal poisons—that since the cattle plague has been present I have not, in fact, been able to pay any special attention to it. But I shall be happy, if you think it worth the while, to point out to your readers what would be the most promising experimental methods of research in determining the precise nature of the poison of Rinderpest, its action, and its antidote. I am, &c.,

B. W. Richardson.

12, Hinde-street, W., Jan. 3, 1866.

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## IS CATTLE PLAGUE SMALL-POX?

### Letter from Dr. T. Sarvis.

[To the Editor of the Medical Times and Gazette.]

Sir,—The opinion that the cattle plague is small-pox is gaining credence with many intellectual men. Why this should be I know not (for the symptoms are quite different) unless it be that in the hides of animals having died of, or been slaughtered for, the cattle plague there are depressions which appear like pits left upon the skin after a violent attack of small-pox.

Having seen a great many cases of cattle plague, both in my own district and in the Metropolitan Cattle Market, the latest case being that of a cow bought at the market a fortnight ago, which was attacked on Saturday last and died yesterday, I cannot think that the disease is small-pox, for in the cattle plague we have no pustular eruption. It is true we have "ulcers," so called, of the tongue, but they are of an irregular shape; "ulcerations" also occur in other parts of the mucous membranes, but they are also irregular in form. I have never seen in any case a pustule proper. There is one symptom which is like typhoid—a rash that appears on the skin, especially over the udder, which is darker than that seen in the typhoid fever of man, but not so dark as the mulberry spot of typhus. These spots appear as if the epithelial surface of the skin were partly eroded; hence the depressions discovered during the process of tanning, which have mainly led to the inference that the cattle plague is small-pox. I believe the production of these pits to be post-mortem.

I am, &c., Thomas Sarvis, M.D.,
Medical Officer of Health for Bethnal-green.

135, Bethnal-green-road, Jan. 3, 1866.

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## REPORTS OF SOCIETIES.

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## THE PATHOLOGICAL SOCIETY.

Tuesday, December 5.

Dr. Peacock, President.

(Continued from vol. ii., 1865, page 696.)

Dr. Cayley showed a specimen of

### ABSCESS OF THE CEREBELLUM.

A man, 40 years of age, a patient under the care of Dr. Goodfellow, in the Middlesex Hospital, had had purulent discharge from the ear from childhood. Recently he had suffered pain at the top of the head, and at the back of it. The pain came on in paroxysms. There were no signs of paralysis, and mental power was good. He died suddenly in an attack of pain. There were no convulsions. An abscess was discovered in the cerebellum, and a large cavity in the position of the mastoid cells, and the membrana tympani was perforated. There was, however, no continued disease from the ear to the abscess.

Dr. Dickinson exhibited specimens from

### THREE CASES OF ANGINA PECTORIS, ALL DEPENDING ON OCCLUSION OF THE OPENINGS OF THE CORONARY ARTERIES, BY ATHEROMA OF THE AORTA.

*Case* 1.—The first case was that of a gentleman, a patient of Dr. Dudfield, of Kensington, at whose post-mortem Dr. Dickinson was asked to assist. The patient, 45 years of age, had had symptoms of disease of the heart for eight years, well-marked fits of angina for three years before his death. In an attack within a day or two of his death, Dr. Dudfield described him as presenting a ghastly appearance, pale, with upraised arms, and glazed eyes. He complained of a horrible sense of constriction in the chest, with pain, numbness, and coldness of the left arm. He died at last rather gradually. At the examination of the body, the stomach was found to be dilated; but there was nothing to account for the symptoms, excepting the state of the heart. This was rather increased in size. The aortic valves and root of the aorta were much altered by atheromatous deposit. This was soft, and lay under the lining membrane of this vessel, especially about the origin of the coronary arteries. By the encroachment of this material, the left coronary artery had become completely obstructed, so that its position could only be found by tracing up the vessel from the outside. The right was much narrowed, but still remained pervious. The coats of both these vessels were free from atheroma; but the left artery had become much shrunk, while the right retained its full proportions. The ventricles were both contracted; the tissues displayed a slight general amount of fatty change.

*Case* 2.—The second case was that of a muscular, spare man, 42 years of age, a gamekeeper. He was a patient at St. George's Hospital under Dr. Fuller. For the last two years of his life he had had much epigastric pain, attributed to dyspepsia. While in the Hospital, he had several attacks of angina pectoris in its ordinary form, in one of which he expired while under the eye of his Physician, who was at that time going round. This attack, like many before, had come on immediately after food. At the post-mortem examination some points of extravasated blood were found on the surface of the heart. The left ventricle was quite uncontracted; the valves were natural. There was much soft atheroma on the root of the aorta, which had so encroached upon the openings of the coronary arteries that neither of them would admit the head of a common probe. The vessels in their course were natural. The heart was slightly increased in size, weighing 13½ ounces; it had a trace of fatty degeneration about it, but not enough to be considered morbid.

*Case* 3.—The third case is that of a soldier who had been discharged from the army in consequence of some cardiac affection. He was 35 years old. He was brought into the Hospital dead. An agitated young woman came with the body, and from her account it appeared that the two had been passing some time together in the park; the time was evening. While in her company, as she said, sitting down, he fell dead. From the fact that the glans penis was found to be covered with spermatozoa, it was presumed that either at the time of death or very shortly before he had been engaged in sexual intercourse. Most likely, like Attila, he had died in the act, the excitement having produced a paroxysm of the disease from which he had before suffered. The heart, as in the preceding cases, was slightly enlarged (14 oz.). The left ventricle was quite uncontracted. The valves were all natural. There was the same soft atheroma under the lining membrane of the base of the aorta, as has been described in the other cases. By it the right coronary artery had been so completely occluded at its mouth that no opening whatever remained, and its place could only be found by dissection from the outside. The lining membrane of the aorta appeared continuous over the orifice. The opening of the other artery was much narrowed by the same means. The coats of the vessels were natural. There was no fatty change in the muscles of the heart. The stomach contained much gas and undigested food. The symptoms known as "angina pectoris" have furnished pathologists with ground for speculation ever since Heberden drew attention to the disorder and gave it its name. Atheroma of the coronary arteries has been assigned as a cause for it, and Laennec has described atheroma of the aorta as a more frequent cause. He does not, however, allude to the state of the coronary openings. From these cases it would appear that obstruction of these little vessels at their mouths may be no uncommon cause of the disorder, and it is such that it may often escape notice. The atheroma is soft and smooth, and if not especially looked for its effect upon the little openings might be disregarded. Angina pectoris has been described as neuralgia of the heart, and that it is an affection of the nerves of that organ there can be no doubt. In connexion with this, we cannot but observe the relation of the coronary arteries to the nervous structures of the ventricles. The vessels pass just beneath the pericardium, closely entwined by the nerves; and judging by their obvious arrangement and situation, would seem to have more to do with the nerves than with the muscular fibre. They are of course too large to be needed by the nerves alone, but it may be presumed that they chiefly supply the nerves and more superficial structures of the organ, since in these cases, though they were in great part closed, and from the chronic nature of the disease must have been so for some time, yet there was no atrophy of the muscular structure. How, then, is the muscle of the heart nourished? Probably in great part by imbibition from the cavities, in the same manner as are the walls of the great vessels.

Dr. Gibb exhibited a

### FIBRINOUS CAST OF THE TRACHEA AND BRONCHI

of a child, 5 years old, who was admitted on the third day of croup into the Westminster Hospital, and upon whom tracheotomy was performed the night of admission. The child went on well up to the third day, when the tube of the canula became blocked up by portions of loose fibrine, which nearly suffocated him—indeed, he was almost gone, were it not for the perseverance of Mr. Hawken, the House-Physician, who removed the canula, and extracted a complete fibrinous cast of the trachea and larger bronchial tubes. The child at once rallied, but, unfortunately, died from pneumonia on the ninth day of the operation.

Dr. Gibb also showed

### A TAPE-WORM EXPELLED WITH ITS HEAD,

from a Hospital patient treated with the oil of male fern. The practice he is the habit of following with general success is to administer a dose of castor oil at night, followed by the fern oil at 7 the next morning, and another dose of castor oil three or four hours after, the patient meanwhile fasting. The passage of the head of the worm is of course the great thing desired in the treatment of tænia, when the cure is considered complete.

Mr. Curling exhibited a specimen of

### COLLOID DISEASE OF THE LOWER PART OF THE COLON, PRODUCING OBSTRUCTION, WHICH WAS RELIEVED BY OPENING THE COLON IN THE LEFT LOIN.

The patient, a female, aged 68, was suffering from pains in the abdomen of great severity, arising from the efforts to overcome obstruction in the bowel. The pains were entirely relieved by colotomy, but the patient sank exhausted eleven days afterwards. The terminal portion of the colon was affected to the extent of three inches, with colloid infiltration of its walls, producing great thickening and diminution of the cavity of the bowel. There was a large cystic tumour of the right ovary, containing dark grumous fluid, with colloid deposits in its walls. Mr. Curling stated that this was the oldest patient upon whom he had performed the operation.

Mr. Curling showed a drawing of a

### TESTIS IN PERINEO

in a child a month old, in which he had recently attempted by operation to place the organ in its normal position in the scrotum, and had succeeded in securing it in the upper part. Mr. Curling stated that it was useless to operate later, after the scrotum had become atrophied, and he showed an engraving of this malposition in the adult, in which the corresponding side of the scrotum was quite defective.

Dr. Ogle showed a specimen of a

### LARGE MASS OF CALCAREOUS DEPOSIT FOUND ATTACHED TO THE DURA MATER AND IMBEDDED IN THE CEREBRAL SUBSTANCE.

The patient was a woman, aged 40, who had been considered to be a very lazy woman, sleeping a great deal, and neglecting her children and household duties. She was said by some to have been a drunkard, as she was dyspeptic and frequently complained of headache. No paralysis existed. She was found dead in bed. On post-mortem examination, a mass (of about the size of a bantam's egg) of calcareous matter, formed of different separate fragments of different sizes, was found attached to the inner surface of the dura mater, covering the right cerebral hemisphere and occupying the substance of the superficial part of the brain, portions of which in the neighbourhood were softened. At one part in the neighbourhood was a small abscess. The calcareous matter was found by Dr. Davy to consist of 60 per cent. of phosphate of lime and magnesia, the rest being animal matter, showing in parts under the microscope a fibrous structure. The specimen was given to Dr. Ogle by Dr. Ward, of Twickenham.

Dr. Ogle also showed

### CARCINOMATOUS MASS CONTAINING CYSTS CONNECTED WITH THE LUMBAR GLANDS WEIGHING BETWEEN SIXTEEN AND SEVENTEEN POUNDS.

The patient, a man, aged about 40, of good family history, had been in good health until the beginning of the present year, when he began to experience great pain in the loins. This was followed by swelling of the abdomen, and he became an inmate of the Windsor Infirmary, when great distension of the belly was found and a large, hard, solid mass discovered in the right side of the abdomen. He was admitted into St. George's Hospital under Dr. Ogle's care in August in the same condition, but he had then acquired an unhealthy yellowish aspect. The functions of the stomach, bowels, kidneys, and liver appeared to be in all respects natural, but, though for a time he improved, he subsequently got thinner and weaker. A few weeks only before death vomiting came on, which hastened his exit. The diseased mass was of the encephaloïd form, containing numbers of cysts. The lumbar glands were the only parts of the body affected by disease.

Dr. Ogle next exhibited a specimen showing a

### LAYER OF FALSE MEMBRANE LINING THE DURA MATER, APPARENTLY FORMED FROM EXTRAVASATED BLOOD (FROM A CASE OF DEMENTIA).

The whole of the upper part of the dura mater covering the left cerebral hemisphere was lined by the membrane, which was tough and for the most part firmly adherent to the dura mater. It was in many parts of a very pink hue, and in places studded by small accumulations of desiccated blood. A portion of the dura mater on the opposite (the right) side contained also specks of effused blood, and from its surface also a thin layer of membrane could be peeled, the arachnoïd membrane covering the brain substance corresponding being thickened and opaque. The patient, a man, aged 78, was admitted into the Wells Asylum under Dr. Boyd in a very excited and demented state, and requiring to be fed by compulsion. Having for a short time become incoherent, he died about seven weeks after admission.

Dr. Broadbent showed a specimen of an

### ANEURISM OF THE MIDDLE CEREBRAL ARTERY OF THE RIGHT SIDE.

It had been taken from a woman, aged 59, brought into St. Mary's Hospital on Saturday evening, December 2, in a state of insensibility. The limbs were motionless and relaxed; the left pupil was contracted; pulse 66; respiration regular and without stertor. She died in about three hours; the only previous symptoms were flatulent dyspepsia and occasional giddiness. When the head was examined blood was found beneath the arachnoid in various situations, chiefly in the interpeduncular space, hiding the optic commissure and tracts, the crura cerebri and even the pons, extending along both fissures of Sylvius, especially on the right side, and appearing upon and between the convolutions of the anterior and lateral part of the hemispheres. Blood was also found about the entrance to the fourth ventricle and in the velum interpositum, leading to the supposition that hæmorrhage had taken place into the ventricles bursting out in various directions. The ventricles, however, contained only bloody fluid, and no clot except the descending cornu on the right side. The floor of the third was torn through. Further examination led to the discovery of an aneurism in the right Sylvian fissure embedded in the anterior lobe of the hemisphere, and beyond it there was, in the tract of the middle cerebral artery, extensive softening, chiefly of the middle lobe. The aneurism had not ruptured.

Dr. Hilton Fagge showed a specimen of

### FIBRO-CYSTIC TUMOUR OF THE UTERUS.

The specimen was taken after death from Mrs. W., a patient of Mr. Duke's, of Kennington. She died at the age of 64. She had suffered from this growth for at least twenty years. Its nature was not determined during life, but it was not considered to be an ovarian tumour. It did not give her much pain, nor does it appear that it ever caused any menstrual disorder. Indeed, menstruation had probably ceased before the presence of the mass in the abdomen was first observed. She had a miscarriage some years before in India. The growth occupied the right side of the uterus, and was everywhere surrounded by uterine tissue; the cavity of that organ was enlarged, and contained a flattened mucous polypus. The right dilated Fallopian tube, and the right round ligament of the uterus, were stretched over the summit of the tumour, while the fundus of the organ was pushed over to the left side.

The right ovary could not be found; the left ovary and the uterine appendages on that side were healthy. The growth consists of numerous cysts of various sizes. Their walls are made up, according to the observations of Dr. Braxton Hicks and Dr. Fagge, of ordinary fibrous tissue, mixed with some undeveloped uterine fibres. These cysts have not generally any defined limiting membrane; they contained a pink or red fluid. The tumour also contains a large number of masses of earthy matter, which Dr. Stevenson kindly examined, and found to consist of phosphate and carbonate of lime. The case is of interest, as being an example of a rare form of disease, of which, indeed, only three or four instances seem to have been recorded till within the present year.

## OBITUARY.

### DR. C. G. RITCHIE.

Last week we could do no more than make known the loss of this young Physician, and allude briefly to the melancholy accident which led to the sudden termination of his short but honourable and prosperous career. We are not all Dr. Marigolds. It is no easy matter to do the "cheap Jack" with the head of a sick child resting on your shoulder. Death drives you into seclusion, and you can only say, "Quick. Shut the door! Don't let those laughing people see." But it is almost beyond human endurance to have to step out on the platform, and, as soon as you know it yourself, to announce publicly the death of your own friend—to sit down and, with the half-closed glistening eyes following every scratch of the pen, write such tidings for readers unsympathising from want of knowledge. To say more than the simple truth would be wretched mockery, and yet the plain truth only, though enough to rouse a suspicion of fond flattery, sounds cold and heartless. Still one cannot alter the way of the world or the world's troubles. What has been before is now, and will be again. "Che sara, sara." Before the inevitable we must all learn to bend, not break. So it being true, and no turning away from the fact having power to alter it, we strain ourselves to comment upon the sudden death of Dr. Charles George Ritchie. He was only 23, but already reading and thinking men had begun to see that he promised to be worth something to his friends and the world if he had but time to ripen. The public must now take upon trust an estimate of those merits which a few years more of life would have made known to all.

One glowing July morning last summer twelvemonth, a bright young fellow walked into a working room, modestly introduced himself, and set eyes for the first time on the marvels of the human ovum. He noted carefully every particular pointed out to him, watched patiently the steps of tedious dissection, and the mode of unravelling those minute structures, verified some of his book knowledge, corrected many of his misconceptions by observation, stated his difficulties in the spirit of an earnest learner, displayed some of the scepticism of inexperience as to the possibility of seeing all that it was promised to show him, grew more and more engrossed as the day went on and his knowledge and confidence in his teacher increased, and at last soared into enthusiasm when he witnessed the perfect demonstration of a pathological condition which had only been partially and obscurely seen and doubtfully stated by Rokitansky. Day after day he submitted in the same patient way to teaching and guidance, perseveringly trying his 'prentice hand, curiously telling over and over again his new earnings, and at last gaining steadiness, skill, and success in doing for himself what a week before he had been half inclined to think incredible and impossible. It was a great treat to an old stager, who had looked long enough on these things to become somewhat sluggish and hopeless, and who had tried often enough, and in vain, to rouse others younger and more able than himself to work at them more vigorously than he did, to watch the growing zeal, the pushing inquisitiveness and unbounded delight of this novice. Henceforward his labours in the same direction were incessant.

In that seven days' work there is the clue to the character and life of young Ritchie. Fortunate in a pleasing person and manners, he soon made friends; quick of thought and sight, he was an apt learner; patient and persevering, he made sure progress; careful and reasonably hard of belief, he stepped forward observantly, and was not easily misled; conscious of power and honesty in himself, he was willing to trust to the leading of those who dealt truly and openly with him; thirsty for knowledge, craving for distinction, determined to win early and fairly a first position, he was a good representative "Young England" Doctor. But it is all over. Young-like, he strove too much, and too soon. He was not strong enough for the flight he essayed. Overtasking had weakened his frame. Worn and weary, he sought sleep and rest, and he died from the narcotism of a dose of morphia, which could not have been a very large one.

> "Pocula Lethæos ut si ducentia somnos
> Arente fauce traxerim."

We can only add that Dr. Ritchie was the son of the well-known Physician and Professor in Glasgow, whose papers on the ovaries were reprinted in the "Contributions to Ovarian Physiology and Pathology," by which the names of father and son will hereafter be best known. The son began the study of Medicine under the father at Glasgow; went to Vienna, Wurtzburg, and Paris for two years; took his degree in Glasgow; and spent a year in Edinburgh under Dr. Simpson, residing in the Children's Hospital. Towards the end of 1863 he came to London, and very soon afterwards began to assist Mr. Spencer Wells in his private practice. The daily routine of this occupation, his literary engagements, and Midwifery practice, which was rapidly increasing, kept him fully occupied. His prospects were unusually good. He had been engaged to attend an English ambassadress in her approaching confinement abroad. But the sad end of it we have all heard.

> "Fame is the spur that the clear spirit doth raise
> (That last infirmity of noble mind)
> To scorn delights, and live laborious days;
> But the fair guerdon when we hope to find,
> And think to burst out into sudden blaze,
> Comes the blind fury with the abhorred shears,
> And slits the thin-spun life. But not the praise."

## BOOKS RECEIVED.

Ligature of the Left Common Iliac Artery. By W. Hargrave, A.M., M.B. Dublin: T. Deey.

⁂ "The practice of Surgery appears to be experiencing a remarkable change in the controlling of arterial hæmorrhage by other means than by the ligature. From the position which I have the honour to hold in the School of the Royal College of Surgeons, I cannot, without much more experience than we at present possess, supersede this valuable and well-tested means of commanding hæmorrhage in favour of acupressure, the catgut, lead, metallic, silk, and others; we have now the hemp ligature, which will supersede all others for the firm way in which it remains on the artery, the complete absence of irritation, and no alteration in its strength or soundness."

The Edinburgh Medical Journal, October. Edinburgh: Oliver and Boyd.

⁂ Dr. Matthews Duncan gives the following as his conclusions on the subject of the mortality of women in child-birth as affected by age:—

"1st. Youthfulness has less influence in producing mortality from parturition than elderliness.

"2nd. From the earliest age of child-bearing there is a climax of diminishing puerperal mortality, succeeded by an anti-climax of puerperal mortality increasing till the end of child-bearing life.

"3rd. The age of least mortality is near 25 years, and on either side of this age mortality gradually increases with the diminution or increase of age.

"4th. Above 25 years, puerperal mortality increases at a much higher rate than it increases at corresponding periods below 25 years.

"5th. Though it is not deducible from anything in this paper, it is too interesting to omit noticing that the age of greatest safety in parturition coincides with the age of greatest fecundity, and that, during the whole of child-bearing life, safety in parturition appears to be directly as fecundity, and *vice versâ*. (See *Transactions* of Royal Society of Edinburgh for 1864, p. 488.)"

A Companion to the Medicine Chest, giving the Properties and Doses of the most useful Domestic Medicines; also, Directions for Sick-room Cookery. By Peter Squire, Chemist on the Establishment of the Queen, etc. London: John Churchill and Sons. 1866.

⁂ A very small book of forty-three pages, containing really all that most people need know of the uses and doses of such medicines as may safely be trusted in non-Professional hands.

De la Resection du Genou. Par M. Leon Le Fort.

The Edinburgh Medical Journal. December, 1865. Edinburgh: Oliver and Boyd.

The Pocket Formulary and Synopsis of the British and Foreign Pharmacopœias. By Henry Beasley. 8th edition. London: John Churchill and Sons.

Handbuch der Speciellen Pathologie und Therapie Redegirt Von Rud Virchow.

A Tariff of Medical Fees for Bridgewater and its Neighbourhood. Bridgewater: A. Graham.

The New York Medical Journal. November.

Inaugural Address delivered by James Paget, F.R.S., at the opening of the New Buildings of the Leeds School of Medicine.

What Food to Eat. By W. W. Ireland, M.D. Pamphlet. London: F. Pitman.

The Sixty-seventh Annual Report of the Plymouth Public Dispensary. Plymouth: J. Thomas.

On Wakefulness, with an Introductory Chapter on the Physiology of Sleep. By W. A. Hammond, M.D. Philadelphia: J. B. Lippincott and Co.

## MEDICAL NEWS.

**Apothecaries' Hall.**—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, December 28, 1865:—

Alfred Bullock Watts, University College; Charles Arthur Patten, St. Bartholomew's Hospital.

The following gentleman, also on the same day, passed his First Examination:—

Robert Harman Smith, Guy's Hospital.

### APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

**Bennett, William H.**, M.R.C.S. Eng., has been elected Coroner for the Shaftesbury Division of Dorsetshire.

**Hingston, C. Albert**, M.D. Lond., has been appointed Physician to the Plymouth Public Dispensary.

### BIRTHS.

**Burn**, Dr. G. A., 4th Cavalry, Hydrabad Contingent, the wife of, at Hingolee, on November 16, of a daughter.

**Finch**, Dr. R., the wife of, at Stainton Lodge, Blackheath, on January 1, of a son.

**Gibbon**, Dr., the wife of, at 39, Howley-place, W., on December 26, of a daughter.

**Gordon**, Dr. R. N., the wife of, at the Royal Dockyard, Portsmouth, of a daughter, on December 23.

**Hearnden**, Dr. W. A., the wife of, at Sutton, Surrey, on December 25, of a daughter.

**Hicks, Robert**, M.R.C.S. Eng., the wife of, at Ramsgate, on December 28, of a son,

**Hooker**, E. M. C., Dr., the wife of, at Hadlow, Tunbridge, on December 17, of a daughter.

**Plumbe**, Dr., the wife of, at Maidenhead, on December 21, of a daughter.

**Ringrose**, Dr. E., the wife of, at Potter's Bar, on December 27, of a son.

**Salter**, Dr. Hyde, the wife of, at 6, Harley-street, W., on December 30, of a son.

**Simms, Frederick**, M.B., the wife of, at 75, Rue de la Pompe a Passy, Paris, on December 25, of a son.

### DEATHS.

**Hill, William P.**, Surgeon, at Port Elliot, South Australia, on September 30, aged 47.

**Kelson, Joseph J.**, M.R.C.S. Eng., at Beaufort House, Park-row, Bristol, on January 2, aged 74.

**Roberts, John**, L.R.C.P. Lond., Resident Medical Officer St. Pancras Infirmary, on December 30, aged 26.

## POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

### RESIGNATIONS.

*Bramley Union.*—The Bramley District is vacant; area, 2505; population, 8691; salary, £20 per annum. Also the Workhouse; salary, £5 per annum.

*Droitwich Union.*—Mr. Cramer has resigned the Hanbury District; area, 10,945; population 3118; salary, £65 per annum.

*Fylde Union.*—Mr. D. Niddrie has resigned the Lytham District; area, 10,220; population, 4076; salary, £25 per annum.

*Richmond (Surrey) Union.*—The Barnes District is vacant; area, 900; population, 2303; salary, £40 per annum. The Kew District is vacant; area, 341; population, 1100; salary, £10 per annum.

*West Bromwich Union.*—The East Oldbury District is vacant: area, 1989; population, 8409; salary, £65 per annum. The West Oldbury District is vacant; area, 1809; population, 8849; salary, £65 per annum.

### APPOINTMENTS.

*Congleton Union.*—Charles F. Sutton, M.R.C.S.E., L.S.A., to the Church Hulme District.

*Durham Union.*—William C. Allen, M.R.C.S.E., L.R.C.P. Edin., to the Western District.

*Ely Union.*—Henry Pearson, M.R.C.S.E., L.R.C.P., L.S.A., to the Second District.

*Pontypridd Union.*—Walter Morgan, L.R.C.S.E., L.S.A., to the Workhouse.

*Tamworth Union.*—William Anderson, M.D., Edin., M.R.C.S. Edin., to the Clifton District.

**Testimonial to Dr. Paterson.**—The sympathisers with this gentleman—who, it will be recollected, achieved great notoriety as a witness in the Pritchard case—have presented him with a piece of plate and £200.

**Fever in St. Pancras.**—The Fever Hospital is full, and a number of cases of typhus have in consequence been taken into the St. Pancras Workhouse Infirmary. In several parts of St. Pancras fever is rife, and we regret to announce that the Senior Surgeon of the Workhouse, Mr. John Roberts, died on Saturday of typhus, caught in the discharge of his duties. He was only 26 years of age.

**Photographs by Magnesium Light.**—The magnesium light is so powerful and so portable, that it has become a great power in photography; for it enables the operator, independently of daylight, to take portraits where and when he chooses, whether of geological specimens in a cellar or of the sick in their chambers. We have seen Mr. T. Skaife, of 118, Pall Mall, operate in this way, and may say that the process is exceedingly rapid, and less wearying to the eyes than that of taking an ordinary photograph. Medical men who may wish photographs taken of patients who cannot leave their rooms may find Mr. Skaife a useful auxiliary.

**The Cattle Plague.**—The case is simply this: The disease spreads much more rapidly, and destroys much faster, than such means of cure as are known can follow; and therefore it is of more profit, or rather it is a smaller loss, to kill, than to try to cure with the certainty of failing in seventy, eighty, or ninety out of a hundred cases. This is the simple and serviceable ground which has been all along held by Professor Gamgee; and to this complexion also the farmers are rapidly coming. Indeed, there is in Scotland at least a broadening conviction that had Professor Gamgee's energetic counsels been taken at first we should not have been in these alarming circumstances. It has been the fate of Mr. Gamgee to see a little too clearly, and to speak a little too soon, for the class in whose interests he labours. Whatever may have been his mistakes and successes before he proclaimed to the country the presence of the rinderpest in the London dairies, since that time as surely as his counsels have been slighted, they have been followed later, a little too late in the day. He declared the disease imported; after much controversy, that is admitted on all hands. He urged the suspension or rigid supervision of the import of foreign cattle; the Commissioners and the farmers have practically recommended the stoppage of the entrance of live cattle from abroad. He strenuously prescribed isolation and slaughter as the sole effectual cure; and for the "killing cure" many of the farmers are now only too willing. He has long, almost if not quite alone, insisted on the necessity and advantage of a National Cattle Insurance Association, as a safeguard against the ravages of this and other epidemics; and the most influential meeting of agriculturists that has been held on the subject of the plague has taken up the idea, and resolved in favour of just such a system of insurance. It is something for any man to have been right, and to have pointed the way, in a time of emergency and tumult of opinion—to have silenced and convinced opponents, and to have led those who have laughed at him. This Professor Gamgee has done, and it is but just that the credit he deserves should be given him.—*The Scotsman.*

**A Difference of Opinion.**—A recent number of the *Somerset and Wilts Journal* contains a long account of an inquest held in consequence of a difference of Medical opinion. The particulars of the case were as follows:—On Tuesday, November 28, John Franklin Rawlings, aged 8 years, was taken ill at Upton Noble. The next day, his step-mother hearing that Dr. Banks, of Evercreech, was in the village, asked him to see the boy. He complied, and pronounced the case one of scarlatina, recommended that the child should be kept warm, and, in reply to Mrs. Rawlings, said he did not think the parish authorities would consider the case one that legitimately called for free attendance and medicines. On the following day the child died. About this time Dr. Heginbotham, of Bruton, had engaged a sister of the deceased as nurse for his children, and fearing infection, went to the residence of Rawlings, and made a post-mortem examination of the body, and gave it as his decided opinion that the child died of acute inflammation of the windpipe. This intelligence having been noised abroad, some of the village authorities demanded an inquest. The father of the child, to save inquiry, proceeded to Evercreech, and asked Dr. Banks for a certificate of the cause of death. A dispute arose about the charge for the certificate, Dr. Banks demanding 2s. 6d. for it. Rawlings afterwards paid 2s. only. In the ensuing week, the guardians, the relieving officer, the village policeman, and others discussed the merits of the case, and finally it was agreed that there should be an inquest. On Thursday, the 7th inst., the inquest was held at Rawlings' house before Dr. Wybrants, Coroner, and a jury of which the Rev. Henry Taylor, rector of Batcombe, was the foreman, and the above facts were deposed to, Dr. Banks having been kept in ignorance of the proceedings. As Dr. Banks had a majority of partisans on the jury, it was decided that the inquest should be postponed till Tuesday, December 12, in order to give him an opportunity of explaining the matter connected with the certificate, and to hear the evidence of the post-mortem examination from Dr. Dr. Heginbotham. During the inquest Dr. Banks accused Dr. Heginbotham of a breach of Medical etiquette in visiting his patient, and a dispute, which we suppose was found very edifying by the jury, ensued. The verdict of death from natural causes was finally returned.

THE following are the last week's Cattle Plague Returns. By comparison with those of the previous week, it will be seen that there have been 8207 attacked, 5161 deaths, 757 slaughtered, and 1167 recoveries, since December 16 :—

| Census Divisions. | 1. Attacked. | | | 2. Result of reported Cases from the Commencement of the disease. | | | | |
|---|---|---|---|---|---|---|---|---|
| | Week ending December 23. | Week ending December 16. | Week ending December 9. | Attacked. | Killed. | Died. | Recovered. | Remaining. |
| 1. Metropolitan Police District . . . | 86 | 43 | 129 | 7175 | 3089 | 3222 | 280 | 584 |
| 2. South Eastern Co. . | 91 | 70 | 55 | 4519 | 1447 | 2474 | 361 | 237 |
| 3. South Midland Co. . | 786 | 745 | 627 | 5608 | 1340 | 3276 | 284 | 708 |
| 4. Eastern Counties . | 243 | 390 | 245 | 6071 | 2285 | 2925 | 385 | 476 |
| 5. South Western Co. . | 70 | 101 | 71 | 585 | 155 | 305 | 34 | 91 |
| 6. West Midland Co. . | 127 | 143 | 84 | 1561 | 388 | 789 | 127 | 257 |
| 7. North Midland Co. . | 387 | 318 | 171 | 1667 | 384 | 882 | 88 | 313 |
| 8. North Western Co. . | 1007 | 945 | 673 | 4294 | 386 | 2407 | 298 | 1203 |
| 9. Yorkshire . . . | 1212 | 1202 | 1037 | 8694 | 620 | 5201 | 1010 | 1863 |
| 10. Northern Counties . | 118 | 109 | 138 | 1340 | 487 | 625 | 108 | 120 |
| 11. Monmouthshire and Wales . . . | 405 | 287 | 245 | 2068 | 83 | 1427 | 197 | 361 |
| 12. Scotland . . . | 1724 | 1701 | 1881 | 20011 | 2473 | 11328 | 2631 | 3579 |
| | 6256 | 6054 | 5356 | 63593 | 13137 | 34861 | 5803 | 9792 |

# NOTES, QUERIES, AND REPLIES.

◆

He that questioneth much shall learn much.—*Bacon.*

Dr. Wahn's book shall receive due notice.

*A Country Practitioner.*—There is no such journal in the present day as the *Medical Gazette.* The old *Medical Gazette*, one of our progenitors, was far too respectable to have noticed any such obscene work, neither was there any review under that name.

*Gelatine in Ophthalmic Practice.*—In our last number, p. 717, appears a letter from Mr. J. Z. Laurence, in which the use of gelatine discs as media for the application of atropine to the eye is ascribed to Mr. Streatfield. Messrs. Savory and Moore claim the priority of application for Mr. Ernest Hart, for whom they made the gelatine discs before they were used by any other ophthalmic Surgeon. The matter was only mentioned incidentally by Mr. Laurence, who publishes an invention which he believes likely to supersede the gelatine discs. Time will show which is best.

### VOTING BY PROXY.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In computing the comparative interest taken in the election of the Council of the College of Surgeons by "Fellows by election" and "Fellows by examination," you appear to forget that the large majority of the former are gentlemen who have been in practice for some years, and are busily occupied in practice, and therefore unable to leave home and personally tender their votes. By far the larger proportion of the Fellows by examination are comparatively junior in the Profession, and not yet so fully occupied as their seniors, who have been longer in practice. I am authorised to inform you that Mr. Sankey, of Dover, is in favour of voting by proxy. I am, &c.,

C. HOLMAN, M.D.,
Secretary of the South-Eastern Branch of the British Medical Association.
Reigate, January, 1866.

### THE TITLE OF PHYSICIAN.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I shall feel greatly obliged if you will be good enough to answer me the following queries in your next week's number. 1st. I am L F.P. and S.G., and L.M. ; have I a right to be called "Physician," or, am I only "Physician" by courtesy? 2nd. Should I be doing wrong by taking the title and calling myself "Physician?" 3rd. Does the Faculty allow its Licentiate to take the title, or does it only wink at its being done? If you will kindly answer the above, I shall feel much obliged.

I am, &c.,
MEDICUS.

We ought to have the words of the licence before giving an opinion.

### POOR LAW MEDICAL REFORM.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Since the last publication of the list of subscribers to the Association I have received the following sums of money :—Cod, G., Watford, 5s. ; Worth, E. J., St. Germans, 5s. ; Irving, W. B., Newark, 10s. ; Hair, Jas., Sudbury, 5s. ; Hall, E., Ulverstone, 10s. ; Fenn, E., Uckfield, 5s. ; Griffin, R., Weymouth, 21s. As the year 1865 has now passed, I think it due to the subscribers to lay before them a short statement of the accounts :—In January, 1865, there was a debt of £8 7s. 1d. ; and during the year, I have received from twenty-nine of the three thousand and odd Poor Law Medical Officers £14 3s. 1d. ; but as the expenditure during that time has been £10 13s. 1d., for printing 750 pamphlets for the Members of the House of Commons and the subscribers, with postage and sundry small expenses, it follows that there is £4 17s. 3d. still due from the Association.

I am unwilling to say one word by way of reflection on my brethren, but it must be obvious to them, that without adequate funds, meetings cannot be held, or the necessary steps taken to impel the Poor Law Board to improve the system of Poor Law Medical Relief. I am, &c.,

12, Royal-terrace, Weymouth, January 1. RICHARD GRIFFIN.

### THE EARLY PHYSICAL SIGNS OF PNEUMONIA.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In your journal of last week, under "Notices to Correspondents," is a letter from Dr. Waters, of Liverpool, drawing attention to an error in the remarks I made when his paper "on the Early Physical Signs of Pneumonia" was under discussion at the Medico-Chirurgical Society. My mistake was in supposing that in the cases he described distress on percussion existed coincidently with the loudness and roughness of the respiration, and he writes as if my misapprehension on this point affected the whole gist of my argument. On this account only I trouble you with these few lines. The existence of dulness would have strengthened my arguments ; but its non-existence makes no alteration in my view of the case. I cannot doubt that the loudness and harshness of the respiratory murmur, which Dr. Waters described as preceding fine crepitation in the cases referred to was a species of exaggerated or supplementary breathing, due to consolidation, more or less complete, of adjacent lobules or lobulets. There is no other physical explanation of the fact, and if the consolidation was confined to a few scattered lobules, one could no more expect to discover dulness on percussion, than one can in many cases of so-called lobular pneumonia, or commencing secondarydeposits.

I am, &c.,
13, Manchester-square, HENRY W. FULLER, M.D.

### THE CATTLE PLAGUE.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—It has been sufficiently established by the most reliable authorities that the cattle disease is solely imported from the Steppes of Russia, and is never propagated otherwise than by contagion. Why it should be indigenous to the Eastern part of Europe is, in our present state of knowledge, difficult to determine; but this much is certain, that from its strictly contagious nature it may altogether be regarded as a specific animal poison, producing well-defined symptoms, and running, in most instances, a regular course. Like typhus and its modifications, it is essentially a blood disease, and is produced by the virus being imparted to this fluid. In some way or other, according to Spinola, after the poison having remained dormant in the system for some time, it ultimately produces a change in the condition of the blood, which is marked by a derangement in the functions of the various organs. Its effect on the brain causes dulness, irritability, and nervous depression on the lungs, cough and hurried breathing in the stomach and intestines, diseased secretions, dysenteric purges, and we may add, congestion and inflammation of the mucous membrane, and on the skin, harsh and staring coat. As in all diseases of a contagious nature, in this instance also, the preventive measures are decidedly the most important of all, for when the disease has fairly broken out, it is only too often next to impossible to stay its progress, or to abate the violence of its symptoms. Thus disinfectants of all classes should be freely employed together with the utmost cleanliness, the observance of which should be made compulsory upon all those employed in the management of cattle. The chloride of lime is of all disinfectants the one most in use, both from its cheapness and ready application ; but from the experience I have had in my own practice, I give in all such cases the preference to the exhalation of the tars, both wood and coal. I remember an instance of a long-continued typhus in a manufactory being immediately checked by causing the wells of the establishment to be painted all over with coal tar, and I would suggest the same expedient being resorted to in the cattle plague. The sheds, slaughterhouses, and stalls might easily be coated in a similar manner, thereby offering an easy prevention to this terrible calamity. One might also put open vessels, containing equal parts of wood and coal tar, in places where cattle are generally kept, which might be changed once or twice a day as required.

Upon the first appearance of the malady, nitre should be given to counteract the catarrhal and inflammatory symptoms ; these being abated, arsenic may be exhibited in small and repeated doses in warm gruel or any other mucilaginous vehicle, as possessing the double quality of retarding the process of putrefaction, and destroying or neutralising the effects of every exuberant low animal or vegetable poison, whilst it acts to some extent as a tonic if used in moderation, owing to its affinity to iron, with which it is not unfrequently found.

The disease being of a decidedly putrid character, the chlorates, chlorine water, or diluted phosphoric acid, may be given with benefit as the signs of putrefaction become more marked. Stimulants are objectionable, as they contain but little nourishment, and, by the false excitement they create, rather tend, by the subsequent reaction, to hasten the fatal termination of the disease than otherwise. Astringents are alike to be depreciated, as they have no effect in neutralising the poison, and by causing an abnormal contractivity in the system prevent its being eliminated by the natural ways ; the pure tonics are alone admissible, but for obvious reasons, not at the outset of the malady ; they should, however, be administered with caution.

Of all the tonics, iron and its salts are the best, the citrate being the most efficacious, though somewhat an expensive drug in veterinary practice.

The hot air and vapour baths, as well as other methods employed to promote perspiration, are doubtless of the greatest utility in inducing a salutary crisis in the milder cases ; but in the severer forms or in the more advanced stages of the malady, the vital powers are so much reduced as to render the employment of a mere expulsive and decidedly depressing remedy wholly inadmissible, to say nothing of its inability to reach the seat of injury or to neutralise the morbific poison.

The diet should be of a bland, pure, and nutritious character : the water used for drink should not be medicated, and the animals should be permitted to use it freely. Cleanliness, I repeat, is here of the utmost importance, and the bedding should be changed as often as it becomes offensive. The milk of diseased cattle is positively injurious, and restrictions should be laid upon the sale of it, even for some time after recovery. The meat is at no stage of the disease fit for food. The dead bodies may be rendered innocuous by having them buried in deep pits and the carcases covered with quicklime. Finally in the most virulent cases, the animal should be put to death at once, thereby ending its sufferings and checking the further spread of the infection. Though the notion universally prevails that this disease is incurable, I have no doubt, from the unmistakeable nature of its symptoms and its comparatively slow course, that some plan of treatment might yet be adopted to stay the progress of this terrible infection; and having given the matter my full and unbiassed attention, I offer the foregoing to the Profession, trusting that in the hands of a skilful and liberal-minded veterinary Surgeon the suggestions I have thrown out may lead to the desired result. I am, &c.,

F. E. JENCKEN, M.D.

### AN AMERICAN VIEW OF MR. SYME'S CRITICISMS.

It is not a little surprising that the greatest opponent acupressure has yet met with should be a colleague of the ingenious inventor himself. Professor Syme has omitted no opportunity to disparage, and even denounce it, and that not always in the most gentle phrase. These attacks have, as might have been supposed, provoked severe replies from Professor Simpson, as may be seen in the *Medical Times and Gazette* The communications are exceedingly pungent and well written, and marked by the raciness of style so peculiar to the author. It is hardly possible that Professor Syme could fail to smart under them; and yet it is certainly his own fault if he is made to suffer. His conduct affords an apt illustration of the sentiment of Terence—

> "Si mihi pergit quæ vult dicere, ea quæ non vult audiet."

Steel is not the only substance that cuts. To assume, as seems to have been the case in the present instance, that nothing good can emanate from the brain of an obstetrician, was rather a bold conclusion, fraught with evil consequences. The Surgical Professor in the University of Edinburgh has never, it would seem, employed acupressure; and yet, according to our author, he has set himself up as its most uncompromising enemy. When, or how, this controversy may end, time alone can determine. It is much to be regretted that there should ever have been any occasion for it. Disputation too often distracts the Profession, and curdles the milk of Professional brotherhood."—*American Journal of Med. Sc.*, July, 1865.

COMMUNICATIONS have been received from—

DR. BENCE JONES; MR. R. GRIFFIN; MR. G. REED; M.D. LOND.; A COUNTRY PRACTITIONER; DR. W. J. MOSES; DR. G. KENNION; DR. C. KIDD; MICROSCOPICAL SOCIETY; APOTHECARIES' HALL; VETERINARY DEPARTMENT OF THE PRIVY COUNCIL; DR. WAHN; DR. H. W. FULLER; ROYAL MEDICAL AND CHIRURGICAL SOCIETY; DR. ROGER DUKE; DR. MORIARTY; MR. F. H. APPLEBY; DR. M. COCKCROFT; DR. C. A. HINGSTON; MR. W. GARLICK; MR. PROCTOR; DR. G. T. ROLSTON; OBSTETRICAL SOCIETY; MR. L. C. BADCOCK; MR. R. CEELY; DR. H. FEARNSIDE; DR. C. HOLMAN; DR. E. G. WAKE; DR. GUY; DR. FOTHERBY; DR. M'LOUGHLIN; DR. HUMPHRY; MEDICAL SOCIETY OF LONDON; DR. A. HENRY; DR. JOHN GRIFFITH; MR. J. HUTCHINSON; DR. WOODHAM WEBB; MR. SPENCER WELLS; DR. HUGHLINGS JACKSON; MR. E. BELLAMY; MR. J. CHATTO.

## VITAL STATISTICS OF LONDON.

*Week ending Saturday, December* 30, 1865.

### BIRTHS.

Births of Boys, 869; Girls, 805; Total, 1674.
Average of 10 corresponding weeks, 1855-64, 1690·2.

### DEATHS.

| | Males. | Females. | Total. |
|---|---|---|---|
| Deaths during the week .. .. .. | 773 | 830 | 1603 |
| Average of the ten years 1855-64 .. .. | 706·0 | 695·2 | 1401·2 |
| Average corrected to increased population.. | .. | .. | 1541 |
| Deaths of people above 90 .. .. .. | .. | .. | .. |

### DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

| | Population, 1861. | Small pox. | Measles. | Scarlatina. | Diphtheria. | Whooping-cough. | Typhus. | Diarrhœa. |
|---|---|---|---|---|---|---|---|---|
| West .. | 463,388 | 1 | 18 | 8 | 5 | 10 | 8 | 3 |
| North .. | 618,210 | 2 | 12 | 8 | 3 | 12 | 25 | 2 |
| Central .. | 378,058 | .. | 7 | 6 | 3 | 7 | 5 | .. |
| East .. | 571,158 | 7 | 6 | 13 | 1 | 17 | 17 | 5 |
| South .. | 773,175 | 3 | 3 | 11 | 5 | 18 | 19 | 2 |
| Total .. | 2,803,989 | 13 | 46 | 46 | 15 | 64 | 74 | 12 |

### METEOROLOGY.

*From Observations at the Greenwich Observatory.*

| | |
|---|---|
| Mean height of barometer .. .. .. .. .. .. | 29·912 in. |
| Mean temperature .. .. .. .. .. .. .. | 41·2 |
| Highest point of thermometer .. .. .. .. .. | 50 9 |
| Lowest point of thermometer .. .. .. .. .. | 29 2 |
| Mean dew-point temperature .. .. .. .. .. | 38·7 |
| General direction of wind .. .. .. .. .. .. | S.W. |
| Whole amount of rain in the week .. .. .. .. | 0·37 in. |

### BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, December 30, 1865, in the following large Towns:—

| Boroughs, etc. | Estimated Population in the middle of the Year 1865. | Persons to an Acre. (1865.) | Births Registered during the week ending Dec. 30. | Deaths. | | Temperature of Air (Fahr.) | | | Rain Fall. | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Corrected Average Weekly Number.* | Registered during the week ending Dec. 30. | Highest during the Week. | Lowest during the Week. | Weekly Mean of the Mean Daily Values. | In Inches. | In Tons per Acre. |
| London (Metropolis) | 3015484 | 38·7 | 1674 | 1377 | 1603 | 50·9 | 29·2 | 41·2 | 0·37 | 37 |
| Liverpool (Borough) | 476368 | 93·3 | 343 | 276 | 425 | 52·8 | 35·2 | 44·6 | 0·42 | 42 |
| Manchester (City) . | 354930 | 79·1 | 232 | 201 | ‡254 | 52·2 | 28·0 | 40·1 | 0·44 | 44 |
| Salford (Borough) . | 110833 | 21·4 | 72 | 56 | 12 | 52·1 | 27·2 | 41·2 | 0·39 | 39 |
| Birmingham (Boro') | 327842 | 41·9 | 243 | 159 | 199 | 51·4 | 31·6 | 41·0 | 0·47 | 47 |
| Leeds (Borough) . | 224025 | 10·4 | 266 | 114 | 150 | 54·0 | 25·5 | 41·7 | 0·36 | 36 |
| Bristol (City) . . | 161809 | 34·5 | 107 | 72 | ‡104 | 53·5 | 29·7 | 43·6 | 1·50 | 152 |
| Hull (Borough) . | 103747 | 29·1 | 83 | 48 | 54 | 48·0 | 27·0 | 37·8 | 0·34 | 34 |
| Edinburgh (City) . | 174180 | 39·3 | ‖114 | 84 | ‖101 | .. | .. | .. | .. | .. |
| Glasgow (City). . | 423723 | 83·7 | ‖328 | 247 | ‖274 | .. | .. | .. | .. | .. |
| Dublin (City and some suburbs) . | 317666 | 32·6 | ‖162 | †156 | ‖167 | .. | .. | .. | .. | .. |
| Total of 11 large Towns . . . | 5690617 | 38·0 | 3624 | 2788 | 3413 | 54·0 | 25·5 | 41·4 | 0·53 | 54 |
| | | | | | Week ending Dec. 23. | Week ending Dec. 23. | | | | |
| Vienna (City) . . | (1863)<br>560000 | .. | .. | .. | .. | .. | .. | §.. | .. | .. |

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·912. The mean daily reading was above 30 in. on the first four days.

The general direction of the wind was south-west.

---

* The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.

† Registration did not commence in Ireland till January 1, 1864; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in that city were the same as the averages of the rates in the other towns.

‡ The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

§ The mean temperature at Greenwich during the same week was 42·7°.

‖ The usual returns not having been received from Edinburgh, Glasgow, and Dublin, averages of the returns of the six previous weeks have been substituted for the correct numbers.

## APPOINTMENTS FOR THE WEEK.

### *January* 6. *Saturday* (*this day*).

*Operations* at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free Hospital, 1½ p.m.

ROYAL INSTITUTION, 3 p.m. Prof. Tyndall, "On Sound" (Juvenile Lectures).

### 8. *Monday*.

*Operations* at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.

MEDICAL SOCIETY OF LONDON, 8½ p.m. Lettsomian Lectures—"On Certain Painful Affections of the Fifth Nerve," Lecture I., by Dr. F. E. Anstie.

### 9. *Tuesday*.

*Operations* at Guy's, 1 p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; St. Peter's Hospital for Stone, 3 p.m.

ETHNOLOGICAL SOCIETY OF LONDON, 8 p.m. J. F. Campbell, Esq., "On the Physical Forms of the Lapps." Col. Fayre, "Notes on the Ethnology of the Indo-Chinese Nations and Tribes." Miss A. P. Irby, "On the Characteristics of the South Sclavonic Races."

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8½ p.m. Mr. Barwell, "On the Pathology and Treatment of Lateral Curvature of the Spine." Dr. Radcliffe, "On Acute Uncomplicated Myocarditis."

### 10. *Wednesday*.

*Operations* at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.

HUNTERIAN SOCIETY (Council, 7 p.m.), 8 p.m. Dr. Bright, "Observations on Diphtheria."

MICROSCOPICAL SOCIETY, 8 p.m. Mr. G. G. Lobb, "On an Opaque Illuminator by Prof. Smith, of Gambia, Ohio, U.S.;" "On the best Method of Illumination with High Powers for Difficult Objects."

### 11. *Thursday*.

*Operations* at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.

### 12. *Friday*.

*Operations*, Westminster Ophthalmic, 1½ p.m.

# LIEBIG'S FOOD

## FOR INFANTS AND INVALIDS.

Prepared strictly
by HOOPER,
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*William* *Hooper*

TRADE MARK

From the
Formula of
BARON LIEBIG.

PRICES.

1 lb. Tins, 1s.; 3 lb. Tins, 2s 6d.; 6 lb. Tins, 5s. each.

⁂ Other Preparations, announced as improvements on, or superior forms of, Baron Liebig's Food, being sold as "Liebig's Food," the attention of the Medical Profession is directed to the following

# LETTER from BARON LIEBIG.

"*To the Editor of* The Lancet.

"Sir,—Two preparations have lately been introduced into the trade, and offered for sale, as improvements upon my 'soup for infants.' I have had specimens of these preparations sent to me, and the result of my analysis of them is anything but satisfactory. According to the directions accompanying them, it is impossible that the nourishment can be contained in them which in any way supplies the place of the mother's milk or satisfies the requirements of the infant.

"I am induced to make these remarks in order that the non-success of these so-called 'improvements' may not be attributed to the incorrectness of the principles I have inculcated,—principles which have stood the test, in Germany, during the last eight months, of many hundred cases.—I am, &c., JUSTUS V. LIEBIG.—Giessen, June, 1865."

### AGENTS.

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**MANUFACTURING CHEMISTS and WHOLESALE DRUGGISTS, 4 and 5, UNION-STREET, BRISTOL.**

## Ferris & Co.'s Concentrated Senna Coffee.

This new and elegant preparation will be found one of the most useful and agreeable Aperient Medicines ever introduced; and it is especially adapted for the use of Children and Ladies. Dose: For infants, half a teaspoonful; for children, one teaspoonful; for adults, two to three teaspoonfuls. The dose must be mixed with a sufficient quantity of boiling water, milk and sugar being added to make a cup of coffee. This should be taken before or at breakfast. All medicinal taste is perfectly disguised, children will take the Coffee readily, and this agreeable medicine will be found a safe and effective aperient. In Bottles, 1s. 4d., 2s. 6d., 4s. 6d., and 8s. each. Price to the Profession, 6s. per lb.

## NEPENTHE, or ANODYNE TINCTURE. (Price 8s. per lb.)

Prepared exclusively from Opium. (Dose the same as Tinctura Opii.)

Nepenthe may be used with perfect safety in every case where an Opiate is indicated, and from the peculiar process by which it is prepared it is deprived of all constituents which render the Tinctura Opii, and most other forms of Opium, in very numerous instances wholly inadmissible. It is always of *uniform strength*, and in this respect possesses high advantages. It does not produce headache, stupor, giddiness, depression of spirits, diminution of nervous energy, prostration of strength, nor constipation, but induces natural and refreshing sleep.

## Ferris & Co.'s Ess. Copaib. cum Cubeb. et Buchu. (Price 8s. per lb.)

This will be found a very elegant form in which to administer Copaiba, in combination with Cubebs and Buchu. It is perfectly miscible with water in any proportions, without becoming milky or turbid, producing a bright, clear mixture. The dose is from one to two drachms twice or three times a day, and it is confidently recommended as a most efficient preparation of these Drugs. This combination was originated by the manufacturers, and every bottle bears a facsimile of their signature over the cork.

## Ferris & Co.'s Liq. Secale Ammon. (Price 8s. per lb.)

This Solution contains all the active principles of the Rye, in a convenient form, and with increased efficacy. Dose, thirty drops in a wineglass of cold water, every ten minutes. Two or three doses are generally sufficient.

## Ferris & Co.'s Solut. Calcis c. Sulphure. (Price 10d. per lb.)

A valuable remedy for Scabies, &c.—Directions for use: After the body has been thoroughly washed, the Solution should be applied by means of a linen Rag. One or two ounces are usually sufficient. When used for Children it may be mixed with a little Olive Oil.

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This is a valuable addition to the list of Pharmaceutical Agents. It is applicable in all cases where vesication is indicated, and is quicker and more certain in its operation, as well as more convenient and cleanly than the ordinary mode of producing a blister.

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An extremely convenient and efficient form in which to administer Santonine. Each drachm contains one grain of the Salt, and this will be a sufficient dose for young Children as an Anthelmintic.

N.B.—All the above Preparations are protected by a facsimile of Messrs. Ferris and Co.'s Signature, pasted over the cork, and may be had direct from the Manufacturers, and through all the leading Wholesale Druggists in London and the Provinces, and by order from Dispensing Chemists throughout the kingdom.

Concentrated Essences, Infusions, and Decoctions, Extracts, and all Drugs and Pharmaceutical Preparations, most carefully selected and prepared.

FINEST NEW NEWFOUNDLAND PALE COD-LIVER OIL, 9s. per gallon; 4 gals. and upwards, 8s. 6d.; or put up in Half-pint Bottles (for Unions, &c.), 10s. per gallon for not less than 6 doz. half-pints.

*General Price-Lists of Drugs, Chemicals, and Pharmaceutical Preparations, will be sent to Medical Gentlemen upon application*

# ORIGINAL LECTURES.

## ON GENERAL AND LOCAL CHEMICAL DISORDERS ARISING FROM PEROXIDATION,

AND ON THE MECHANICAL DERANGEMENTS THEY PRODUCE.

By H. BENCE JONES, M.D., F.R.S.

### Part III.—Lecture IX.

(Continued from page 2.)

### On Bright's Disease.

#### *Causes of Tubular Nephritis.*

It is scarcely possible for disease of the arterial and interstitial structure of the kidney to exist without an affection of the tubes. It is far more possible for the tubes to be affected without the interstitial texture participating in it. The malpighian tuft must be considered as part of the tube, and the slightest increased action, pressure, or thickening in the tube must immediately affect its malpighian tuft.

Of all the names that have been given to this form of disease, that of tubular nephritis appears to me the most simple. In its comparative mildness, in its occasional intensity, in its long duration, and in its rapid and perfect cure, it resembles slight, severe, chronic, and rapidly-curable bronchitis. If it were not for the albumen poured out, and for the urinous matters kept in, there would be, as in bronchitis, a peroxidation set up in the tube outside the blood. This would cause increased flow of blood in the vessels, increased formation and shedding of epithelium, increased pressure and thickening from fibrin. Then obstructions would come on, stoppage of the blood, stoppage of oxidation in the most obstructed part, and production and deposit of fat and alteration of the composition of the nitrogenous texture by the stoppage of nutrition, whilst around the obstruction a widening circle of increased action would exist.

Of all the causes that affect the tubes of the kidney cold is the most striking.

The sudden stoppage of the removal by the skin of water, salts, lactic and hidrotic acids, urea, and probably a multitude of other substances, immediately causes an accumulation of these or their parent substances in the blood. No sooner does this occur than on every mucous membrane and in the lymph that diffuses into every structure these substances are poured out. The greater part of the skin excretion must ultimately pass off by the kidneys or bowels. Hence increased chemical and mechanical action, increased flow of blood, increased oxidation, and, if this becomes excessive, obstruction occurs; then follow altered oxidation and altered nutrition, whilst albumen, epithelium, fibrinous casts, and blood globules are thrown out in the urine. The substances or their parents that the cortical structure should secrete are left behind in the blood, and from it they pass with the lymph into the structures according to their power of diffusion. In the cellular tissue these lymph effusions can most easily accumulate, and the chemical action set up by the urinous substances acting on the cellular substance probably is the cause of so large an amount of fluid being poured out. It is probable also that sometimes, from the excessive hardness of the effusion in the legs, that some fibrinous as well as albuminous and urinous matters are poured into the cellular tissue.

Sometimes the inflammation in the tubes may be as slight as in the slightest catarrh, lasting a few days and showing scarcely any symptoms. At other times the intensity of the action may be so great that it can only be compared to the most intense croup.

Many cases arising from cold, scarlet fever, irritants, or pressure will require no treatment at all. As soon as the causes pass away the complaint ceases. In other cases the increased action, the mechanical obstruction, and the tertiary diseases are so intense that no time for any treatment is allowed. Thus, after scarlet fever the patient may in a few hours sink from the violence of the secondary disease. In the vast majority of cases of tubular nephritis the disease lasts for some weeks, and is far more influenced by treatment than any other form of Bright's disease.

Another frequent cause of tubular nephritis is scarlet fever. It has been said that an internal desquamation in scarlet fever causes tubular nephritis, but in the secondary affections of the eyes, ears, and glands after scarlet fever scaling does not occur. Moreover, the scaling of the skin is only the result of the altered nutrition arising chiefly from the increased circulation which the increased chemical action in the skin produced. If shedding of the epithelium does occur in the tubes of the kidney, alterations in the chemical and mechanical actions in the tubes must have preceded this scaling and these actions, and not the mechanical scaling, are the cause of the tubular nephritis.

Although the scarlet fever poison has never been insulated, or its amount at different times determined, yet judging from small-pox you may be pretty sure that it multiplies, and that the action which we see on the skin goes on more or less strongly in every part of the body, so that at the time when the eruption begins to decline the amount of poison oxidised or unoxidised in the skin and textures must be at its highest point. This must be taken up by the lymphatics, and must be thrown out by every excreting surface, more especially by the kidneys, through which the greater part of all extraneous substances pass and undergo further oxidation. Even for a fortnight after the eruption declines the elimination of oxidised poison must continue, and during all this time in the kidneys, the eyes, the ears, or the glands unmodified peroxidation may be set up.

Many other poisonous substances, as cholera poison, turpentine, cantharadin, copaibæ, etc., when taken by the stomach, the breath, or the skin into the blood for a few minutes even, begin to pass off in a great part by the kidneys and give rise to the same tubular nephritis.

A peroxidation spreading up from the pelvis of the kidney, or increase of pressure on the arterial system consequent on obstruction to the free flow of blood in the renal vein—as, for example, during the last weeks of pregnancy—may also give rise to tubular nephritis.

#### *On the Signs and Symptoms of Tubular Nephritis.*

In all lung affections or bowel troubles you would expect to learn many things from the more or less careful observation of the expectoration or the evacuations. In diseases of the cortical structure of the kidney, without the most careful microscopical examination of the urine, you will get nothing more than the fact that albumen is shown by chemistry to be present. The interpretation of the meaning of the albumen depends on the general history and circumstances under which it occurs, but still more on the microscopical appearances which the urine presents; and without the microscope no accuracy of diagnosis is possible. Common-sense, or even good guessing, without a microscope may lead you right, and the microscope may only help to lead you wrong; but if you become skilful in its use, and not over-refined in drawing conclusions from a single cell or a particle of fibrin, and employing it as one means, and not the only help, to a right diagnosis, you will find that in this tubular nephritis more especially it will serve you well.

Masses of epithelium of the form of the renal tubes, fibrinous exudations in casts of the tubes, exudation cells, mucous cells, blood cells, pus cells, these all may occur, in every variety, according to varying states of congestion, inflammation, and suppurative deposit or production of fat in different parts of the tubes of the kidney at the same or at different times. It is in tubular nephritis that these appearances mostly occur; and according to the intensity or stage of the attack the microscopic appearances will be more or less pronounced. Moreover, as tubular inflammation is more curable than either of the other forms of cortical disease, so the appearance of these products of inflammation—altered epithelium cells and casts—indicates that the least dangerous of the three diseases is present, and that if the interstitial and vascular structures remain free perfect recovery may take place. Hence excess of fibrinous casts in the urine, other things being favourable, should lead you to a far more hopeful prognosis than when no casts and no tubular epithelium are found. When cirrhosis or amyloid disease (even in extreme cases) are present, no microscopic appearances may be found, and after careful watching for months for the slightest microscopical evidence of disease, I have found the cortical structure of both kidneys almost entirely disappeared.

#### *Consequences of Tubular Nephritis.*

Not only do albumen, fibrin, and blood globules come out, but urea, and its parents and progenitors, are prevented from escaping by the altered conditions produced in the tubes. These urinous substances cannot be kept in the blood, but they diffuse back into every texture, and in the cellular tissue,

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set up increased chemical action, and water, albumen, and sometimes even fibrin are poured out. In the loose cellular tissue under the eyelids the effects of the irritating fluid are generally most perceptible, even when the lowest part of the denser cellular tissue about the ankles shows as yet no appearance of effusion. The more rapidly this acute dropsy comes on, the harder the swelling is to the touch, in other words, the more fibrin is mixed with the other products of this effusion; and in the most intense cases of tubular nephritis, scarcely any impression can be made by the finger even where pressure can be most strongly applied.

This primary urinous acute dropsy differs altogether from the secondary anæmic dropsy, which, in tubular nephritis, and in other forms of Bright's disease, comes on when the blood globules and albumen in the blood have, by long-continued wrong chemical and mechanical actions, fallen so low as to produce anæmia. Then, as in anæmia from other causes, if little urine is passed, œdema becomes evident in the lowest parts of the limbs or body, and the slightest pressure leaves its mark, and the water can be moved from place to place, because no fibrinous matter has been effused.

The primary dropsy may continue even after the secondary dropsy is set up, for the two causes may be in action at the same time, or the secondary dropsy may more or less quickly come on after the first dropsy has passed away.

When urea and its progenitors exist in the blood, not only does it diffuse into the cellular tissue, but it passes also into the serous and other textures of the different organs. Hence the disposition to pleurisy, pericarditis, peritonitis, pneumonia, bronchitis, and other secondary diseases, which so readily occur in acute tubular nephritis. Even the affection of the brain which occasionally is met with in the most acute tubular nephritis must be attributed to a strong chemical action on the nervous substance rather than to the slower poisonous action of the urinous matters which I have brought before you when speaking of uræmia. Increased oxidation, in the form of a more or less acute inflammation, may be set up by the action of undetermined descending excretory matter on one or all of the substances of which the organs are composed, whilst in uræmic poisoning no increase of oxidation may take place.

### *The Treatment of Tubular Nephritis.*

The first indication is, as far as possible, to remove the causes of the attack. When cold is the cause, warm baths, vapour baths, and warm clothing may help to restore the action of the skin. Tartarised antimony has no strong action on the kidneys, and has a very decided action on the skin; and when it acts on the bowels or on the stomach, causing vomiting, it removes urinous substances from the blood. Hence it is a most important remedy in the acute dropsy from cold. Even when poisonous substances are passing out of the blood, as after scarlet fever, cantharides, turpentine, in extremes cases tartarised antimony may sometimes be used. In slight cases simple dilution with the purest water washes the impurity out of the blood.

The second indication is to stop the thickening of the tube, and to relieve the obstructed vessels. Abstraction of blood by cupping glasses on the loins can hardly be expected to effect the circulation in the tubes of the cortical structure of the kidney; whilst general bleeding, even to a few ounces, has a distinct effect on the pressure of the blood in the malphigian tufts. Hence, if blood at all is taken, it should be by venesection. Digitaline in small doses acts on the nerves that regulate the circulation rather like a stimulant, but in large doses or long continued the pressure on the arteries is diminished; and of all diuretics this is the only one which is admissible in acute tubular nephritis. As the disease becomes more chronic iodide of potassium may be used in diuretic doses. In ten minutes after the first dose it is present in every part of the kidney, and probably may be found there for many days after the last dose has been taken.

The last indication is to relieve the symptoms and complications that occur.

Of these, the dropsy is the most important. In the acute stage you have to contend with the urinous dropsy. Strong vapour baths or hot air-baths, used to the greatest extent that the strength will bear, are most efficacious. Strong action on the bowels by those watery cathartics that have the least action on the kidneys—as, for example, jalap, gamboge, and elaterium. If the strength admits of it, emetics, tartarised antimony, and ipecacuan may be given.

When the acute stage is over, the tendency to anæmic dropsy begins. To prevent this, and after the anæmic dropsy is set up, small quantities of iron should be given. Nitre, cream of tartar, broom tea, and other diuretics may be used, sometimes in very large doses. Even tincture of cantharides may, in the more chronic state, be prescribed. In a very short time the whole of the anæmic dropsy may be removed, and then iron in larger quantity should be given to prevent a return of the effusion.

The treatment of the secondary inflammations should be carried on with allowance for the general debility which will appear when the increased arterial action subsides.

Counter-irritation is to be preferred to local bleeding, because it saves the red blood. Mercury is hardly ever to be used, as in this form of disease its poisonous action is most quickly and violently set up.

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## ORIGINAL COMMUNICATIONS.

# CASE OF INJURY OF THE HEAD, FOLLOWED BY CONVULSIONS AND PARALYSIS—RECOVERY.

By CAMPBELL DE MORGAN, F.R.S.,
Surgeon to the Middlesex Hospital.

THE following case I take to be one of great practical interest. It may appear to be somewhat unnecessarily detailed, but the symptoms were so variable, and in many respects peculiar, that, let them proceed from what cause they might, they should, I think, be carefully and fully recorded. That such cases do occur from time to time is very probable. Dr. Brown-Séquard, as will be seen, says that he has read similar cases. I have never myself met with any which in the severity and sequence of the symptoms resembled this, unless as the result of some positive injury to the base of the brain.

James H., a bricklayer's labourer, aged 73, was admitted into the Middlesex Hospital on October 9, 1863, at 4 p.m. He was brought to the Hospital in a light cart, having been shortly before knocked down by it. He walked into the Surgery, and there appeared little the matter with him beyond a contusion of the left knee, which was painful and tender, and a small contused wound over the left eye, and a still smaller one behind the ear of the same side. He said that he had not been stunned by the fall, nor had been giddy or sick. He spoke quite rationally, complaining of the pain in his knee, but he walked to the accident ward, and soon after took some food. The sister of the ward says that he talked quite collectedly to her and to the other patients during the evening, that there was nothing peculiar in his manner, and that he never alluded to the head, but complained only of the knee. He had been, it appeared, a very healthy man, had never had fits, but was a hard drinker.

At 9 p.m., five hours after his admission, he was seized with convulsive twitchings of the left side of the face and the left arm, and in a few minutes afterwards fell into a state of semi-consciousness. He could with some difficulty be roused to put out his tongue, which was drawn towards the left side. The pulse was 88, small, and not very compressible. The pupils were contracted and insensible. When roused, he gave evidence of understanding any simple direction, but he did not attempt to speak.

At 10 p.m. the convulsions were more marked, and extended to the right arm; but nothing was noticed in the legs. He was still conscious enough to endeavour to put out his tongue. The breathing was slightly stertorous.

12.45.—There was now hemiplegia of the left side, and some loss of sensibility. When the right leg was pinched he gave evidence of uneasiness; but the left side, even the injured knee, might be pinched far harder without his showing any consciousness. There was no reflex action excited on tickling or pricking the sole of the left foot. The pupils were contracted and fixed. There was no appearance of want of sensibility or power in the face. The respiration was stertorous, chiefly diaphragmatic—40 in the minute—but somewhat irregular; the pulse 102, and small. He was still slightly conscious. On putting liquid into his mouth it brought on cough, but was soon swallowed, and he coughed occasionally from mucus collecting in the throat. There was no tendency to vomiting; he sweated profusely. The bowels acted from an enema, but apparently without his consciousness. The head was again carefully examined. There was no trace of puffiness. Movement and percussion did not seem to give rise to any pain. The contusions were very slight, and there was scarcely any ecchymosis around them. There was no ecchymosis beneath the conjunctiva, and no blood in the ear.

October 10, 1.30 a.m.—Up to this time the symptoms had been regularly increasing; a slight improvement now took place. The breathing became more regular, quieter, and slower; the pulse became larger and slower by six to eight beats. He appeared conscious when the left leg was pinched; but the paralysis was quite as complete. The surface was less perspiring. Observations were now made on the temperature of the surface. In both axillæ the thermometer stood at 97°; on exposing the hands to the air for some time the right showed a temperature of 96°, while the left never fell below that of 96¼°; the left calf, after exposure, fell to 90°, while the right remained at 91°.

10 a.m.—He remained in much the same condition, the breathing becoming somewhat quieter till this time, when spasmodic twitchings recurred on the left side of the face. They were continual, and at times there were severe exacerbations when the spasm extended to the neck, and the head was jerked to the left side. The breathing was more thoracic, thirty in the minute, but still stertorous. He was slightly conscious, and endeavoured to put out the tongue when asked; but it also seemed to be affected with the spasm, and he could not protrude it. Pulse 86, moderately full. The pupils were small, slightly affected by changes of light. The paralysis and anæsthesia remained in the left arm, and he did not evince pain or move at all when the right arm and hand were pinched or tickled, but there was marked sensibility in both legs.

1 p.m.—The left arm is now in a state of contraction from strong spasm, principally of the biceps. The face and tongue are still affected by the spasmodic twitchings. He can move the right arm, though it still seems devoid of sensation. He has some slight voluntary power over both legs, but they are powerfully affected by reflex action.

2 p.m.—The head and eyes are now spasmodically drawn to the left side, and fixed. The skin of the face, especially on the right side, is dusky; the respiration laboured and stertorous, and he seems almost entirely unconscious. The impression on the minds of those who now saw him for the first time, and were not aware of the phases which presented themselves in the course of the case, was that he was dying. This state continued for more than two hours, and then gradually diminished, and he became more conscious than he had been since his first attack. In the course of the evening he spoke several times, and said he was a little better. He lay with both legs drawn up, and appeared to have some voluntary power over all his limbs. The pulse rose to 100, and the skin became hot and dry. Towards night there was continued muttering. As some reaction appeared to be coming on, I ordered ice to the head, and a drachm of strong mercurial ointment to be placed in the axilla.

October 11, 9 a.m.—Had no sleep, and wandered all night; but he is now more conscious than yesterday, and says he is better. The spasm of the left side of the face continues. The knees are drawn up, and he has sensation and voluntary power in both legs. He complains much when they are pinched. Both arms are flexed and somewhat rigid; the left hand is firmly clenched. Pulse, 120; respiration, 36; the skin dry and warm; the tongue dry. He has passed no water since yesterday; but there is no distension of the bladder. He complains of headache, and has a troublesome cough. During the night he took a pint of beef tea.

12 noon.—The twitching of the left side of the face still continues. He can put out his tongue and talk so as to be understood; but he wanders and mutters when left to himself. The knees are still drawn up, and he can move both legs. The left arm is again paralysed and rigid.

1.30.—The general condition remains much the same. The arms and legs were again exposed for some minutes, and their temperature measured. The disposition to the maintenance of heat on the left side, in which there had been most tendency to paralysis, was still more marked than before.

| | | | |
|---|---|---|---|
| Temperature of right leg, | 77° | left leg, | 94° |
| „ right hand | 75° | left hand | 95° |

He passed a large quantity of urine about an hour ago.

Towards evening he became very drowsy, muttering continually; roused with difficulty, and relapsing immediately into the drowsy state. The twitchings of the face were less marked. Pulse 120, weak.

At night the temperature of the limbs was measured under the bed-clothes, without exposure. The same tendency was found as before.

| | Calf. | Axilla. | Hand. |
|---|---|---|---|
| Right . . | 94° | 100° | 98° |
| Left . . | 97° | 100° | 100° |

A blister was ordered to the neck, and he was directed to have a few drops of brandy in water every three hours.

12th.—He slept about three hours at intervals during the night; while awake he mutters constantly. There are occasional slight twitchings in the face. The left arm is flexed and rigid, and he has no power of moving it. He moves both legs, but there is evidently much less power over the left than the right. He complains when they are pinched.

On taking the temperature in the middle of the day it was found that while the right hand and foot remained much as before, the left foot was 10° lower than the right, while the right hand remained a few degrees above the right. A careful examination proved that the left leg had entirely lost sensibility, and was nearly paralysed; neither could any reflex action be excited in it. He complained much of any pinching or pricking of the right leg—so much, in fact, that it was a question whether there was not hyperæsthesia; but the left leg might be pinched with forceps or pricked without his evincing the slightest consciousness of it. The left arm, too, seemed to have lost sensibility, and remained flexed, but he had a very slight power over it. The face was slightly paralysed on the left side, the features being drawn to the right. He is still only semi-conscious, and mutters continually; sleeping naturally at intervals.

8 p.m.—There is now some sensibility in the left arm, and he has more power over it. To some extent he has sensation in the left leg, and reflex movements can be excited in it, but he has no voluntary power over it.

13th.—To-day he appears quite conscious, and complains of cold. He puts out his tongue readily. He sleeps much, and there is less muttering. There is still some spasmodic contraction of the left arm; he can move it slightly; but there appears to be little or no sensibility in it. In the left leg, on the contrary, the sensibility is now acute, and he complains much of soreness in it. A slight pinch makes him cry out; but he has no voluntary power over it. The temperature is again 2° in excess of the right. He ate this morning some bread and milk, which he swallowed quite naturally. Pulse 84.

14th.—Slept fairly last night. Pulse 96; good power. He has considerable power of movement in all directions over the left arm; but only to a slight extent in the fingers. The sensibility is still much below the natural standard, and the temperature is still a little above that of the opposite side. The hyperæsthesia of the left leg still continues, and he complains much of pain in it, though he can move it without pain. The face is drawn to the right side. The tongue is dry in the centre, moist at the edges. He complains of feeling cold.

15th.—He sleeps a good deal, but is very noisy and unmanageable when awake. He still complains of pain and sensitiveness in the left leg, but he can move it more freely. The left arm and forearm are returning to their natural condition. The left side of the face is flaccid. His appetite is improving; he is calling out for more to eat.

16th.—The sensibility and power of movement over the left leg are now nearly natural, though the temperature is about 1° above that of the right. The power over the arm appears to be perfect, though it is still weak. The face is assuming a more natural expression. He complains greatly of pain in the forehead, is very restless and noisy at night, but sleeps a good deal in the day.

From this time he rapidly improved. The restlessness subsided under the influence of small doses of morphia. He had for some days a tendency to irregularity in the action of the bowels; sometimes there was diarrhœa, sometimes constipation. The urine was often alkaline and overcharged with phosphates.

On the 24th he got out of bed at night, and walked about the ward. His memory is greatly impaired; he can hardly recollect anything from hour to hour.

He continued to talk somewhat wildly occasionally; but still there was marked improvement from day to day.

On the 30th there was a little numbness in the left extremities; but his memory was returning, and he had regained strength.

He was discharged on November 3 convalescent.

I confess that I am unacquainted with cases which are quite like this, and I found difficulty in explaining the cause of the symptoms which presented themselves. My own impression certainly was that some slight laceration had taken place at the base of the brain, probably in the neighbourhood of the pons Varolii, or crus cerebri; but I could not account for the symptoms being so long delayed. It evidently was not one of those cases in which the real damage done to the brain is masked by the depression from concussion. I referred it, therefore, to Dr. Brown-Séquard, who has kindly favoured me with the following remarks :—

"The case is one of considerable congestion, amounting to inflammation in several parts of the base of the brain, particularly the crus cerebri of the right side, and also the upper part of the pons Varolii of the same side. Together with that affection there was also congestion, with serous effusion either in the ventricles or on the surface of the cerebral lobes. This state of the encephalon was due to a concussion. I have seen several cases like yours, but due to quite a different cause —either excess of mental work or anxiety, or hard drinking, abuse of smoking, etc. All the patients except one have recovered. One of them has completely recovered after having been, if possible, in a much worse condition than your patient. I have read some cases almost identical with yours, as regards the principal features, but I cannot now find my notes about them, etc."

Being unable myself to offer a better explanation, I should be inclined to accept the solution which Dr. Brown-Séquard's great experience and singular acumen have led him to furnish. Still, there are difficulties in the way, and from his remarks it would appear that there have been few opportunities of verifying by post-mortem inspection the opinions which have been formed on this class of cases. Thus the symptoms of concussion were either altogether absent, or were so transient as to be unnoticed; this we should hardly expect to be the case where congestion and inflammation so speedily arose from it.

The extremely rapid invasion of symptoms is not easy to explain. There is no doubt that within a few minutes of their occurrence the man was talking rationally, and that he made no complaint about his head. It is, however, of little use to speculate on what was really present; the point of chief practical importance is that symptoms of the most alarming kind may follow an injury of the head, and may yet be attended with little real danger. The alternations in the symptoms which I noticed on watching him very carefully for two or three hours after they first appeared, satisfied me that their cause could not be any extensive injury, but that they were rather the evidences of some reflex irritation. Even on the following day, when he appeared to be dying, I had, from what I had previously seen, strong hopes of his recovery. This want of uniformity in the symptoms, and the fact that they came on so long after the injury, and without any intermediate cerebral disturbance, were, I think, the most valuable indications of the real amount of mischief that had taken place.

## CASE OF FATAL POISONING ASCRIBED TO CHLOROFORM.

By EDWARD BRADFORD,
Deputy Inspector-General of Hospitals, and Honorary Surgeon to the Queen;
AND
FRANCIS COLLINS, M.D. Edin., and L.R.C.S. Edin.

On November 23, 1865, I was summoned in great haste, about 10.30 a.m., to visit Mr. ——, aged 25, M.R.C.S., Eng., and I reached him in a few minutes after. I found him in bed undressed in a state of complete insensibility, his countenance pale, lips livid, pupils contracted, and his breathing stertorous, the surface of his body was warm; pulse at the wrist scarcely to be felt. The pulsations of the heart could be heard and felt, about 120. The respirations were short and jerking, 20 in a minute, at times they almost ceased. He did not appear to have vomited.

I found on inquiry that he had been apparently well on the previous evening and in good spirits. He had been seen about 8 o'clock a.m. on the stairs partly dressed, by a member of his family. He had returned to bed, and not having appeared at the usual hour, his father at 10.20 went to rouse him and found him in the state described. On a small table at the side of his bed stood an 8 oz. bottle rather more than half full of chloroform, and an empty tumbler. An attempt had been made to give him some brandy, but he was unable to swallow, and this having been spilled over his person and nightdress, I could not ascertain whether his breath had any smell of chloroform. No sponge or handkerchief was near him. I could not find any trace of any other narcotic poison in the room. I did not perceive any smell of chloroform in the room. At some distance from the bed under a wash-stand there stood a vessel containing urine and some frothy matter, which I took to be soap lather and saliva.

I immediately inferred that he had swallowed chloroform, and as circumstances forbade all probability of intentional injury. that it had been taken in mistake for chloric ether, which I was informed he sometimes made use of.

I attempted to excite vomiting by means of a feather, strong ammonia was held to his nostrils, and cold water dashed on his face, but no effect was produced. Air was freely admitted, and every effort made to sustain respiration. It was then attempted to introduce the tube of the stomach pump, but this induced suspension of respiration and of pulse, and it was of necessity abandoned. Strong ammonia was applied to the region of the heart, to the legs and thighs, the nape of the neck and spine, but it produced little apparent effect except slight vesication on the nape of the neck. Large injections of hot water and of turpentine were repeatedly thrown into the rectum, and mostly retained. No urine was passed. The electric apparatus was out of order.

About noon some indications of improvement were observed. His respiration became more regular and full; at times he sighed deeply; his lips were less livid, and his pulse was full and regular at 120; the surface of the body and limbs continued warm, and there was slight perspiration on the forehead and epigastrium. All sensation and all power of voluntary motion were still entirely suspended; he was unable to swallow, his eyes were insensible to light and their pupils contracted. About 4 p.m. his pulse again became weak, and at times it could scarcely be felt at the wrist. His respiration became slower, and gradually sunk so low as twelve in a minute. Loud mucous râle was heard over the chest obscuring the sounds of the heart; he continued warm, and through the whole day he was entirely free from all convulsive action. The movements of the heart and of respiration became constantly more feeble, and they finally ceased soon after 8 p.m.

On the 26th I made a careful attempt to ascertain the quantity of chloroform which might be supposed to have been swallowed by weighing what remained in the bottle and calculating the quantity known to have been otherwise consumed. It will suffice to say that I was satisfied that at least one ounce by weight could not be accounted for. The bottle had on the 10th contained 9 oz. by weight. Its sp. gr. was 1486. E. B.

*Examination of the Body Forty-four Hours After Death, by Order of the Coroner.*—The body was well nourished, and much fat was deposited under the skin. The dependent surfaces and the neck were becoming very livid. The limbs were rigid. Head: The blood vessels and sinuses were filled with dark, liquid blood. A small quantity of limpid fluid was effused on the surface of the hemispheres of the brain under the arachnoïd membrane. The vessels of the pia mater were loaded with dark blood. The cerebral substance was apparently quite natural. About half an ounce of limpid fluid was contained in the ventricles. This, as well as the substance of the brain, had no unusual odour. Chest: Extensive and firm adhesions of old formation existed on the left side, connecting the lung to the ribs and to the diaphragm. A soft adhesion of about half an inch in diameter, not apparently of recent formation, also existed between the anterior surface of the heart and the pericardium; this had been separated before it was observed. The heart was larger than natural, and its muscular substance less firm in consistence than usual. The left cavities were quite empty; their lining membrane and the valves were healthy. The right auricle and ventricle were, together with the great veins, distended with dark blood, which was fully and firmly coagulated. The lungs were extremely congested with dark blood, but no change of structure was observed. The bronchial membrane was healthy. Abdomen: About four ounces of serous fluid of pale colour was found in the abdominal cavity. There was none in the cavities of the chest. The liver and spleen were apparently healthy. The stomach was contracted and empty. On being opened, about half an ounce only of a turbid, reddish, mucous fluid could be collected; this was quite destitute of odour. The blood vessels of its cardiac extremity were extremely congested with dark blood; this appearance, however, did not extend to the pyloric extremity of the organ.

The intestines contained much air and some fluid matter, but they were of healthy aspect. The kidneys were of healthy appearance. A little urinous secretion could be squeezed from them, but we were not able to detect distinctly any unusual odour. The bladder contained about two ounces of urine, which was of healthy appearance and odour.

The opinion delivered by us at the inquest, based on these facts, was briefly to the effect that although no direct proof existed that chloroform had been swallowed, yet that no other cause could be assigned for the sudden death of the deceased than the agency of that or of some other narcotic substance.

This opinion was strongly controverted, and an attempt was made to show that death had resulted from natural causes, and that the symptoms and post-mortem appearances were inconsistent with the effects of chloroform.

The respected Physician who advanced this view will, no doubt, feel it incumbent on him to make public the grounds on which he was induced to form it. We are constrained to say that his opinion was not based on personal observation.

It is in its scientific aspect alone that we desire to draw attention to the case. The instances(a) in which chloroform taken into the stomach in large quantities is known to have caused death are so few (only four are recorded), and they differ so much from each other (as reported) that they afford no sure standard by which the essential results of this substance when thus taken into the stomach can be established.

In this belief we do not hesitate to repeat the opinion given at the inquest, and are content to vouch for the accuracy of the facts stated.

P.S.—The coroner's jury were unable to come to a decision as to the immediate cause of death.

# REPORTS OF HOSPITAL PRACTICE
# IN
# MEDICINE AND SURGERY.

## GUY'S HOSPITAL.

### ULCER OF THE STOMACH—OPENING THE SPLENIC ARTERY—DEATH BY HÆMORRHAGE.

(Under the care of Dr. PAVY.)

THE following case is of interest as showing one rather rare cause of hæmatemesis, and the uncertainty of life after hæmatemesis from such a cause. The life history is unfortunately meagre; but the details of the autopsy are carefully given, and have much value:—

A man, 63 years of age, was admitted under Dr. Pavy's care on September 20. He had been ill eight weeks before admission, and had then brought up a considerable quantity of blood, and had pitchy stools at that time. Ever since the loss of blood he had had costiveness. No hardness could be felt, and no place was found to be tender. He complained of indigestion, flatulence, and impatience of food. He died suddenly on October 20, after vomiting a large quantity of blood.

*Autopsy by Dr. Moxon.*—The body was blanched and spare; the skin, especially of the legs, had a half-micaceous chaffiness; no jaundice tinge and no stains on legs. The brain was excessively anæmic; the vessels to the naked eye looked natural. In the bronchi there was much grumous black-grained fluid, which extended as far as the quaternary divisions. The lungs were blackish in colour. The dependent half of the left was œdematous, with watery serum; the right was bulkier, but dry. The left ventricle of the heart was closely contracted, its cavity being very small.

*The stomach* was much dilated, and contained about a pound of coagulated blood of black colour. An ulcer, about 3⅓ inches diameter and circular, was in the cavity walls at the lesser curvature, extending further on the hinder than on the fore wall of the cavity. The stomach coat was eaten through in two separate places—one in front of the upper edge of the size of a fourpenny piece; the other, behind the upper edge, larger than a shilling. The first was filled in by the liver, which formed its floor; the second, by the pancreas. The liver substance was not eroded, at least not so as to be evident to the naked eye; but a section showed that the portal canals within one and a-half inch radius of the ulcer-floor had the fibre-tissue very much increased. The substance of the pancreas was very firm and hard, not more so, however, when it formed the floor of the greater perforation. The lobular substance came into the boundary of the cavity, and had no granulations or other covering. At the upper part of the pancreatic part of the ulcer there was a dark-coloured, slightly elevated spot, which proved to be the splenic artery. Its anterior wall was torn transversely by a rent an inch and a-half in height. On tracing the gastric artery, the cardiac brach was found to pass to the left of the ulcer just at a safe distance. The pyloric branch on the floor of the ulcer was plugged by very firm old tissue. The pyloric branch of the gastric artery was doubtless the source of the hæmorrhage, which is related as having occurred ten weeks before death. The edges of the ulcer were thickened to double the thickness of the rest of the stomach wall. The ulcer had an even edge, and section showed the muscular tissue thickened in due proportion along with the other layers in the wall. *Liver* patchy, with fibrous degeneration of its edge and about some of its superficial veins. *Spleen.*—Its capsule was opaque, not very thick; the organ soft, and much shrivelled and flaccid. *Kidneys* very white. No appearance of amyloid by T.

## UNIVERSITY COLLEGE HOSPITAL.

### CIRRHOSIS (?) OF LIVER IN A CHILD THREE YEARS OLD—JAUNDICE—ASCITES.

(Under the care of Dr. REYNOLDS.)

FOR the notes of this case we are indebted to Dr. Andrew Stuart.

E. E., aged 3 years, was admitted into Hospital October 11, 1865. His parents were both questioned as to their habits, and these, as far as their statements can be believed, were sober. Mother during pregnancy with this child took scarcely anything spirituous, and only occasionally a glass of beer. Never indulged in spices of any kind.

The child now and then, after dinner, used to drink an ounce or two of beer, but was never given gin, or spirit of any kind, or spices. The child has always been strong. The mother states that she thought the child's belly larger than it ought to be, but attributed its size to the child's great appetite. A month before admission became poorly, feverish, complained of pain in head, and after three days its skin was noticed to be yellow, face and conjunctivæ more so than elsewhere. Urine was scanty, and very yellow, and the stools were almost white, and of the consistence of clay. A week after this, the abdomen was noticed to increase in size, and it has continued to get larger up to present time. Has suffered from measles and ascarides.

*Present State.*—Child is strong-looking, well-nourished; jaundiced tint of skin over whole body; conjunctivæ very yellow; no œdema of legs; bowels rather confined; stools like clay; respiration calm; pulse 116, regular, weak. Abdomen very much distended; veins of upper part distended, and too visible. Percussion note is dull as high as umbilicus, and also in both flanks; the dulness changes with the change of position of child. Fluctuation perfect over dull area. Circular measurement 30⅝ inches. Upper line of liver dulness on level with right nipple; lower line a finger's breadth below margin of false ribs; edge indistinctly felt. Splenic dulness not increased; heart and lungs natural; urine dark orange-coloured, non-albuminous, sp. gr. 1028; contains bile pigment.

Was ordered generous diet and a little wine, ten grains of calomel and jalap when necessary, a hot air bath every other night, and this prescription:—Potass. nit., gr.v.; sp. ether. nit., ♏xv.; liq. ammon. acet., ♏x.; aquæ menth., ℥ss., three times a day. A flannel corset fitting the whole length of the abdomen and lacing behind was applied so as to keep up firm pressure over the abdomen continually, and was tightened as it became loose.

Under this treatment the abdomen got gradually less, and on the 28th the liver could be very distinctly felt two and a-half inches below the margin of the thorax, its surface being hard and granular, its edge well defined and very hard. The yellow tint of skin had considerably diminished, and that of face replaced by a healthy rosy hue.

On November 4 it was noted that the superficial veins of abdomen were no longer visible. Fluctuation could not be detected. Circular measurement of abdomen twenty-one and a-half inches on level with umbilicus. Urine natural coloured; no bile pigment.

The following was the last note taken just before discharge:

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(a) See Report of the Royal Med. Chir. Society on Chloroform, p. 88.

—Looks in excellent health. Cheeks ruddy. Very slight yellow tint of ocular conjunctiva. Abdomen looks about as large as that of any healthy child of the same age; measures round twenty and a-half inches; no fluctuation. Liver dulness, upper border, two fingers' breadth below right nipple. Edge can be very distinctly felt nearly three fingers' breadth below margin of thorax; feels hard and rounded. Surface of liver feels hard and finely granular. Child is fat and strong, and its appetite is excellent.

## ST. GEORGE'S HOSPITAL.

### CASES OF CHOREA TREATED BY CALABAR BEAN.—CLINICAL REMARKS.

(Cases under the care of Dr. OGLE.)

*Case* 1.—Harriett L., aged about 20, was admitted with severe chorea June 14, 1865. She was at once purged with calomel, scammony, and castor oil, and took one grain of sulphate of zinc and two of sulphate of iron, in the infusion of valerian, every six hours. The zinc was increased, so that on the 27th she was taking nine grains of the zinc. From time to time, also, she took a morphia draught at night and a dose of castor oil, and had wine daily.

On July 4 the former treatment was discontinued, and the potassio-tartrate of antimony was given in one-grain doses every six hours; subsequently every four hours, with one-sixth of a grain of extract of belladonna. Later on the extract of belladonna was increased and the antimony discontinued, being replaced by the sulphate of zinc. These were augmented, so that on July 22 she was taking five grains of the sulphate of zinc and three grains of the extract of belladonna every four hours. A shower bath was then ordered every morning, and on August 1 the liquor potassæ arsenitis was given every six hours. This was subsequently prescribed every four hours, until August 23. During this period occasional aperients were resorted to.

On the 23rd she came under Dr. Ogle's care; he continued the above treatment until the 31st, when he determined, as she did not appear to gain ground, to try the Calabar bean. Accordingly, he directed her to begin with half a-drachm of the tincture (supplied by Bell to the Hospital, and having the strength of one drachm of the bean to one ounce of rectified spirit of wine) administered three times a day in water, and increased it by ten drops at a dose, *making no alteration in diet.* She very quickly improved in muscular steadiness, and on September 10 the nurse reported "she has cut her own food to-day for the first time." The dose of the bean was raised to ʒj. three times a-day; and on the 19th the wine was omitted. She so quickly and so satisfactorily recovered that she was discharged from the Hospital as almost quite well. On inquiry of the nurse of the ward (Roseberry), Dr. Ogle learned that the patient made her appearance about the middle of November, and that she had become so stout and looked so well that she was hardly recognised by the nurse. She had quite lost all choreic symptoms.(a)

*Case* 2.—Hannah W., aged 13, pale in face, but otherwise healthy, became an out-patient September 15 last. She was affected by chorea, which was mainly but not entirely confined to the "right" side (both arm and leg). The speech was much affected; the tongue feeling, as she described it, "too large for the mouth." The pupils were equal, and natural in character. Symptoms of the disease had shown themselves for six weeks. She had never had rheumatic or scarlet fever or other severe disease, and had not suffered from worms, etc. No other member of the family had been similarly affected.

Dr. Ogle ordered her twenty minims of the tincture of Calabar bean in water three times a-day, making no alteration in diet, and giving no other remedy.

On the 22nd, when she came, the mother said the "shaking was on the other side" now. The pupils were rather enlarged. The dose was increased to thirty drops three times a-day.

On the 29th the statement was that she was "stronger," but she still "rolled the tongue," and the speech was still affected. The tincture was then increased to forty drops three times a-day.

On October 6 it was stated that she eat better, but that there was still a difficulty in opening a book with the hands. The pupils were natural; sight good.

She went on with the same dose of the Calabar bean until November 3, when it was stated that there was no shaking whatever. Food was taken with a natural appetite. The pupils appeared to be natural. She was discharged as being quite well.

Dr. Ogle stated that he had one or two other patients with chorea under his care who were at present taking the Calabar bean, and that alone, apparently with marked benefit. At the same time, he had had some cases under his care in which no good appeared to attend its use. He considered that choreic patients who were out-patients were better adapted for a trial of the services of the bean than those who were in-patients, as in the latter the use of the remedy becomes complicated by the changes of food, rest, and care incident to residence within the Hospital. Dr. Ogle proposes to try the eserine, or active principle of the Calabar bean, the alkaloid thereof, in chorea as well as in other forms of disease.

## KING'S COLLEGE HOSPITAL.

### A CASE OF EPITHELIOMA OF THE HAND.—CLINICAL REMARKS.

(Under the care of Mr. SPENCER WATSON.)

The principal point of interest in this case is the peculiar aspect of the tumour when the patient first presented herself. It then resembled, at first sight, a sebaceous cyst on the point of suppurating; and the absence of any ulceration on the surface made it very unlike the greater number of epithelial growths. The great hardness at once showed that it could scarcely be regarded in the light of a sebaceous cyst, and the result of the incision made it evident that it was not so. In the absence of any history of irritation in this part, the position of the tumour is somewhat noteworthy and difficult to be accounted for.

Mrs. B., aged about 60 years, applied at King's College Hospital on September 17, 1865, with a tumour of the size of a horsebean occupying the dorsal aspect of the metacarpo-phalangeal joint of the thumb of the left hand.

The woman has no marked cachexia, but is somewhat worn and haggard, and appears to be in suffering. The tumour is of a hemispherical form, of a purple tint, smooth on the surface—excepting over the centre, which is paler than the rest of the skin covering it, and has a roughened appearance, not, however, amounting to anything like ulceration; it is hard to the touch, and the integument adherent, but it seems distinctly circumscribed, and not involving any of the deeper tissues. At the inner side of the elbow there are two slightly enlarged lymphatic glands, which are somewhat tender when touched.

Mr. Watson, thinking that he might possibly be able to enucleate the mass, made an incision across it, and with a scoop extracted a portion of the contents, which broke away easily; but the peripheral portion of the growth was too adherent to the skin and subtegumentary structures to allow of enucleation. The pieces that were removed were submitted to microscopic examination by Mr. Watson, and subsequently and independently by Dr. John Harley, and they both came to the conclusion that the disease was epithelioma. The loculi of the areolar tissue were filled by collections of epithelial cells in globular masses, such as are very characteristic of this disease.

September 24.—There is now a sluggish ulcer in the place of the raised tubercle; the patient herself extracted a piece of the contents of the tumour.

26th.—Mr. Watson having determined to remove the whole of the disease, made two curvilinear incisions, one on each side of it, and dissected off the included tissues. After its removal a microscopic examination of the growth gave the same appearances as the previous one had done.

October 4.—The wound commenced suppurating.

10th.—The wound cicatrizing.

23rd.—The site of the incision covered over by healthy cicatrix tissue.

November 7.—The line of the cicatrix continues healthy; the hands swells frequently, and she complains of great pain in the arm. The enlarged glands at the elbow have become very much smaller. Her health is very indifferent, as she suffers from winter cough.

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(a) With reference to the case of so-called paralysis agitans, which Dr. Ogle referred to in our number for September 2 last as having been treated by the Calabar bean, the dose was increased up to 1½ drachm three times a day of the tincture. The pupils were not at all affected by its use, nor the powers of vision. The patient, aged 52, suffered much from pain in the head, and was treated by sulphate of zinc and extract of belladonna. He had previously been galvanised for eight weeks without good results.

## HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, BROMPTON.

### CASE OF PHTHISIS—FATAL HÆMOPTYSIS FROM THE RUPTURE OF A SMALL ANEURISM OF A BRANCH OF THE PULMONARY ARTERY.

(Under the care of Dr. COTTON.)

E. C., aged 28, male. Admitted November 4, 1865, with symptoms of ordinary phthisis in the third stage. Pulse 100, respiration difficult, cough severe with abundant purulent expectoration, night perspirations, emaciation, great exhaustion. Hæmoptysis first occurred about five months back, but was moderate in degree and easily controlled. Since that period the expectoration has frequently been streaked, but the hæmorrhage had never been great until a few days after admission, when it came on suddenly, and amounted to more than half a pint. On November 24, about three weeks after the previous attack, the bleeding recurred to quite an equal extent, producing great exhaustion, under which in the course of a few days the patient sank.

*Post-mortem Examination* (from notes taken by R. D. Powell, M.B., Resident Clinical Assistant).—Body emaciated; great anæmia. Right lung pale and emphysematous. In the upper lobe there existed a cavity of the size of a walnut, surrounded by a considerable amount of scattered tubercle. Left lung small, dense, heavy; bronchial tubes considerably dilated; mucous membrane much injected. Substance of lung itself was toughened throughout, and studded with yellow tubercle, and several small cavities made their appearance as the lung was divided, owing to the escape of softened tuberculous matter. A large excavation occupied a great portion of the upper lobe, containing much tubercular *debris*, but no blood. Another large cavity was found in the lower lobe. In the lower and anterior part of the latter cavity, a small, irregular-looking clot was discovered, partly decolourised, and on turning this aside a small bulging was seen, which on further examination proved to be a small aneurism on the cavity side of a moderate-sized artery, running in a direction transverse to the lower end of the cavity. This artery was exposed to an extent of about three-quarters of an inch, but was supported on one side by lung tissue. The aneurism occupied the whole of the exposed part of the artery, but owing to a constriction in the middle appeared to form two aneurisms; the larger dilatation was about the size of a pea, contained no coagulum, and was not ruptured; the smaller dilatation was rounded and filled with an adherent and partially decolourised clot, and was evidently the source of the fatal hæmorrhage, an opening having been found in its upper part where its walls were most attenuated. The artery itself, when laid open, measured transversely two-eighths of an inch. The heart was healthy; and no tubercle was found in the other organs.

*Note.*—In this very rare case, a small branch of the pulmonary artery, running along the walls of a cavity, instead of being, as usually happens, obliterated, had remained pervious; and, wanting the support of lung substance upon the cavity side, had dilated into a small aneurism, the walls of which, no doubt, easily gave way, not only from want of support, but from the softening or degeneration of tissue which was only too likely to accrue in such a case.

The Skull of Ben Jonson.—A statement appeared in the *Times* of November 11, 1865, from a lecture delivered at Hull by Dr. Kilburne King, to the effect that Ben Jonson's skull had been extracted from Westminster Abbey on the occasion of the interment of John Hunter's remains, and was now in the possession of some private individual. The whole story has been just set at rest by a lucid description of the circumstances out of which the story grew in an interesting work just published by Mr. Frank Buckland, son of the late Dean of Westminster—"Gleanings of Natural History," third series, vol. vi., pp. 141—189. It there appears, with much curious detail, that the skull of Ben Jonson rests, beyond question, some twelve or eighteen inches beneath the triangular stone which bears his name in the north aisle of the nave of the Abbey, in the place in which the remains were found in an upright position (according to tradition) at an accidental opening of the grave in 1849.

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Medical Times and Gazette.

SATURDAY, JANUARY 13.

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## CHLORODYNE *versus* THE PHARMACOPŒIA.

Any one who is engaged actively in the Practice of Physic must be aware of the great popularity of a compound called "chlorodyne." Not only is it found in very many houses as a domestic medicine, but singularly enough it is prescribed by scores of Medical men, as if it were an established and orthodox "officinal" remedy. It is said to be the invention of a retired Indian Medical Officer, who had been in the habit of taking narcotics, and who made many experiments on his own person to find out a compound narcotic and stimulant, which should give the greatest amount of comfort with the least ill effect afterwards. That compound was introduced to the world as chlorodyne; a word which is certainly a singular experiment in Greek. It soon appears to have become popular, and of course was analysed and imitated. Narcotics in considerable variety, as morphia, chloroform, prussic acid, and Indian hemp; stimulants, as peppermint and capsicum;—and some sweet basis, such as treacle or liquorice, to give it consistency and render it easily miscible with water—these are said (*plus* a little perchloric acid) to be the ingredients; at all events, it is out of these that imitations are made which are said to be indistinguishable from the original.

As for its virtues, we have less to say than most of our brethren, for we never prescribed it ourselves, and never shall. We met, some years ago, with a case of gouty disturbance of the heart in a plethoric person in which a dose of it brought the patient into great danger. We think, too, that such of our Professional friends as use it as a medicine, or sanction its use in families, should give a friendly caution that there may be some risk of abuse. When we hear of ladies, young and old, taking a few drops at night for a "bad cold," or for "fatigue," or "restlessness," or "indigestion," or "colic," or "diarrhœa," we cannot help fearing that it may be but the thin end of a wedge, and that it may be the forerunner of stronger and worse stimulants. Clearly Paterfamilias ought to have a hint of this.

However, the abuse of a thing is no argument against the use, so we will not dwell on that; and our present purpose is to point out the naked fact that a certain compound of narcotics and stimulants, called by the funny name chlorodyne (which we suppose means *Greenache*, if it means anything), has an immense sale amongst the physic-taking public, and that it is prescribed by many orthodox Practitioners. Of course, it would not be thus singularly popular did it not supply a want and fill a place.

This want is very easily defined.

In the first place, human beings want something warm, comforting, and solacing against fatigue, irritability, and malaise. The most innocent remedy for this purpose that we wot of, is pure wine, in good quantity;—perhaps a little spirits for old people. But many persons are parsimonious in the item of wine; they stint themselves from economy, or abstain "on principle," as they think; but then they must take something by way of compensation. Certes, the teetotallers do not object to chlorodyne; and we would call attention, by the way, to advertisements which appear from time to time of suspicious stimulants and cordials for the use of this irritable fraternity. For our own parts, we think a "bumper of Burgundy" more honest, more pleasant, and quite as cheap in the long run as chlorodyne. We can't think a woman virtuous or delicate merely because she will not, in public, drink or eat enough to compensate for her fatigue or exhaustion of mind or body. If she shirks a glass of wine at dinner, and takes a dose of chlorodyne at night, we are inclined to think her a hypocrite.

Secondly, the Medical Practitioner, like all other rational beings, hates waste of time; and it is a waste of time to write out the details of common formulæ for every-day cases. He wants *compounds* ready to his hand. Suppose a *mère de famille*. Up comes the cook after breakfast. "Please, mim, what pudding will you please to horder for the young ladies' lunching?" and suppose that madame, instead of saying rice pudding, were obliged to say, so much rice, so many eggs, so much milk, &c. What a monstrous waste of time! But this is just the case of the Medical Practitioner! He wants compounds ready to his hand, of known name and composition; for a purgative draught; for a common astringent, an anodyne, or diaphoretic, and so on; and he finds chlorodyne in one word save the trouble of an elaborate formula.

Thirdly, let us call to the minds of our readers that the principle of chlorodyne is not a new one. It is after the pattern of remedies which have always been in vogue. Old Pharmacopœias abound with similar compounds. There is the mithridate, the theriaca andromachi, and their descendant the confection of opium; the liquid laudanum of Sydenham; the paregoric; the compound chalk and opium powder, and the storax pill—all compounds of opium and spice. And it is instructive to note this fact: no sooner are these *improved* off the face of the Pharmacopœia than a new one starts up! This is a palpable indication of a public want. The appointed guardians of public health ought to fill it, but do not; and whilst they are doubting or disputing, the secret remedy creeps into use! We do not blame the persons who invented, nor those who sell, it; they found a want, and filled it; whilst the authors of the Pharmacopœia did not.

Moreover, *compound* narcotics are wanted, in which some ingredients shall be complementary to or antidotal to some others. This is quite an old field, but it has never been worked at thoroughly, and we can only hint at it now.

And now for a word about this long-expected and much-fought-over publication, the Pharmacopœia. Let us go into any society, Medical or chemical, scientific or commercial, connected with Physic, and the opinion is unanimous. The Pharmacopœia authorities wasted time, temper, and money in attempting what they were quite unable to do or to control; whilst they did very imperfectly what they were quite competent to do. All their attempts at controlling or directing processes of manufacture have been received with a chorus of derision by manufacturing chemists of every degree; whilst if they had been so far able to agree amongst themselves as to give an additional number of working formulæ for the Practitioner, their labours would have been received with as much thankfulness and satisfaction as the international jealousies of the three kingdoms would have permitted.

We say that it is absurd for a Pharmacopœia Committee to meddle with anything like manufactures in the present day. It is keeping up the ghostly forms of two centuries back, and is as unreal a thing as it was for George the Second to call himself King of France.

The division of labour is nowhere seen more palpably than in Medicine; for as Medicine was formerly a part of the *rerum naturæ cognitio*, or general philosophy, so chemistry was formerly a branch of Medical knowledge. In the days of Hoffmann, Mead, and Mayow, Physicians were the chemists, and could dictate the processes of manufacture. Even in 1767 we find Dr. Cadogan claiming to be author of the best method of preparing carbonate of magnesia. Times are quite changed now. The manufacture of chemical substances is carried on on the large scale by men each of whom has his own process, and aims, not at following the directions of Physicians, but at finding how he can make a definite compound best and most cheaply. What is the use of filling a Pharmacopœia with processes which are gathered from manufacturers? Physicians do not guide manufacturers, but follow them. What is the use of experiments to determine, for example, the best method of making salts or solutions of iron, when practical workers say that the resulting formulæ are uncertain, and each uses his own? Would the Pharmacopœial Committee like to undertake the charge of a chemical manufactory? If so, they would never live to be bankrupts—the place would blow up in a week.

Whether it be chemical compounds or vegetable extracts, the manufacturer will have his own way. He finds out how to get the best result at the least cost, and it is useless to dictate to him. One glance at Mr. Squire's "Companion to the Pharmacopœia" will show how fruitless are the elaborate directions which the Committee took such pains to write.

On the other hand, there is the other function which the Pharmacopœia Committee could discharge admirably. They could give us convenient formulæ for every-day use; useful purgatives, anodynes, preparations of opium fit for every condition, diaphoretics, salines, antacids, carminatives, and the like. Within this scope the authority of the Committee is unimpeachable. The President of the College of Physicians would be completely at sea in a manufactory; but his own daily work might furnish the Profession with some of the most useful formulæ. Our Scottish and Irish brethren, too, with the shrewd practical habits of the one, and the quick imaginative intuition of the other, and both admirable Practitioners, might outvie each other in friendly rivalry. There is so much more to be said on this matter that we shall return to it next week.

## THE NATURE OF RINDERPEST.

While specifics are being on all sides vaunted as curative of the cattle plague, and modes of prevention recommended, all of which, with the exception of the use of the poleaxe, advised by Mr. Gamgee, have only to be tried to prove their futility, there are patiently working, among the Medical Profession, men who, having learned by their experience in treating human diseases how great is the help afforded for this purpose by a knowledge of the relations and nature of any disease, now seek by careful investigation to discover the nature of this one. They naturally endeavour to discover whether this disease is identical or not with any which affect the human species, and if not identical, to what disease or class of diseases it is most nearly allied. The importance in guiding the efforts at treatment, of the identity, or even only of the close analogy of Rinderpest to any known human distempers, would be exceedingly great. This is strikingly manifest in the recent statements which have been published concerning its nature by Mr. Ceely, Dr. Murchison, Dr. Quain, and others, to the effect that the Rinderpest is variola in cattle; for if they are right we are almost certain of two things—one being that the disease will run its course in spite of any treatment, and the other that by vaccinating cattle they will become proof against the contagion of this pest.

The position of the cattle plague among the exanthemata seems to be universally admitted. Some have thought it to be identical with typhoid fever; others, that it is scarlatina; and others, that it is variola. The constitutional, and more especially the nervous, symptoms, together with the condition of the intestines, have appeared to be the points of resemblance between the Rinderpest and typhoid. In confutation of this statement, it has been pointed out, in regard to the intestinal lesion, that there is no true ulceration observable in the cattle disease (Dr. Smart), and no exudation of inflammatory products, and that the glands of the intestines are not specially affected or the seats of the congestion (Dr. Murchison, Dr. Smart). The evidence of its affinity to, if not identity with, scarlatina is more powerful. Dr. Smart, in the report to the Edinburgh magistrates, indicates the following points of resemblance of it to scarlatina:—The general congestive, but non-inflammatory vascularity of the mucous membranes, especially of the alimentary tract—the tendency to epithelial desquamation from the general mucous surfaces—the congested condition of the kidneys in all cases—and the invariable presence of albumen and blood cells in the urine, besides the general symptoms.

That Rinderpest is small-pox is asserted by Mr. Ceely, on the following grounds:—There is cutaneous eruption, rarely detectable before the fifth or sixth day, consisting of roseola, papules, vesicles, and pustules. They may be met with on various parts of the skin, "but more particularly about the alæ nasi, the cutaneous surface of the lower lip, the cheeks, and under the jaw." He mentions also the sides of the neck, over the shoulders, and along each side of the spine, inside the thighs and the udder of the milch cow, as being often thickly covered with it; and about the buttocks, near the vulva, and the scrotum and prepuce as other seats of it. Small, red, acuminate papulæ are preceded and accompanied by patches of roseola. Their summits soon yield a limpid fluid, which as quickly becomes turbid and puriform, and pass into crusts or scabs. These vesicles are often coalescent or confluent. In protracted cases the scars of previous pustules may be seen, especially when the hide has gone through the first stage of tanning.

Dr. Murchison is strongly impressed, also, with the belief that Rinderpest is small-pox. He has seen large, well-developed *vesicles* in a few cases. He describes the minute pimples (which are to be found most abundantly on the back of the neck and shoulders, in the neighbourhood of the mouth, on the udder and scrotum, and on the skin surrounding the anus and the entrance to the vagina), as softening at their summits into *pustules*. These pustules, he adds, speedily dry up, and form a scab, on detaching which the subjacent cutis appears raw or superficially *ulcerated*. He also holds the anatomical lesions (as of the mucous membranes) to be identical in the two diseases.

Lastly, Mr. Rayner, of Uxbridge, has been consulted by Mr. Hancock, a Veterinary Inspector, on account of the effects of a slight wound he received on the back of the hand whilst dissecting an ox which had died of the cattle plague. This wound, which was attended with marked constitutional effects, assumed the appearance, according to the opinion of Mr. Rayner, of the vesicles of vaccinia; Professor Spooner, Dr. Quain, Dr. Murchison, Mr. Ceely, and others who have seen Mr. Hancock's hand, hold the same opinion. Dr. Quain describes the appearance at the time it was presented to him as exactly that of a declining vaccine vesicle.

These arguments and statements, though very weighty, are far from conclusive. Dr. Smart states that there are no *true ulcerations* of the mucous membranes of the intestines, stomachs, or mouth, and that the high colour of the tissue of the fourth stomach, as microscopically determined, is due, not, as has been stated, to sub-mucous or intra-mucous *extravasation*, but to vascular congestion in its most extreme form. He admits that there are *ulcer-like* depressions in the fourth stomach, but asserts that they are abrasions not penetrating beyond the epithelium. So, also, he asserts that the ulcer-like appearances in the mouth are not due to a true ulceration of the tissue subjacent to the epithelial layer. A similar statement is made by Dr. Sanderson, who seems to be carrying out with the greatest care the important part allotted to him of the duties of the Commission. He has, he says, carefully observed the appearances presented by the cutaneous eruption in all its forms, and watched them with all attention, and he states that *vesicles never occur* at any period of the disease; the so-called flattened vesicles described by Dr. Murchison on the udder being solid elevations, the structural elements of which are epidermal. He says, also, that it is through the softening and breaking up of these elevations and their becoming gradually semi-fluid, that they acquire an unreal resemblance to pustules. He also points out that the so-called scabs are not produced by the desiccation of pustules, but by the incrustation of the abundant secretion from the sebaceous follicles.

It seems somewhat doubtful whether Dr. Murchison is quite correct in considering the state of the intestines in Rinderpest as identical with the state of these organs which is described as sometimes observed in small-pox. In the former there is always marked *congestion* with, at least, only doubtful ulceration or extravasation; while in the latter cases there are sometimes inflamed, ulcerated, and enlarged follicles, with petechial patches. And even if in cattle plague it is true that true ulceration of the intestines and ecchymosis are observable, as well as congested kidneys, etc., which are universally admitted to be present, still, as Drs. Gregory and Copland remark, these are only such as are observable in low and malignant fevers.

With these difficulties around us, it seems vain to attempt to come at present to any definite conclusion. The small-pox theory as to the nature of this terrible disease is now being tested, so that we expect soon to be able to announce to our readers that it certainly is or is not identical with variola. If it is identical, then vaccination or inoculation with the matter of variola ought to render cattle insusceptible to the influence of cattle plague, and those animals which have recovered from an attack of the latter disease ought not to be affected by inoculation with variola matter.

Since the above was in type, we have received a letter from Dr. J. Fairmann, which we publish in another column, containing the important statement that a cow which had only recently recovered from severe cow-pox, has since died of Rinderpest. If this case be confirmed by other observations, it will certainly go far to disprove the variola theory of the cattle plague.

## THE MEETING OF THE MEDICAL PROFESSION AT LIMERICK JUNCTION.

The late meeting of the Irish Medical Association, under the presidency of Dr. Mackesy, was the occasion for our friends upon the other side of St. George's Channel expressing their opinions upon several legislative enactments and other matters concerning the Medical Profession. A full report of the meeting is contained in the *Irish Times* for December 30 last.

Among many resolutions which were passed, there was one expressing sympathy with the Medical Officers of the Army and Navy, and a strong hope that the Commission at the Admiralty would not disappoint the just expectations which have been raised.

The fact is, that the Government authorities will be well contented to allow Medical Associations to pass as many resolutions as they please, *so long as the public services can be recruited.* The whole thing turns on the question of demand and supply. The Commission lately sitting at the Admiralty, whose report went in last Wednesday, is said to have behaved liberally on the whole to the Army

Medical Officers. Still, Commissions have no sympathy with our Profession, and a Committee sitting at the Admiralty, nominated by the powers that be, constituted in great part of men holding official appointments, cannot be expected to yield much out of a mere desire to advance the interests of our Profession. They care little or nothing about obtaining a superior class of men when it involves any additional outlay of money. The question with them has doubtless been, what it will ever continue to be—Can a sufficient number of men be obtained on the present terms or not? If they can, that ends the matter! We should not be the least surprised to hear that the results arrived at by the Commission will be withheld until after the next examinations for the public services; and if candidates be forthcoming, the appointment of a Committee will have answered its purpose, of course.

To return, however, to the report of the meeting of the Irish Medical Association as given in the *Irish Times*. Dr. Chaplin, in moving a resolution bearing upon the public services, appears to have spoken on a subject which few out of Ireland would have dared to approach, much less employ the terms he has done. He is reported to have spoken in strong terms of condemnation of the alleged lowering of the standard of Medical education, and of competition of Medical colleges for fees.

> "As regards the pay of young Medical officers," he said, "10s. a-day was not sufficient for them. There were at present 600 Assistant-Surgeons in the army, and it would be probably several years before some of them became regimental Surgeons. That was all very well so long as young men remained unmarried, but if they should get married, was that sufficient to maintain their families in the manner in which they would be expected to live? He believed not, and therefore he submitted that their pay ought to be increased. (Hear, hear.)

We think ten shillings a-day sufficient at first, but there is no adequately progressive rate of increase in the pay, and there is no chance whatever for promotion within reasonable limits. To whom belongs the blame if this state of things be allowed to continue?

## THE WEEK.

### SIR J. Y. SIMPSON, M.D., BART.

The announcement that Her Majesty has been pleased to confer a baronetcy on Professor Simpson, of Edinburgh, will be received by the whole Profession with unmixed satisfaction. No worthier representative of practical beneficent Medicine could have been selected for State honours, for no Physician since Jenner has conferred so great a boon on mankind as has the discoverer of chloroform. It is, of course, true that the highest gifts in the power of the State to bestow are totally inadequate to reward the man whose discovery could annihilate the agonies of difficult parturition, disarm the Surgeon's knife of its terrors, and save hundreds of lives by the avoidance of shock and suffering in long and difficult operations—such as ovariotomy; operations that without chloroform would never have become legitimate Surgical proceedings. The benefactors of mankind are not always or even often recognised, but it would be ungracious did not the Profession hail with pleasure the due honour which has been rendered to Medical science in the person of Professor Simpson.

### SUICIDE AND INSANITY.

Were it part of the plot of a sensation novel that a man, occupying a position in decent English society, is permitted to go at large after having let a number of people into the secret of his fixed intention to destroy himself, and after giving other evidence of unsound mind, and yet that none of his friends consider it their business to interfere and rescue the madman from the responsibility of self-control, the reviewers would certainly damn the book as improbable and untrue in the highest degree. Nevertheless, readers of the daily papers will often find instances which prove that such a picture might be painted from the life. A man, perhaps, loses a small sum of money; this, in penny-a-liners' phrase, preys on his mind, and he tells his friends that he is ruined, that he shall not live long, that they will soon hear of his death; but no one sends for a Doctor and has him put under restraint or surveillance. A day or two after he is found hanging from his bed-post, or with his throat cut. A jury is summoned; they hear all the evidence, and immediately return a verdict of "suicide while in an unsound state of mind," and in a week or two the thing is forgotten. The *Times* of Friday, January 5, contains a case of the kind. Mr. J. N., holding a high position in a public office, was found dead in his watercloset with his throat cut on Tuesday, January 2. He had lent some money which he could not get repaid, but he was in perfectly solvent circumstances. The day before his death he had been to the City, and told persons in his office that they would not see him alive much longer, and the report adds, "the result was anticipated!" If a Doctor sign a certificate of lunacy on insufficient evidence, or even place an outrageous patient under temporary restraint, he is liable to an action at law, with all its pains and penalties. But we should like to know what is the proportion of lives yearly sacrificed to the apathy and folly of friends and relatives, compared with the number of persons who in the same time are unnecessarily confined in lunatic asylums.

### FROM ABROAD.—MUSCULAR POWER OF INSECTS—M. BOULEY ON THE CATTLE PLAGUE.

M. Plateau, in a communication to the Academie des Sciences, observes that, believing the muscular power of the invertebrata has not sufficiently attracted the notice of physiologists, he has instituted a series of experiments upon insects, from which he has drawn these conclusions:—1. Independently of their power of flight, insects possess, in relation to their weight, enormous power, as compared with the vertebrata. Thus, while a powerful horse can only exert during some instants an amount of traction effort equivalent to about two-thirds of its own weight, the common cockchafer will exert a traction equal to fourteen times its weight. This amount of power is also considerably less than that possessed by other of the coleoptera, the most vigorous of these upon which the experiments have been yet tried being the *donacia nymphecæ*, which exerts traction power equivalent to forty-two times its weight. 2. When we compare two species of insects of the same group which differ notably in weight, it is the smallest and lightest which exhibits the greatest proportionate power. 3. These results are not due to the muscles being relatively more voluminous in the smaller animals, but to their being endowed with a greater energy and muscular activity.

M. Bouley, on the occasion of M. Leblanc's communication to the Academy of Medicine on the outbreak of cattle plague in the *Jordin d'Acclimatation*, made a highly interesting speech, of which we give the chief passages. On his return from his visit of inspection in England, towards the end of August, he observes, he was enabled easily to predict that the ravages then taking place were but the prelude of those which were to follow, and that England would have to pay millions for the fault she was then committing in not opposing to the scourge the barriers which had arrested it in Germany during more than half a century. The 60,000 deaths which are admitted by the Commissioners are far below the actual amount, and yet the disease goes on frightfully increasing.

> "The causes of this immense disaster are complex: the powerlessness or inertia of the central authority, which did not believe itself sufficiently armed by law to enable it to act, and through constitutional scruples feared to assume the responsibility of energetic action called for by the circum-

stances; the absolute liberty allowed in the sales of cattle just as in normal times; the concentration of affected animals in the weekly markets, and especially those of London; the transformation of these markets into immense focuses of infection, whence the disease radiated in every direction; the operation of private interests seeking only to save themselves at the expense of that of the public, every owner of cattle seeking to diminish losses when menaced by sending his contaminated animals to market, transporting with them necessarily the germs of the malady. These are the principal circumstances which have favoured the spread of the disease in England.

"But over all these there is one which predominates, and that is the ignorance of the English Government and public as to the nature of the disease,—an ignorance systematically kept up by the daily press, which, unpossessed of any technical knowledge, has derived its inspirations solely from the commercial interests it desired to protect. This ignorance has the more deeply taken root and exerted its influence because the English public has not had much faith in veterinary science, which does not enjoy on the other side of the Channel a high repute. I must even take courage to add, because the truth should be known, that its want of credit is not quite undeserved. Not that there are not, I hasten to add, a number of eminent men in England who do honour to their Profession, and who, had their voice been listened to, would have saved their country from the scourge it is now enduring. Such men there certainly are, but the mass of English veterinarians exert no influence on public opinion, whence a want of faith and the ease with which the voice of the organs of the Profession has been smothered by the daily press. This powerless condition of the Veterinary Profession in England seems to me to be due to the insufficiency of its instruction. There are no schools organised and maintained by Government. The teaching takes place in colleges maintained by private subscriptions, and the course of instruction only lasts for two sessions of six months each, while in France, Belgium, and Germany the course of study occupies four years. I believe that this is a certain condition of inferiority, and that diplomas of veterinary capacity accorded after such a short, and therefore insufficient, course of study, are not, for a great number of those who obtain them, veracious diplomas. Hence the want of credit of those who possess them, and the impossibility in which the Profession has found itself, in spite of the remarkable men who may be found in its ranks, of rendering service to the country by enlightening it respecting the dangers which it was incurring and the means of obviating these."

In Holland the disease, imported from England, not being promptly dealt with, has produced a loss of not less than 20,000 head of cattle, and is not yet arrested; while in Belgium, where the central government applied sanitary measures with rigour, the loss has been quite insignificant. In France, the speedy slaughter of forty-three beasts attacked in the Department du Nord and Pas de Calais at once arrested the progress of the disease which had there appeared, and the future importation from countries already affected was strictly prohibited. Still, "perfide Albion" contrived to inoculate her wary neighbour by means of two gazelles, which, purchased in London, had been transported to the coast in a railway van ordinarily employed for bringing meat to London. M. Bouley feels convinced that it was in this van the animals became affected. At all events, there can be no doubt but it was they who conveyed the disease to the Paris garden, they being the first animals affected with it there. The prompt and costly slaughtering of every animal there affected, or threatening to become so, at once stopped the ravages of the disease. But these had already taught their lesson as effectually as if direct experiments had been tried; and it was completely proved that not only may the disease attack the smaller ruminants, but also animals of a widely different nature, as the peccary, or wild boar of South America. M. Bouley confesses that had he known this fact he would not have handled the diseased parts with such equanimity as he did at Glasgow, having at the same time a fresh excoriation of the thumb highly favourable for inoculation. The French Government also learned its lesson, and extended its prohibition of import to all quadrupeds whatever except the horse, ass, mule, and dog. Thanks to the effective measures taken, four months have since passed and no reappearance of the disease has taken place in France; and even should it be by chance re-imported—and M. Bouley emphatically denies that it can be in any other way produced—similar prompt measures will again extinguish its germs. Prompt slaughtering is, in fact, the great safeguard, the deaths of a few saving hundreds of thousands.

"But this measure ceases to be applicable and becomes irrational when the epizootic has attacked an immense number of animals, for slaughtering in such case only increases the mischief. There are always from 10 to 15 per cent. of the animals who may either escape or recover from the disease, while the poleaxe is a certain destroyer, every one struck perishing. General slaughtering, then, should be proscribed, whilst partial, and especially initial, destruction at the instant the disease manifests itself in a new locality is the condition of common safety. The experience of the Departments du Nord and Pas de Calais prove this."

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## THE RINDERPEST PARASITICAL?

*(From a Provincial Physician.)*

The discussion as to the identity or otherwise of Rinderpest and small-pox goes on, but as no amount of theorising or of assertion will settle this disputed yet most important question, we must be content to wait for its absolute determination until a sufficient number of satisfactory experiments have been carried out. These, we are glad to say, are in progress in several different quarters, and we shall look with great interest for the results which may be arrived at. In the meantime, the discussion of the question of the intimate nature of cattle plague has received a new and unexpected impulse, and speculation upon it is being directed into a fresh and hitherto unexplored channel.

Our readers are probably aware that a letter from Dr. Fenwick appeared in the *Times* of last week, announcing the discovery by him of the existence in the flesh of animals which had died of cattle plague of parasitical entozoa in very considerable numbers. These entozoa he describes as existing in greatest quantity in the muscles of the heart, but also in large numbers in other parts of the muscular system. He says:—"In the heart they are either round, oval, or elongated at one end, with the projection terminating in a small bulb. In the other muscles they often resemble a common earthworm, are divided into segments and filled with granules." They are "usually about $\frac{1}{120}$th of an inch in length, but occasionally three or four times as large." He adds: "I have examined microscopically the various organs of a considerable number of animals destroyed by this disease, and I have been surprised to find how invariably the muscles have been literally infested with entozoa—in fact, I have not met with a single exception; while, on the contrary, in the healthy animals I have dissected the muscular structure has been either entirely free from entozoa, or only a few isolated specimens have been observed.

Dr. Fenwick very modestly disclaims attaching any exaggerated importance to his discovery; but to us it seems that the announcement of this fact is one of very great and singular importance as well as interest, whatever its exact bearing upon Rinderpest may be. It may, of course, be that the existence of these animals in the diseased flesh is a coincidence only—that is, that they may be able to seize upon and develope in the muscle merely because it has become a suitable soil or nidus for them, because being diseased it is in a weakened state, and therefore unable to resist their entrance, just as lumbrici and ascarides develope in the feeble intestine, or the achorion on the morbid scalp; but it is also possible that the presence of these parasites may have a deeper meaning, and that they may have a more intimate connection—direct or indirect—with the etiology and essence of the disease.

Of the facts as stated by Dr. Fenwick we have ourselves proved the truth, having within the past few days examined the flesh of several diseased beasts with the result of finding the parasites described in all of them. (a)

We already know that the human body is liable to one disease (trichinosis), which consists in the development within its muscular portion of myriads of parasitical animals, the growth and multiplication of which produces a low form of fever, with diarrhœa, prostration, etc., and in many cases destruction of the life of the inhabited individual. It is also highly probable that other diseases, with whose intimate nature we are yet unacquainted, may be hereafter found to be due to the growth and multiplication within the body of vegetable or animal organisms. In fact, the tendency of modern research has been to show the possibility that diseases having a specific origin, and course, and duration are due to some matter, material, or cause, which is either endued with life or something akin to it; with something, at all events, which has the power of reproduction, and which, like the seed of a vegetable or the egg of an animal, when again planted or deposited under suitable circumstances and conditions, is able to develope over again the same series of phenomena as its parent did. If this be not a vital development, the analogy which it presents to life, as we see it manifested in undoubted organisms, is so close as to make us always look anxiously to any fresh facts corroborative of this view. Recent researches with very high powers of the microscope have shown how likely it is that a world of life and vital development may exist in a much lower stratum of organised animal matter than we have been accustomed to consider proved, and that even granular matter may have within itself the power of development, and if so of reproduction.

With respect to the parasites described by Dr. Fenwick: if, as he says, and as there is no reason to doubt is true, they are always found in Rinderpest muscle, and only occasionally, and then in very small numbers, in muscle reputed to be healthy, they have in all probability something more than an accidental connexion with it, and if so, if they are really part and parcel of the disease, they are doubtless introduced into the body of the living animal by means of ova, exhaled with the breath of the diseased, or conveyed in the morbid discharges. We would suggest to those who are conversant with the higher powers of the microscope whether a new field for inquiry and observation is not opened by a consideration of these facts, and whether a rich harvest of knowledge may not be likely to be acquired by a careful examination of the nasal and other discharges (by which the cattle plague disease is so readily and certainly communicated from one animal to another), or by the secretion, which is an equally potent virus, of the vaginal canal.

Further, we think this subject widens out and acquires a still increased importance by considering that a discovery of what may possibly prove to be the intimate nature of cattle plague *may be* a most important step towards the elucidation of the real nature of some of our human exanthemata. If cattle plague can be shown to be in any way, as trichinosis is, intimately connected with its parasitical phenomena, surely its analogies with scarlatina, small-pox, and other allied diseases will go a long way towards increasing the probability of these disorders being also due to the growth in the human body of some definite organism, and not to mere chemical catalysis or fermentative action; and if so, by showing us the exact nature of their cause, will help us one step further, and that a long one, towards the end of all such labours and inquiries, the saving of life by the prevention of disease.

## REVIEWS.

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*The Principles and Practice of Medical Jurisprudence.* By ALFRED SWAINE TAYLOR, M.D., F.R.S. London: John Churchill and Sons. 1865.

TAYLOR'S "Manual of Medical Jurisprudence" has, since it first appeared, grown to rather unwieldy proportions, so its author has now wisely determined to restrain its growth in the future editions through which it is destined to pass. To do this alone, however, would be to rob us of what the manual was evidently tending to become - a comprehensive and exhaustive treatise on Forensic Medicine. We are therefore glad to find that the author has also prepared for the use of the Medical and legal professions the work before us, which justly professes to treat of the "Principles and Practice of Medical Jurisprudence."

The present volume is the result of a revision of the plan of the Manual, with the addition of other subjects besides those contained in it. Among these are "The Signs and Phenomena of Death, with an account of the Changes which take place in the Dead Body; Putrefaction in Air and Water, and its Conditions; the Identity of Bones, Skeletons, and Mutilated Remains; Sudden Death; the Presumption of Survivorship; Spontaneous Combustion; Life Insurance and Medical Evidence."

In the introductory section on Medical evidence we find some interesting remarks on the defects of coroners' inquests. Our author writes:—

"The 4th Edward I., stat. 2, on which coroners profess to act, directs that, 'upon information,' they shall 'go to the place where any be slain or suddenly dead,' and make due inquiry as to the cause, etc., before a jury selected from persons living in the neighbourhood. The information upon which a coroner generally acts is—1. Notice from a beadle or other officer of the parish (whose zeal is sometimes stimulated by a fee or salary) of any death from sudden or supposed unusual causes. 2. Notice from a Medical man who may have attended the deceased, and who communicates his suspicion that the cause of death is not natural. 3. Notice from a registrar of deaths that no cause has been assigned in a particular case, or that there has been a rapid death after a short illness.

"The conclusion to which experience leads in reference to these inquiries is, that the system affords no certainty for the detection of crime; that it affords no protection to those who are wrongly charged with crime; and lastly, that in some cases it screens a criminal by a verdict based upon an imperfect inquiry, in which the important Medical facts are either not understood or are misinterpreted by the jury.

"Admitting that some crimes (which might have remained concealed) have been brought to light by this system, it is my opinion that, as the inquiry is now conducted, it fails to exercise any deterring influence on criminals.

"In a large proportion of cases, no inspection of the dead body is made. This is probably in order to avoid the expense of a post-mortem examination. It would be easy to point to cases in which death by poison has been thus concealed, and the fact has only come to light by accident some years afterwards. With rare exceptions, indeed, is it justifiable on the part of a coroner to hold an inquiry on a dead body without a strict external and internal examination of the body? Either the inquiry is neeessary or it is not. If not necessary, the coroner is to blame in holding it; if necessary, an inspection of the body is the very essence of the inquiry, where it refers to one who has been slain or is suddenly dead."

Having adduced cases to establish his position, he continues:

"There is a popular notion, in accordance with the ancient statute, that sudden deaths only require an investigation by the coroner; but this is an error. A large proportion of sudden deaths take place from well-known natural causes, easily elicited by a proper Medical inquiry, and they strictly demand no judicial proceedings. On the other hand, in all cases of chronic poisoning, the form which secret murder has of late years assumed, the person has lingered on with intermitting symptoms, and death has taken place only after an illness of some weeks' duration. There is no provision for the detection of such cases. There discovery appears to be a matter of accident." As a rule, it may be said that all inquests in which there has been no Medical inspection of the body are a vain mockery, and the sooner the public mind is imbued with this proposition the better for society."

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(a) Not only have we found the round or oval bodies described by Dr. Fenwick in great numbers, but in one case we have also seen long strings or trains of smaller round bodies, very like to the smaller globular particles seen in the interior of the entosoa, and which were doubtless the ova of these animals escaped from the parent bodies. In this case, also, we found a great abundance of fungous matter growing both as infiltrated threads and bunches of fungus, in or upon sections of muscle cut from its interior at the moment of examination. The entosoa were here also in unusual abundance; in places positively in masses. The transverse striæ of the muscular fibre were in many parts obliterated, and the flesh itself presented to the naked eye a pale, rough, almost granular, appearance, something analogous to that of finely cirrhosed liver.

The present system of electing coroners without applying any preliminary test of ability or capacity is strongly condemned; as is also the system of selecting the nearest Medical Practitioner, whether he has had any experience or not, to report at the inquest upon the cause of death. For the removal of these defects of coroners' inquests, Dr. Taylor then offers the following valuable suggestions:—

"Let a well-trained gentleman be appointed as a stipendiary judge in every county or borough; let him, upon the same sources of information as are now open to the coroner, hold inquiries or not, according to his judgment. There are many coroners who are quite competent to fill such an office. In each county, borough, or district, there should be appointed, as in some States on the Continent, a skilled Surgeon—skilled in the inspection of the dead body, and in a knowledge of the causes of death; and a skilled chemist, skilled in the processes for the detection of poisons. To these three officers, and, if necessary, to assistants appointed by and under them, all inquiries into crimes connected with the death of persons should be exclusively remitted. Proper salaries for skilled Surgeons and analysts would secure competent men, and probably turn out in the end to be less costly than the present system. The duties of sanitary officers (which are not heavy) might be shared by the Medical and chemical gentlemen appointed to these offices.

"Some such regulations as these must sooner or later be made if the public desire to have the duties of an important office properly fulfilled. The value of life is greater in England than in any other country; but this remark applies only to cases of crime which are actually detected, and to the prosecution and punishment of criminals. I believe that we are greatly inferior to other nations in our means for the scientific detection of crime and murder by secret poisoning. In the case of William Palmer (1856), there was evidence to show that his wife, his wife's mother, two of his children, his brother, and one of his personal friends, had all died from poison under his roof, within two or three years before the death of Cook—for the murder of whom Palmer was tried and convicted. His wife had been poisoned by tartar emetic, and his brother by prussic acid. The deaths of at least two others in his house were probably violent. Where was the coroner's inquest for the protection of life?"

Another subject of interest treated in the section on Medical Evidence is that of Medical Experts. After indicating the necessity for calling in Medical or scientific experts, the author resumes:—"There is, however, a strong public feeling against the admission of the testimony of experts. One able writer remarks: 'It is impossible to shut out such evidence altogether, but there is nothing which brings more discredit upon the administration of justice. There is one consequence of its admission which is common to all cases in which it occurs—it is, that no difficulty has ever been found in obtaining any amount of evidence of this description, on either side of any point in issue. There is a contest as to whether a vitriol or a gas manufactory is a nuisance. Twenty chemists of fair character and scientific acquirements come forward to swear that the effluvia evolved by these processes are producing the most deadly fevers, and twenty others equally eminent will give just as positive testimony that the gases are absolutely wholesome, and rather fattening than otherwise. These things are of every-day experience.' . . . It cannot be denied that experts have frequently introduced into their evidence speculative fancies and idle theories, not warranted by a proper induction from the facts; but it is quite clear that in all trials requiring special knowledge, if justice is to be administered, the Court must be assisted by those who possess the knowledge. . . . The cause of the evil is that the solicitors on each side are allowed to search the whole Profession until they can find one or more persons ready to adopt their respective views; and when once in court, provided a man can call himself a 'Doctor,' his qualifications and experience sometimes escape a rigid scrutiny. Persons have thrust themselves or been thrust into cases as experts without any pretensions to such a title, either by their Professional standing or experience. A man who may be engaged only in the ordinary routine of Medical practice, and who may have had no special experience on the subject on which an opinion is required, will be described by his counsel 'as a most eminent member of the Profession, on whose opinion the jury are as much entitled to rely as on that of the very respectable gentleman called on the other side,' etc. The nomination of experts as witnesses by the judge who tries a case, or by the Lord Chancellor in his department, would do away with most of the objections which now tell with so much force against the evidence of experts. As long as they can be retained by either party—and the Profession is large enough to furnish a great variety of experts—so long will the objections to the present system continue, and the good be confounded with the bad."

After illustrations and comments, Dr. Taylor resumes:—

"But the question regarding this employment of experts as assessors, and the avoidance of the imputation of their appearing as hired retainers in a case, is practically answered in the Admiralty Courts. Four Masters of the Trinity House, experienced in all the rules of navigation, give their opinions on questions submitted to them, as experts, by the Court; and without creating any charge of injustice in the decisions of the Court, they constantly guide these decisions by answering certain difficult nautical questions. In a case in which two ships come into collision, both parties contend they are right, or the case would not be litigated. The question turns upon the respective positions of the ship, the setting of certain sails, the direction of winds, tides, and currents, and whether the helm should have been ported or starboarded before the collision. These nautical experts, as their opinions are now received, acquit themselves with satisfaction; but if such a trial took place before a jury, and each captain were allowed to select his own experts as witnesses, there would be the same dissatisfaction as that which now exists in reference to trials involving other branches of scientific evidence."

"There can be no doubt that the present system discourages some eminent and upright men, who could by their special knowledge solve many important questions, from appearing as witnesses." . . . "As counsel on both sides look on the experts opposed to them in the light of hired advocates, it is obvious that so long as this system lasts, it must have a deterring effect on the higher and better class of witnesses, who, whenever they have the option, will avoid placing themselves in such a position as to have imputations of venality and untruthfulness thrown out against them in a public court." . . . "It is a fact worthy of note that even in criminal trials where life is concerned no provision is made by the English law for the calling by a judge of independent Medical witnesses or experts interested only in the manifestation of the truth."

A number of excellent engravings form a valuable feature in the volume. Some serve to show the form of poisonous leaves, fruits, etc., and the appearances of their active principles under the microscope, as well as those of mineral poisons. Others render intelligible the shape and arrangement of apparatus used in searching for poisons. The microscopic appearance of ordinary and of menstrual blood; of the human and of several kinds of animal hair; and of the different kinds of fibres found in textile fabrics are also among the number.

Everything enlarged upon in the volume is set forth in a clear and remarkably simple manner. Indeed, few writers have better apprehended what matters require explanation, and what may be assumed to be known to their readers, than the author of this work. The matter of it covers twelve hundred pages, independently of the tables of reference, etc.; yet nowhere have we noticed in the volume anything not to the point, or that could be removed without detracting from the interest or usefulness of it. Assuredly none who have call to peruse the pages of this treatise will find occasion to pronounce Medical Jurisprudence to be a "dry, dull" study.

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*Australia for the Consumptive Invalid: the Voyage, Climates, and Prospects.* By Isaac B. Brown, junior, late Surgeon-Superintendent H.M. Emigration Service. 8vo. Pp. 137. Map. Hardwicke. 1865.

The Surgeons of Her Majesty's emigration service, although a small body of men, are nevertheless a very important one; few persons have any notion of the responsible nature of their office, or of the power that is placed in their hands. Mr. Brown, although but comparatively a short time in the service, has availed himself of his opportunities for observation, and has published his experience of Australasian climates in a volume that will reflect credit on the service to which he belonged. Mr. Brown has wisely appended an excellent map of Australia; for doubtless a knowledge of Australian geography is anything but universal; only a small percentage of ladies or gentlemen in ordinary society would, we suspect, be able to give at all a satisfactory reply to the questions, What is the distance from

Sydney to Adelaide? and which is the southernmost of the two cities? It would be well, perhaps, if a greater familiarity with the splendid Southern Empire belonging to Englishmen were cultivated.

In the first place, it is encouraging to learn that the voyage to Australia is not a dangerous one; the best proof of which, Mr. Brown says, p. 18, is "the commercial test, ships in the Australian trade being insured at almost the lowest rates. Of all the ships despatched by Her Majesty's Emigration Commissioners, only one has met with an accident." It appears from a table furnished by the Commissioners that four and a quarter millions of human beings—that is to say, a number greater than what would now represent a half of the entire population of Ireland—have sailed for Australia with the loss only of 5094.

The remarks Mr. Brown makes in reference to what is to be expected by change of climate are such as would be endorsed by any Practitioner of experience. It is too often that exaggerated accounts lead to false hopes of benefit. He says there is a form of consumption "in which the hereditary taint is so strong, and the constitution is so thoroughly affected by the presence of tubercle, that from the first one sees that nothing will prevent or retard the course of the disease. In fact, in these cases interference seems only to aggravate matters; and it is here that to recommend change of climate is indeed positive cruelty. To turn to the account of those cases reported by Drs. Heineken and Renton, as having gone to Madeira to die within a few weeks or months of their arrival, how many would have been far happier at home, and have been spared many sorrowful partings and the separation from spiritual communion with those nearest and dearest, which in this fatal type of the disease is the only consolation left."—P. 27.

Mr. Brown's predilection is evidently in favour of the climate of Tasmania; he describes it as "the most lovely and healthy of all parts of Australasia. The first assertion I will leave those to contradict who can; it is a matter of taste; but the second I make fearlessly, for there is a larger proportion of old people to be found in Tasmania than in any other part of the globe. I know nowhere where a pink complexion and a white beard are so often seen in unison; where with age the senses, instead of failing, ripen into mellowness; where memory and all other faculties remain perfect to the last." Mr. Brown gives an example of Tasmanian longevity:—"There is now, or was a few months since, living in Launceston an old man, named John Dell. He was born on Guy Fawkes' day, 1763, served for many years as corporal of the guard of George III., and emigrated to Tasmania as a soldier. He has eighty-six descendants living in Tasmania, and is hale and hearty. He will go to the theatre with his great grandchildren, and hear and appreciate the acting. He can write and read without glasses, and can not only remember what happened fifty years ago, but can relate consecutively the events in his life from that period down to the present time.

"The weather of the Tasmanian summer and autumn is truly delightful. Atmosphere almost uniformly transparent; the sky clear from clouds and vapours. One may bask in the sun, and think oneself on the beach at Hastings, or climb the hills and imagine one is breathing the air of the Highlands of Scotland. It is in these months that ladies from New South Wales and Victoria come to gain fresh roses and fresh vigour for the next year."

Mr. Brown, nevertheless, says,—"I look on New South Wales as the best place for invalids who require a warm climate; but they must not live in Sydney itself. The Illawarra district, or Bathurst, will be found quite warm enough in winter for any one who any one who has come from England."

Chapter xi. is especially interesting, and we should say invaluable, to the intending traveller. It contains advice on the choice of ship and cabin, furniture and outfit, exercise, diet, and amusement during the passage. The practical character of the author is shown by the minuteness with which he has gone into details which might at first sight be insignificant, but which, in reality, in a most important degree affect the comfort of the passenger. Imagine the misery of a ninety days' voyage with blankets just one single inch too short, contrasted with the comfort of blankets of ample proportions under the same circumstances! "Outfitters," says Mr. Brown, "seldom allow for 'tucking in.'"

Mr. Brown has contrived to make a pleasant readable book on what might be supposed to be a not very enticing subject.

## PROVINCIAL CORRESPONDENCE.

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### SCOTLAND.

Edinburgh, January 2, 1866.

We had occasion to refer, in our last letter, to various important sanitary improvements which were being organised by our Lord Provost Chambers. The numerous proposals which have been suggested are being considered, and in a short time a matured plan will be brought forward by the principal authorities for the improvement of those parts of our city where vice finds a too prolific breeding-ground, and where

> "Hopeless anguish pours his groan,
> And lonely want retires to die."

This reform movement, now spreading over many large and crowded cities as a doubtfully contagious epidemic of blessings, has extended to the managers and supporters of our Royal Infirmary, who laid a report before the contributors to this charity at their last meeting; the general objects of which will be favourably regarded by the numerous readers of your journal, who are acquainted with the condition of this Hospital.

The Infirmary consists of two main departments, the Medical and Surgical, which occupy two separate buildings. The present Medical house was built in 1738, as a general Hospital for the treatment of both Medical and Surgical cases, admission being granted, since its foundation, "to the curable distressed, from whatever corner of the world they came, without restriction." This almost peculiar catholic character of the Hospital, among other causes, increased the number of applications to such an extent as to necessitate an increase in the accommodation, and about forty years ago the present excellent Surgical house was built, the old building being removed for Medical cases. At present, the Surgical department can accommodate 252 patients, and the Medical about 258, and there is a separate Fever-house, which has beds for sixty cases. However suitable the old building may have been at the time of its foundation for the treatment of diseases, its low roofs, defective ventilation, and sparing supply of ordinary conveniences, have now rendered it totally unfit for modern principles of treatment and for modern ideas of Hospital accommodation. Last year the managers reported that extensive repairs were required, and at the same time recommended that a committee should be appointed to consider the question of building a new and more suitable Medical Hospital; and the report of this committee has just been published. They consider a new building necessary, and propose two plans: the first, to rear the new house on the site of the present Hospital, at an estimated expense of £45,000; and the second, to increase the present site, by the acquisition of a street directly opposite the University, by which an improved access would be gained for the Infirmary from South Bridge-street, and the total cost of which would be about £100,000. We are glad to find that the managers strongly urge the adoption of the second proposal; it would give additional space and necessarily increase the ventilation of the whole Infirmary, and an important city improvement would be effected by the much-to-be-desired opening up of one of its finest buildings, the University, which would result from the removal of the opposite and obstructing street. This report is to be discussed on the 15th inst. There can be little doubt that the second proposal will be adopted, and that a Medical Hospital will be reared in every way worthy of the world-renowned reputation of the Edinburgh Medical School.

A fourth report on the cattle plague has been recently presented to the magistrates; and now Dr. Smart gives the Profession a further cause to thank and congratulate him by the publication of a most elaborate table, the results of about one hundred dissections which he has made in his persevering researches on this the most important Professional question of the day. Such a publication will certainly increase the credit which Dr. Smart unquestionably deserves for his important observations on Rinderpest, and these investigations—which we believe are unequalled in extent, and which have placed at his disposal the largest mass of data which we have met with—will add greatly to the value of any opinion to which he has committed himself. In this report attention is directed to the dermal eruption, which is at present occupying so much of the attention of those who are interested in the investigation of Rinderpest, and which has suggested some differences in the nosological position of the disease. Dr. Smart, we believe, does not consider himself entitled to give any final opinion on the matter. He is inclined to favour the view of a similarity between Rinderpest and Scarlatina, but until more special attention has been directed to the natural history of the eruption, the question must remain an open one. We understand that an opportunity will be soon given him of continuing the special investigation of this important practical question. Meanwhile, Edinburgh has suffered to a deplorable extent. Previous to the outbreak, there were about 1600 cows in the city, and of those three-fourths have perished, the greatest proportion from the disease, but some to avoid it. Dealing with a pestilence of so virulent a character, we can never be satisfied with any treatment which does not comprehend a specific cure or a certain method of prevention. Should Dr. Murchison's view of the analogy between Rinderpest and small-pox be the correct one, the whole Profession will have reason to congratulate itself that the despairing and querulous cry for Medical aid which has been raised by the *Times* will be immediately and satisfactorily answered. Still, with a difficulty so gigantic, and, for all scientific purposes, so novel, the first duty of the Profession, and the most natural prelude to successful treatment, is a searching inquiry into the pathology and symptomatology of the disease. We must congratulate ourselves, basing our laudation on results alone, that this task has been assigned to such able, persevering, and careful observers as Drs. Smart and Murchison, and their fellow-labourers in the Veterinary Profession, Messrs. Gamgee and Simonds.

At the last meeting of the Medico-Chirurgical Society, Dr. Gillespie read an interesting paper on a case of death while under the influence of chloroform. The case is one which presents the most frequent characters of chloroform accidents. The unfortunate patient was a young lady of 17, of a very nervous disposition, and the chloroform was administered for the trifling operation of tooth extraction. Death was caused by the employment of only fifty minims of the anæsthetic, and only a few seconds after its administration. It may not be altogether superflous to remark that the chloroform had been administered contrary to Dr. Gillespie's advice, and at the earnest entreaty of the patient and her friends.

At the same meeting the retiring President, Professor Maclagan, delivered an able valedictory address, in which he gave a *resumé* of the proceedings of the society during his presidentship. The important results of Dr. Thomas Keith's cases of ovariotomy were, *inter alia*, referred to in the following words:—"Dr. Keith's cases up to the present time are thirty-seven in number (besides one operated on the day before yesterday); of these nine have died, and twenty-eight recovered. The last eight cases in succession have done well; of the last twenty-one, three only have died, and all the recovered cases are now in perfect health. Such results are full of promise and encouragement, and are not the less interesting to this society that through it most of the cases have been communicated to the Profession." Dr. Moir, F.R.C.P., was elected President for the ensuing year; and Drs. J. Warburton, Begbie, Haldane, and Gillespie, Vice-Presidents.

Shortly before the Christmas vacation a mutiny was threatened by the Medical students of the University because of the published intention of the Senatus to continue the lectures of the Medical Professors during the week which has for a long period been devoted to Christmas relaxation and festivity. Indignation meetings were held, and an extensively signed petition presented to the Senatus, requesting a repeal of the obnoxious resolutions. This was first denied by the Senatus; but, on a favourable response having been given to a similar petition presented to the University Court, the request of the great body of the students of Medicine was granted, on the understanding that an attempt would be made by the Senatus to change the commencement of the session from November to the beginning of October.

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*(From another Correspondent.)*

January 10.

The first baronetcy ever bestowed upon a Scotch Professor, or a Physician practising in Scotland, has been conferred by Her Majesty on our distinguished townsman, Professor Simpson. We can think of no one more worthy of the high honour. By his great discovery of 1847 suffering humanity throughout the world has become his debtor.

To Obstetrical science his genius has contributed many of the most important discoveries of late years. Meantime he is storming the established principles of Surgery with the invention of acupressure, which promises as far to surpass the old ligature as it, in its day, excelled the torturing cautery. Nor have his talents been bounded by the vast demands of Medical science and practice pursued in so enthusiastic a spirit. He has over and above all this found time to enrich literature with many valuable treatises on antiquarian and other subjects. Long may Sir James Young Simpson be spared to enjoy those honours of which, as the just reward of individual talent and energy, he has a right to feel proud!

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## GENERAL CORRESPONDENCE.

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### ON THE SMALL-POX OF CATTLE IN BENGAL.

LETTER FROM DR. MACPHERSON.

[To the Editor of the Medical Times and Gazette.

SIR,—With reference to a view now very currently entertained of the identity of the Rinderpest and of small-pox, it may be interesting to call attention to the fact that in Bengal the natives have long looked on one of their most common murrains as small-pox. They apply the same names to the disease in man and in cattle, the commonest being "Mátá" and "Gotie."

The following extracts from *Transact.* Med. and Phy. Soc. of Calcutta, and from the Official Report on Small-pox, Calcutta, 1844, give a general account of this form of murrain, and are submitted for the judgment and information of those who are engaged in the investigation of the disease now so prevalent. I do not presume,—not having had an opportunity of studying cases of the Rinderpest—to offer any decided opinion of my own, though there are, undoubtedly, some very strong points of resemblance between the two diseases.

Mr. G. G. Macpherson, of Moorshedabad, writes in December, 1832:—

"I learned that the cows in Bengal are subject to a disease which usually makes its appearance about the end of August or early in September, to which the same names are given as to variola in the human subject,—namely, Basant, Mátá, or Gotie.

"The animals which were at first affected, amounting in one shed to eighteen or twenty, had been for a day or two previously dull and stupid; they were afterwards seized with distressing cough, and much phlegm collected in the mouth and fauces. The animals had apparently, at this time, no inclination for food, or, at all events, they were unable to satisfy their hunger. Their sufferings seemed to be greatest on the fifth and sixth days, when there was considerable fever and pustules made their appearance all over the body, especially on the abdomen, which terminated in ulceration, the hair falling off wherever a pustule had run its course. The mouth and fauces appeared to be the principal seat of the disease, being, in some instances, one mass of ulceration, which in all probability extended to the stomach and alimentary canal. In those cases where the mouth was very much affected, the animals died apparently from inanition, whereas, in those cases in which the power of mastication, or even of swallowing, was retained, recovery was much more rapid than might have been expected from the previous severe sufferings and reduced state of the animals. The mortality may be calculated at from 15 to 20 per cent.

"From the above description of the disease, it will be plain that the Gotie assumes a much more serious complexion than the Jennerian disease of cows. It must be inferred from Dr. Jenner's writings that the animal not only continued to secrete milk, but that the milk was used; while in this country, what little is secreted is never made use of, and, perhaps, owing to this circumstance, the milkers in India are not affected with cow-pox. It is an extraordinary fact, and worthy of remark, that while the cows were thus affected, no case of variola amongst the natives in the village presented itself; and although the people were averse from handling or going much among the cattle at the time of disease, still they all scouted the idea of infection, stating that they never heard of any one contracting disease from the cow. The disease assumed the character of an epidemic, all the cattle in the neighbourhood being affected."

Mr. Lamb, of Dacca, in 1836, reported as follows:—

"The disease among cattle known under the appellations of Basant, Mátá, Sitlá, or Gotie chiefly prevails during the months of December, January, and February, though not quite unknown at other seasons of the year. When a cow or bullock is first attacked, there is a discharge of saliva from the mouth; then follows universal tremor, with great heat of the head, chest, and body, as far back as the loins, while the hind quarters are cold. The whole body then becomes hot, and the animal suffers from intense thirst, the flow of saliva ceases, and the mouth becomes dry and hot. After the fever has subsided a day or two, the hair becomes so loosely attached that the slightest rubbing brings it off in handfuls. On the fifth day the eruption appears about the udder, sometimes only a few pustules, at other times they are numerous and confluent; but the result of the attack does not seem much dependent on the eruption. Whether the pustules are numerous or rare, the disease is almost equally fatal, and unless measures are taken to separate the diseased from the healthy, it speedily runs through the whole herd, sparing few. In those who do escape after taking the infection, the favourable symptom is a spontaneous diarrhœa, in which the dejections are large, watery, and offensive. When the hair is rubbed off after the pustules have appeared at the udders, the skin is found covered with sores. Many die before the eruption makes its appearance, but the fever is known by the discharge of the saliva, by the falling off of the hair, and loosening of the teeth. In favourable cases, three or four days after the eruption has come out, the teeth acquire firmness in the gums, and the animal is able to pick up a little grass. Cattle are said not to be subject to a second attack of mata. Sometimes the disease is exceedingly fatal; at other times it is comparatively slight, without sure reference to known or apparent cause; it is, however, at all times greatly dreaded, as it is too often the cause of utter ruin to villages. I have been unable to hear of its frequent co-existence with small-pox among the natives, and the disease is little known in the city of Dacca. Last year, when nearly a thousand deaths from small-pox occurred in Dacca, the disease only appeared in one quarter for a short period, and I was not aware of its presence till it had ceased, after carrying off fifteen or twenty cows."

Early in the winter of 1843, Dr. Duncan Stewart, of Calcutta, "was told that the cattle were dying in great numbers of small-pox. He visited all the cowsheds, and inspected many sick cows, but not one had any pustular eruption he could discover on its body. He saw several very fat and healthy-looking cows die after about three days' fever, with convulsive tremors, blood-shot eyes, and parched mouths. These the natives insisted in calling cases of inward Mátá. He observed in others, and generally for a few days, signs of fever, such as panting, lowing, thirst, loss of appetite; then followed violent purging, profuse salivation, and pituitary discharge from the nostrils; but on the fourth day ulceration of the tongue and palate, with bloody purging followed, and death usually occurred on the fourth or fifth day. In a good many cases certain rough elevations were pointed out to me on the skin having the hair turned back or ruffled over a small phlegmonous base. A number of these undoubtedly were caused by the burrowing of vermin or by the bites of insects, but many may also have been pustules, without supposing they possessed a specific character. Except in three cases out of many hundreds he inspected, he never found anything like papulæ, or vesicles, or pustules on the teats or udders of cows. The mortality among the cattle commenced much about the same time with that caused by small-pox among the inhabitants. The mortality in January had risen to 934 within the month, so as to affect materially the supply of milk and butter. It was asserted that the native butchers were in the habit of slaughtering the cattle the moment they were suspected, and the panic among beef eaters became almost universal. It was not generally known that the mortality was very great at the same time among fowls and pigeons; he saw dead fowls taken out of poultry yards in dozens in the morning, said to have died in the night of the universal small-pox, but could see nothing the matter with the birds, unless a certain degree of swelling and redness about the eyes." During the same epidemic, a cattle-keeper (Mr. Greenfield) whose notion of the disease may be referred to, reported that "he had lost sixty cows with a disease that had been all over his neighbourhood, like strangles or glanders; no eruption on skin, or udder, or teats; only the eyes, tongue, and throat were affected. They were all suddenly taken ill, and seldom lived more than three days. No purging nor discharge of water appeared."

I have myself observed the disease in Calcutta, three or four times in the course of eight years, usually towards the end of the rainy season, but I regret that I have no detailed notes of the symptoms. They were in a general way those described by Dr. Stewart, but I never saw a very fatal epidemic of the disease, nor one nearly coinciding in date with small-pox such as he described. Although all the accounts of this disease, as published, leave a great deal to be desired, yet they say enough to establish a few points of importance:—

1. All observers agree that one of the main features was the attack of the mouth and fauces.

2. All the Professional observers speak more or less of a pustule or eruption.

3. The three Medical observers all found or suspected affections of the bowels.

4. They describe a disease of varying mortality; but none of them talk of a plague at all equal in intensity to that now so general in England, or that prevailed lately in Egypt, and seems now to ravage Burmah and some parts of Southern India.

5. Respecting the communicability of the disease, the natives know well how catching it is among cattle, but they never dreamed of infection to man or to other animals.

6. In the way of treatment little was done. The natives gave various vegetable purgatives, but more usually had recourse to charms and incantations, which were doubtless quite as efficacious as arsenicon.

7. Some feeble attempts were made at the separation of cattle, but generally the murrains were left to exhaust themselves.

Respecting the communicability of the disease something more remains to be said. It has already been stated that the disease varies extremely in intensity, and many observers have conceived the idea that the milder cases of Mátá might be analogous to the vaccinia of Jenner, and have endeavoured to communicate the disease of mild Mátá to the human subject, in hopes of finding it to be the true cow-pox of ordinary vaccination. Accordingly, various attempts at transference of Mátá to children were made, of which three may be considered to have been successful, although I am quite aware of the many deceits which native assistants are willing to practise to bring about a result desired by their superior.

Mr. Macpherson inoculated children with crusts got from one of the cattle suffering from the epidemic of which his description has been given above. The result was the production of the genuine vaccine disease; at all events, of what he and many others considered to be such. Lymph supplied from this source was sent over the country and to Calcutta, and it speedily became mixed up with the lymph previously in use. No disastrous accidents happened, as with the lymph procured in 1837 by Messrs. Brown and Furnell in Assam.

Encouraged by Mr. Macpherson's success, they made use of some scales or scabs taken from the back or abdomen of a cow affected with Mátá, reduced them to a pulp with water, and inoculated four children. "In all four vesicles, in every respect resembling in their progress and when mature genuine vaccinia, were produced, and went through the same regular course, the constitutional disturbance on the eighth day only being more severe than I have usually seen it in the latter." From these many native children were inoculated, and no doubts of the genuineness of the lymph were excited until two English children were punctured from one of them, and it was found that fatal small-pox supervened.

This case might probably have prevented my making any further experiments on the subject had not other cases occurred, in which lymph sent from Calcutta, believed to be pure English lymph, had not, also on more than one occasion, appeared to produce small-pox; in which cases, when the disease was epidemic, I believe that such a result could only have been produced by the child having, previously to vaccination, got the poison of small-pox into its system, or by the trick of a vaccinator wishing to please his superior by making sure of the lymph producing some result, and using some small-pox virus.

Thinking, therefore, that the disastrous result in Mr. Furnell's case might have been so produced, I selected a mild case of Mátá, one in which there was a small irregular vesicle with no areola on the udder; altogether not a very promising case, nor what I should consider a true example of the Jennerian disease in cows; still the best case I could find. I was assisted by a particularly trustworthy native sub-Assistant-Surgeon, Hurronath Mitter. Three children were inoculated with thickish fluid from the teat, and the result was that in two of the children a very tolerable vaccine disease was produced. It was in August, 1856, at the season of the year (the rainy one) when vaccination does not run a regular course in Calcutta. The disease strongly resembled true vaccinia, and was passed through 80 or 100 children. The chief differences from true cow-pox were the earlier development of the vesicles, their being more acuminated, their soon being filled with pus, and not forming scabs—in short, they ran their course three or four days faster than the regular vaccine. There was also considerably more fever than is usual after vaccination. There were by the middle of September some symptoms of the vaccinia becoming more regular; but as, on the whole, I was not satisfied that I was propagating the real vaccinia, I gradually dropped the use of it. No untoward accident from its use was brought to my notice.

There are many points in these experiments which are not satisfactory to my mind, and which cannot now be solved; but with reference to any experiments now to be made with the so-called Rinderpest, they seem, such as they are, to be worthy of being alluded to. As far as I am aware, no attempts to communicate human small-pox to cattle in India have been successful. I am, &c.

Dr. John Macpherson,
late Superintendent-General of Vaccination.
35, Curzon-street, Mayfair, January 10, 1866.

## THE SMALL-POX HYPOTHESIS OF THE CATTLE PLAGUE TESTED.

### Letter from Dr. John Fairmann.

[To the Editor of the Medical Times and Gazette.]

Sir,—Next to knowing what a disease is, stands in importance our knowing what it is not, and I believe the following facts will help us to arrive at this latter conclusion. I returned yesterday from a short journey into certain of the plague-stricken districts; and going there with a strong hope that the hypothesis of there being some sort of absolute relation, at least, between the cattle plague and small-pox would be confirmed by my own observation, I confess to a most unpleasant disappointment, because if such relationship were proven, some prospect of prevention and cure would arise. I inspected carefully cows in all the stages of the disease, but in not one of them did I observe anything approaching to the much-disputed eruption, either on the skin, or on the udder, or around the vulva, or at the entrance of the vagina, or on the tongue or gums. A congested state of the vaginal mucous membrane, either in patches, or streaks, or more diffused, was considered to be the one indubitable sign of the animal being stricken. But the most important fact that came to my knowledge—most important as having a positive value—was this:—In a large herd, on one of the farms I visited, the cow pox had prevailed extensively during the autumn and onwards of the past year; there have been six cases of the cattle plague among them (three being sick at the time of my visit), and three of these six have died; one at least of these three, and two of those three still alive, had the cow pox, and, curiously enough, one of those dead had the cow pox and the cattle disease more severely than the others in either case. There can be no reasonable doubt of the two essential elements of this fact—that the cow pox had been present, and that one at least of the three dead had it severely, because (in addition to other evidence) the two servants that had been and are still in charge declared such to have been the case; and I myself observed the marks of the cow pox on the udder of one of the cows now under the disease, and saw the marks of infection on the fingers of one of these servants, having been, too, previously informed by the family Medical attendant that this man had shown him the regular vaccine vesicle and pustule on the hands.

As already said, I returned much disappointed, though aware that the varioloid nature of the disease was as strongly denied, and by as competent observers, as it was affirmed; but the foregoing facts could not but have their legitimate influence upon me. Notwithstanding all this, however, I strongly urged the propriety of vaccinating healthy stocks; this can do no possible harm, and if there be the smallest spot to support the least etiological relation between the two diseases, the experiment would well merit a fair and extensive trial. The fear is that the conditions essential to valid experiments will not be strictly attended to. But after all has been done, and if vaccination be found nugatory, would it not be well to try extensively the inoculation by small-pox matter from the human subject, as has been suggested and tried in some isolated instances? The experiments of Professor Boeck in the case of constitutional syphilis lend some support, I think, to this trial of inoculation. I am, &c.

John Fairmann, L.R.C.Phys. Edin., etc., etc.

## THE ACUPRESSURE CONTROVERSY.

### Letter from Dr. Brown.

[To the Editor of the Medical Times and Gazette.]

Sir,—Dr. Simpson has most unwarrantably introduced my name into a letter which you have published, as I never expressed publicly any opinion on the subject in question.

It is true that I was present when Mr. Syme tore the pamphlet "with his fingers," and that I regretted his taking a step which was liable to misrepresentation; but being now compelled to give my evidence as a witness, I beg to say that what Mr. Syme did was done with the most perfect coolness as the deliberate reply to an imputation on his fidelity as a teacher, and not as an expression of dissent from the proposed substitution of needles for ligatures.

I am, &c., John Brown.
28, Rutland-street, Edinburgh, January 8.

⁂ Mr. Syme called the act a "public execution." Let Dr. Brown explain this on any "charitable hypothesis," and we shall be delighted to insert the explanation.

## THE LATE DR. RITCHIE AND THE JENNER MEMORIAL WINDOW AT BERKELEY.

### Letter from Dr. John C. Thorowgood.

[To the Editor of the Medical Times and Gazette.]

Sir,—The sad occasion of the death of that excellent and talented young Physician, Dr. Charles George Ritchie, may be a fit one for drawing attention to a work in which he was earnestly engaged at the time of his decease. The work I allude to was the collection of subscriptions for the proposed memorial window to Dr. Edward Jenner in the parish church of Berkeley, in Gloucestershire.

The interest that I felt in this proposal to erect some memorial of Jenner in his own native village was the means of making me acquainted personally with Dr. Ritchie, and during my brief visit to him he was lamenting to me the slow progress in the growth of the subscription list for the erection of this window.

I can hardly imagine that any very great sum would be required to prepare and put in the window; but surely men in the Profession, and out of it, too, should rather regard it as a privilege to contribute something to a fund having for its object a substantial memorial to Jenner, and the names of the Committee are enough to satisfy the most particular of men that any surplus of funds would be disposed of in a proper and satisfactory way. I am, &c.,

John C. Thorowgood, M.D.
Queen Anne-street, January 10.

## EXAMINATION AT THE UNIVERSITY OF LONDON.

[To the Editor of the Medical Times and Gazette.]

Sir,—I cordially assent to the proposition in your editorial remarks that the London University expects too much from those applying for its degrees.

If a student must study practical chemistry he must resort to some large town where it is taught; and if he wants to study botany he must resort to some small town not surrounded for miles by stone walls and not void of green fields To fill a vasculum with plants, a student in Manchester, Birmingham, Liverpool, and other large towns, has to tramp all day—a day wholly lost to other studies. If he want to study zoology practically, he must make friends with some game-keeper far remote from any town. As no student can be ubiquitous, he must select one of these studies in preference to another; and yet the University expects that he shall know all.

I must also call your attention to the fact that there may be much mental discipline and trained observation without the power, suddenly, to make that known. Any man can see the difference between an apple and a pear, a lettuce and a cauliflower; but few can put into writing a description of each in botanical language. In every science there is a vast amount of words with technical meanings; and a memory of wondrous tenacity is required to remember these and their definite use. I think I know a great deal about steam engines, but I was completely *nonplussed* when a friend began to speak of "bushes and bearings" as important parts of them.

Do you think that any examiner in the University could stand a test like this? The chemical Professor shall be taken into a conservatory every day for a week, and shall on each occasion be told the name of every plant, the colour of its petals and sepals, the time of its showing flower, the time of its flowering, the duration of its blooming, the nature of its fruit, the size of its seeds, and the period they require for germination. The conservatory shall be a very large one, like the botanical kingdom is. At the end of the period three plants shall be presented to him, and if he can name all the points noted to him he may receive a medal of the order of memory. But to test him fairly, as compared with a student, he shall at the same time be required to go with another guide through a museum of zoology, and he shall have pointed out to him the moths, butterflies, insects, fishes, birds, molluscs, shells, etc., with which such collections abound; he shall be taught names, anatomy, habitat, habits, food, homes, etc., of each; and at the end of this probation he shall be called upon to name a moth, the appearance of its eggs, its larva, and its chrysalis; to give a succinct account of nudibranchiate molluscs; and to describe technically the difference between a crab and a lobster, and any two crabs and any two lobsters. Do you think he would pass? I might similarly frame a style of examination which would test the anatomist, the botanist, or the physicist; but refrain from want of space.

I would suggest that the examiners really form a board, at which all questions to students shall be read aloud, and each member of the board shall be asked whether he, as an accomplished gentleman, is able to answer it; if not, a vote should be taken "whether that question be put to the student." As it is, each examiner expects the student to excel in his branch, and if very defective in that he damns him altogether.

I was a diligent student in my time, burned no end of midnight oil, and day by day did my duty in the lecture-room, in dissecting-room, and dressing, etc., in Hospital; I took sundry prizes and gold medals in my "school," and earned distinction at the London University; but yet I escaped, almost miraculously, being plucked at the Hall; and at my first examination for M.B., for my want of knowledge of botany, I sat up all night cramming Henslow's book, just before I went in, and remembered enough of it to pull through; while another, who has since made his name deservedly famous, was rejected because he could not describe some flowers, etc., laid before him.

As regards the after career of students successful at the Schools and Universities, I am afraid little can be said favourable. If they want Medical renown, they may obtain it at the expense of worldly success. If they want "pudding," they must forget their learning and study human nature as it is. Experience tells us all that humbug and ignorance pays better than science; and in Medical knowledge we may say certainly much learning increaseth sorrow.

I am, &c. M.D. London.

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Cottage Hospitals.—From the Fifth Annual Report of the Fowey Cottage Hospital it appears that during the past year there have been fifteen severe cases received in this modest institution, two of them necessitating amputation. All have done well, and this at an outlay under £20. We congratulate Dr. Davis, the founder and Medical officer, on the great success which has attended his efforts, at so small a cost, to ameliorate the condition of the sick poor in this primitive and out-of-the-way little nook on the wild Cornish coast.

Harveian Society of London.—The following is a list of the names of gentlemen elected as officers of the Society for the year 1866:—*President:* W. Tyler Smith, M.D. *Vice-Presidents:* B. G. Babington, M.D., F.R.S.; T. Ballard, M.D.; J. B. Walker, Esq.; C. S. Webber, Esq. *Treasurer:* Henry William Fuller, M.D. *Hon. Secretaries:* J. Brendon Curgenven, Esq.; Charles R. Drysdale, M.D. *Council:* J. D. Allen, M.D.; Victor De Meric, Esq.; J. Eardley, Esq.; John Evans, Esq.; J. Gayleard, Esq.; J. Stewart Lamb, M.D.; James R. Lane, Esq.; J. Z. Laurence, Esq.; Edwin Lowe, Esq.; J. M. Moullin, Esq.; Chas. Royston, M.D.; J. C. Whaley, Esq.

## REPORTS OF SOCIETIES.

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## THE PATHOLOGICAL SOCIETY.

Tuesday, January 2.

Dr. Peacock, President.

The following report would have appeared last week but for an accidental delay in the forwarding of the MS. by the Post-office. It is an amplification of the report we gave at page 15 in the number for the previous week. As in that report we were able to give a complete account of Mr. Gamgee's remarks, we need not here reproduce them. It will be remembered that, in the main, Mr. Gamgee agreed with Dr. Sanderson and differed from Dr. Quain and Dr. Murchison.

A report of the meeting for December 19 will appear next week.

Dr. Quain read the following

### CASE OF INOCULATION BY CATTLE-PLAGUE POISON, PRODUCING APPARENTLY A VACCINE VESICLE.

The subject of this phenomenon is Mr. Hancock, a Veterinary Inspector of the Uxbridge district, who, whilst superintending the post-mortem examination of a bullock dead of the cattle plague, received a slight wound on the back of the left hand; the operator was engaged at the moment removing the skin from the neighbourhood of the scrotum. The subject of the inquiry (aged about 30), and showing a mark of old successful vaccination, was at the moment in perfect health, and took no notice of the accident, which occurred on December 3. On the fifth day—*i.e.*, December 8—a papula, hard and slightly raised, was felt and seen in the site of the puncture. This gradually increased in size till December 12, when a distinct vesicle appeared at the site of the papula, and then he began to feel ill; on the following day he felt worse; he had pains in the back and limbs, and felt feverish. He then consulted Mr. Rayner, a Surgeon at Uxbridge, of great experience, who recognised the appearance on the hand as being due to vaccination. The vesicle on this the tenth day resembled that of vaccination; on the ninth day it was full of lymph; the edges were elevated, of a brownish colour; the centre depressed, of a brownish colour also; the whole being surrounded by a large red areola. The hand was swollen beyond the knuckles, and the swelling extended up the arm; the lymphatic vessels were inflamed, and pain and uneasiness were felt in the arm-pit. There was much febrile disturbance. On December 15 and 16 the symptoms were more severe; there was evidence of increased fever, and severe pains were felt in the back and head. He then resolved to come to town for my advice, and he came on December 18, having first called on Professors Spooner and Symonds at the Royal Veterinary College, and showed them his hand. These gentlemen were so good as to approve of his desire to see me, and I saw him on that day. The feverish symptoms had partially subsided, so likewise had the local inflammatory action. There was still the vesicle now filled with rather turbid brownish fluid, the outer edges resting on an inflamed basis being somewhat irregular, the centre brownish and depressed. The appearances were exactly those of a declining vaccine vesicle. They are figured in the drawing presented to the Society. I asked Dr. Murchison, who was engaged in seeking the analogies which cattle plague bears to the diseases of man, to see this case. I sent for Dr. Sanderson also, but failed to find him, he being also engaged for the Commission. Dr. Murchison was struck with the appearance which he saw, and has since zealously and very ably pursued the inquiry. I communicated the fact to Mr. Ceely also, who saw Mr. Hancock on December 20, the fourteenth day of papulation, the nineteenth of puncturation. Mr. Ceely was quite satisfied of the vaccine character of the appearance which he saw. Mr. Hancock has called on me once since then, and again yesterday. The appearance presented by the hand yesterday seemed so striking that I requested him to attend our meeting. These appearances are also shown in a drawing. There is the dry, black, central, depressed crust; the red, semi-transparent, glistening, elevated margin; and the surrounding halo,—an appearance almost identical with the declining vaccine vesicle figured on the temporal region in plate 1 in Mr. Ceely's "Further Observations on the Variola Vaccine."(a)

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(a) Deighton, Worcester. 1842.

Mr. Hancock then showed his hand to the members of the Society, after which Dr. Quain, at the request of the President, made the following observations:—

Dr. **Quain** said that this was not the first time that the cattle plague had been said to resemble small-pox. In the last century an epidemic among cattle had been described as small-pox by Layard; yet although the subject had often been discussed he was not aware that, until the present time, any positive fact had been arrived at. There had been many statements in the newspapers to the effect that Rinderpest and small-pox were allied, but they were mere surmises, unsupported by proof. Mr. Ceely (Dr. Quain continued) had for the last six weeks been investigating the subject, and had pointed out there was an eruption in Rinderpest. In some cases the eruption had escaped notice. It was not a little strange that the first notice of the existence of the eruption, or rather of its effects, was recognised by tanners. They refused to receive the skins of cattle which had died of Rinderpest, as it was found that the hides were spotted. Mr. Ceely had found that the eruption was on the back of the neck and on the shoulder, as well as on the udder, vulva, etc. Having found an eruption, the next thing was to learn what its nature really was, and the question of its being small-pox was raised. At this point in the inquiry Mr. Hancock's case occurred, and gave a fresh impulse to inquiry. Dr. Quain then remarked on the extreme importance of the question—If the Rinderpest really was small-pox, vaccination would doubtless prevent it. It was, he said, remarkable how some cattle exposed to the contagion failed to take the disease, and in some of these instances it had been asserted that the cattle had had the vaccine disease in early life. In such instances the vaccine disease saved the animals, and it was but reasonable, Dr. Quain argued, to confer immunity on oxen by producing the disease artificially by vaccination or by inoculating them with small-pox matter. It seems, however, Dr. Quain added, that it is no easy matter to induce small-pox in cattle, and that there yet remains much to do before its result can be established positively. Dr. Quain concluded by saying that Dr. Sanderson, Mr. Spooner, and Dr. Murchison were present, and would no doubt be able to make some remarks on the question and on the bearing of Mr. Hancock's case on it.

Dr. **Sanderson** had no intention of expressing any opinion as to the precise significance of the appearances exhibited in Mr. Hancock's arm or on the question whether or not small-pox is identical with Rinderpest. Early in December his attention had been called by Mr. Ceely to the remarkable analogy between the two diseases, and he had read a communication to the Harveian Society for the purpose of illustrating this analogy, and, at the same time, maintaining that, however like, the two diseases could not be regarded as identical. He saw no reason to modify the views then expressed, for it appeared to him that neither the symptoms during life nor the post-mortem appearances justified an opposite conclusion. At the same time, it was to be remembered that questions of this kind could only be solved by experiment. As regards the eruption on the skin, he had had opportunities of observing it from its earliest appearances both in mild and in fatal cases, and that there appeared to him to be no analogy whatever between it and the eruption of small-pox. Whereas the vesicles of small-pox originate in a definite manner, have a definite duration, and contain a transparent fluid which is gradually transformed into pus by a process which is invariable in each vesicle, the so-called flattened vesicles have no relation to the severity of the malady or the stage of its progress, contain no serous liquid, being, in fact, not vesicles at all, but solid elevations beneath the cuticle, which occasionally soften, if the animal lives long enough, into a semi-fluid material having a remote resemblance to pus.

[Mr. Gamgee then made some remarks, a full report of which is contained in an article on page 14 of the last number of this journal.]

Dr. **Murchison** said he believed with Dr. Sanderson that the eruption in the Rinderpest did not always pass through the regular stages seen in the eruption of small-pox in the human subject, but he could not help thinking that these differences were to be accounted for by the structural difference of the human skin and the skin of oxen. Again, it was not in the eruption solely, but in the general history of the disease, that its analogy to variola in the human subject was to be traced. He had not maintained that they were identical, but he really felt convinced that the more Rinderpest was studied the more did it seem to resemble variola. The visceral lesions of human small-pox—which, by the way, Dr. Murchison said had not been recently studied—were strikingly like those seen in the animals which had died of the cattle plague. Even the remarkable ecchymoses and eschars found in the third and fourth stomachs of cattle had also been found in the stomachs of persons who had died of unmodified variola. Dr. Murchison then said that it was acknowledged that in some countries, as in India, cattle did suffer from small-pox, and there it was very fatal to them. Now, it would be very remarkable if small-pox in cattle was limited to the East, and another disease, which certainly closely resembled it, should exist here. There was no doubt in India that certain epidemics among cattle were epidemics of small-pox, for experiments showed that inoculation with the matter from the animals produced sometimes variola, and sometimes the ordinary appearance of simple vaccinitis. Dr. Murchison then read the reports of Indian Medical officers to prove this. Dr. Murchison concluded his remarks by saying that, there were, at all events, reasonable grounds for making experiments. A few experiments would easily settle the question; and if they showed the disease to be small-pox we should have in vaccination a means of putting a stop to it.

Dr. **Sanderson** remarked that in order to guard against the impression that the difference in the eruption of small-pox in the human subject and in the diseased cattle was due to differences in the skins, he had pointed out the difference between the eruption of Rinderpest and the eruption of undoubted small-pox in sheep.

Dr. **Sanderson** exhibited a specimen showing

### THE CHANGES IN THE MUCOUS MEMBRANES OF THE GUMS, LIPS, AND CHEEKS IN CASES OF RINDERPEST.

He stated that in seven cases of Rinderpest in which the mucous membranes had been inspected day after day, from the moment that the increase of the temperature of the animal indicated that it was infected, the alteration in question always occurred earlier than any constitutional symptom of the malady, and at a period when the animal exhibited to an ordinary observer no sign whatever of disturbance of health. The earliest change seen (or rather felt) consists in the formation on the gums of minute red elevations, or nodules, often not larger than a poppy seed, which are so little redder than the surrounding surface that they can only be discovered by touch. Twelve hours later they have become opaque, larger, and more visible. A day later they are found to have not only extended into patches, but to have softened in the centre. As they increase in size they become confluent, assume a greyish-yellow colour, and become softer. Having arrived at this stage, they either peel off, leaving a red, easily-blending surface, or remain, assuming the appearance of moist diphtheritic concretions. In his preparation both of these results are met with in different parts. From first to last these structures are epithelial. The process of their formation appears to consist, first, of exuberant development of young epithelium at the surface of the membrana propria; secondly, of the breaking down of these structures, so as to form a granular mass, in which numerous nuclei are still visible. On the surface of the papillæ a similar change takes place; but there is no visible thickening of the epithelium; the obvious change being that the true structure is detached in patches, sometimes leaving the tip of the papilla bare and red, sometimes the base. This alteration is very striking, in consequence of the brightness of the colour which these patches of denudation exhibit. Dr. Sanderson remarked that the alterations described were of great importance in relation to the diagnosis of cattle plague. From the constancy with which they had been observed in all cases, the mildest as well as the most malignant, and from the uniformity of the characters they exhibited, he thought that the experience of this country was in accordance with the opinion of those who had enjoyed the largest opportunity of seeing the disease in Russia, that they are almost pathognomic. Anatomically, the eruption on the mucous membrane of the mouth is strictly analogous to that which occurs on the skin. At the edges of the lips they are seen to be continuous with each other. Neither has any resemblance to the affections of the same parts observed in small-pox.

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Medical Society of London, 32a, George-street, Hanover-square.—The second lecture of the course of Lettsomian lectures, on "Certain Painful Affections of the Fifth Nerve," will be delivered by Francis Edward Anstie, M.D., F.R.C.P. (Senior Assistant-Physician Westminster Hospital), at half-past eight p.m. on Monday, January 22, 1866.

# OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, NOVEMBER 1, 1865.

Dr. BARNES, President.

THE PRESIDENT announced that the Council had resolved to hold a *conversazione* in March next, for the purpose of exhibiting a full collection of instruments used in obstetric practice.

Dr. BARNES exhibited a monstrous Fœtus brought to him by Mr. Thane, of Canonbury. Also, a voluminous Fibroid Tumour, weighing 1 lb. 13 oz., which, with the assistance of Dr. Hicks, he had successfully removed from the uterus of a lady a month ago.

Dr. RUSSELL, of St. Albans, laid before the Society the particulars of a case of Hydatiform Degeneration of the Ovum.

Dr. AVELING read a

### CASE OF OVARIOTOMY IN WHICH THE PEDICLE WAS TIED AND RETURNED, AND THE LIGATURE REMOVED IN FORTY-EIGHT HOURS.

The operation was performed as follows :—As soon as the cyst was reached it was tapped, and the fluid (twenty-one pints) withdrawn. No adhesions existed, and the sac was withdrawn easily. The pedicle, which was short, and about four fingers in breadth, was transfixed by a needle carrying a double thread. The two ends of each ligature were then brought up on either side, and drawn through two wire coils five inches and a half long. Each coil had fitted upon its end a cross-bar; and around these cross-bars the ligatures were secured after they had been drawn sufficiently tight to compress the vessels. The pedicle, after it had been placed in the hook of Dr. Aveling's polyptrite and crushed through, was then returned *in situ*, and the wound closed with iron-wire sutures. The coil-clamps were removed in forty-eight hours; and the patient made a favourable recovery.

Mr. SPENCER WELLS said that no one method of dealing with the pedicle could be applicable in all cases of ovariotomy. A long pedicle was dealt with so successfully by the clamp that he desired no better method; but it was still doubtful what was the best mode of proceeding when the pedicle is short. The plan of leaving the ends of silk or twine ligatures hanging out through the wound was so unsuccessful, that the apparatus of Dr. Aveling would probably prove of great advantage in cases of short pedicle in weak patients.

Dr. MARION SIMS said that the clamp was a great improvement on the ligature. He thought Mr. Baker Brown's plan of severing the pedicle by the actual cautery promised great results. He viewed Dr. Aveling's method with favour. He always used a silver wire, and left it to be sacculated. He said the distal end of the severed pedicle did not slough where the wire was applied. The wire became imbedded and hidden in its tissue.

Mr GEORGE ROPER read the particulars of a

### DIFFICULT CASE OF LABOUR, IN WHICH THE CERVIX UTERI WAS HYPERTROPHIED AND UNEVOLUTED.

A. E., aged thirty-seven, in labour with her eighth child, was found to have the cervix uteri elongated and enlarged, so as to fill the vagina. The os externum was sufficiently dilated to admit the hand, but the os internum was undilated. The occiput presented. Version having been tried and failed, and the funis being pulseless, the head was perforated, and after some difficulty the child was extracted. During extraction the cervix uteri protruded from the vulva, and the effects of pressure and distension on it could be well observed. The difficulty consisted, not in having a rigid os uteri to deal with, but the entire cervix had to be expanded, dilatation of the os internum constituting the chief difficulty. The author discussed the question whether craniotomy alone, or dismemberment and exvisceration of the fœtus, is the best for such a case.

Dr. J. MARION SIMS read a paper on

### PROCIDENTIA UTERI.

He said that a procidentia was complete when the vagina was inverted and formed its outer covering—incomplete when the cervix only passed through the vulva; that a broad pubic arch, divergent rami, a relaxed perineum, and a retroversion, were essential to its production; that in some cases the infra-vaginal cervix was elongated, and came down first, but that in the majority of chronic cases a vagino-cystocele formed the first stage of procidentia. For the first he advocated amputation of the cervix, and said this was generally alone sufficient; but for the second he preferred to narrow the vagina. This idea, he said, originated with Marshall Hall; but he did not think the operation had ever succeeded till the introduction of metallic sutures. He then gave an account of the operation from the time he first performed it in 1857 till now, showing its gradual advancement to its present state of perfection. He illustrated the subject fully by diagrams. In 1857 he narrowed the anterior wall of the vagina by exsecting a large ellipsis of it, and then bringing the lateral borders together with silver sutures. Afterwards he simply denuded the surface of its epithelial membrane; then he simplified the operation by making a V-shaped scarification; and subsequently he made it trowel-shaped or triangular, the point being at the neck of the bladder, and the broad portion in juxtaposition with the cervix uteri. In all these methods, the object was to remove the cystocele, and afford a support to the parts just at the anterior cul-de-sac. By diagrams he illustrated the method of operating, and claimed for it, when properly done, the greatest success. He did not pretend to institute a comparison between this and the perineal operation for the same trouble; but he had been driven to work out this plan in consequence of having often failed with the other. He only wished to add another resource to our means of curing such a disgusting infirmity, for we now had three methods: 1st, amputation; 2nd, the perineal operation; 3rd, the narrowing of the vagina, as advocated by him.

Mr. NUNN stated that he had on several occasions operated for prolapsus uteri after the plan recommended by Mr. Baker Brown. In most of the cases a partial rupture of the perineum had existed. In them the result of the operation was satisfactory on the whole. Where no rupture of the perineum existed, as in young women who had never borne children, Mr. Brown's operation failed. He also stated that he had himself adopted, and had also seen Mr. Brown on many occasions practise, a proceeding *somewhat* resembling that described by Dr. Sims—namely, the removal of a V-shaped portion of the mucous membrane of the vagina reaching from the fourchette to within an inch or so of the cervix, the difference being that this removal was made from the posterior instead of the anterior or vesical wall of the vagina.

Mr. SPENCER WELLS said that the operation suggested by Dr. Marshall Hall had been performed many years ago in London. He (Mr. Wells) had seen two ladies upon whom it had been performed by the late Dr. Hemming, of Kentish-town.

Mr. CHAMBERS regarded Dr. Sims' proposal as a valuable contribution to female Surgery; but, in common with Mr. Baker Brown, he (Mr. Chambers) had for years past combined the two operations in cases requiring such a procedure, and he felt bound to say that the anterior operation, as performed by Mr. Brown, was a very simple one when compared with Dr. Sims'.

Dr. WYNN WILLIAMS remarked that, as regards the success of the operation performed by Mr. Baker Brown, he had met with several cases, and he must say that the patients appeared to him to have been but little benefited by the operation. He recommended a pessary, which acts by making tense the mucous membrane reflected from the vagina to the uterus, the uterus being suspended between the blades of the pessary.

Dr. WILKINS, of William's Town, Australia, stated that he had operated on two cases of procidentia uteri, following closely the method of Mr. Baker Brown as described in his book. Permanent success had followed the operation, even though one of the cases had been of twelve years' standing. Dr. Tracey, of Melbourne, has also operated on several cases, and he believed with similar results.

The PRESIDENT said he had himself performed Mr. Brown's operation several times. He had found prolapsus return in spite of the provision of a good perineum. Further, he had repeatedly seen the uterus remain *in situ* notwithstanding large perineal luxation. It seemed to him that Mr. Brown's operation was performed in the wrong place. It had no effect in providing support where it was wanted—namely, anteriorly, at the connexion of the cervix uteri with the base of the bladder. This object seemed to be perfectly accomplished by the admirably reasoned-out and ingenious operation of Dr. Sims.

Dr. SIMS, in reply, said that no one method of operating could be applicable under all circumstances to all cases. If there was a lacerated perineum it was proper to restore it. If there was elongation of the infra-vaginal portion of the cervix, then the proper operation was amputation of the cervix, and this was probably all that was necessary in such cases. In the majority of cases of procidentia—in all those where a vagino-cystocele formed the first stage of descent—he was satisfied that the operation he had described—viz., that of narrowing the vagina by forming a longitudinal fold of its tissue on the anterior surface, reaching from the neck of the bladder to the neck of the womb—would be one of the safest, simplest, and best.

## MEDICAL NEWS.

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King and Queen's College of Physicians in Ireland.—Licentiates in Medicine admitted in October, November, and December, 1865 :—

James Thomas McMahon, Thorney, Cambridgeshire, October 5; Thomas Bernard Ryan, Nelson-street, Tipperary, October 10; William Westropp Brereton, 65, Fitzwilliam-square, October 10; Arthur Croker, General Hospital, Phœnix-park, October 28; John William Jones, Bangor, North Wales, October 31; Mark Anthony Kilroy, 10, Upper Gloucester-street, October 31; John Randal Croker, 37, Lower Dominick-street, November 25; Francis Sparrow Risk, 7, Richmond-place, Brighton, December 6; Stopford William Halpin, Arklow, December 7; Thomas William Patterson, Letterkenny, December 7; Edward Alfred Birch, 5, Castlewood-terrace, Rathmines, December 19; John Mallet Purser, 32, Hardwicke-street, December 19; William Hay Maturin, Gartan Glebe, Letterkenny, December 21; William Rhys Williams, Bethlehem Hospital, London, December 28; Lennox Robertson, Newport, Monmouthshire, December 28.

Licentiates in Midwifery admitted during the months of October, November, and December, 1865 :—

James Thomas McMahon, Thorney, Cambridgeshire, October 5; Thomas Bernard Ryan, Nelson-street, Tipperary, October 10; William Westropp Brereton, 65, Fitzwilliam-square, October 10; Arthur Croker, General Hospital, Phœnix-park, October 28; William Duncan, Savannah, Georgia, U.S., October 28; Richard Malcolm Graham, Clonmel, November 8; Daniel Ambrose, Loughill, Co. Limerick, November 8; Francis Sparrow Risk, 7, Richmond-place, Brighton, December 6; William Thomas Greene, 2, Carlton-terrace, Rathmines, December 9; Stopford William Halpin, Arklow, December 7; Thomas William Patterson, Letterkenny, December 7; John Mallett Purser, 32, Hardwicke-street, December 19; Andrew Richard Cowell, Miltown, Co. Dublin, December 21; Lennox Robertson, Newport, Monmouthshire, December 28.

Royal College of Surgeons.—The following gentlemen have just passed their Preliminary Examination in General Knowledge, conducted by the College of Preceptors under the superintendence of the authorities of the above institution, viz. :—

Robert Argles, A. J. Atkinson, Cornelius Biddle, H. B. Blackburn, C. P. Bellamy, H. G. Biggs, W. W. Cooke, C. C. Connon, T. L. Close, W. J. Daniel, G. R. Dawson, Walter Date, T. J. Dixon, F. H. Drake, D. W. Duke, H. G. Dyer, N. E. Davey, W. W. Dove, Alfred Edwards, Ralph Floyer, A. G Greenway, William Greaves, J. A. Horsford, William Hugman, W. S. Hughes, W. S. Holroyd, William Hodson, Charles Jervis, H. T. Jones, C. R. B. Kutley, J. D. Lloyd, Arthur Lattey, T. J. Lidbetter, Jonathan Lamplugh, H. C. Martin, Charles McCann, G. A. Menzies, S. S. Noakes, T. J. Ollerhead, F. J. Parson, R. F. Palmer, G. S. Payne, H. G. Peacock, M. H. Payne, T. J. Preston, L. L. Powell, W. G. Ranger, Edward Roe, Frederick Robertson, J. B. Slater, G. A. Slack, A. F. Simkins, F. H. Spencer, Richard Snagg, W. M. Turner, Philip Thornton, F. E. Thurland, Edwin Tipple, W. P. Thornton, E. G. Whittle, and W. P. Yates.

There were thirteen gentlemen referred back to their studies. The ages of the seventy-five candidates varied from 16 to 28 years.

New Fellows.—The following Members of the Royal College of Surgeons, having been elected Fellows at previous meetings of the Council, were admitted as such on the 11th inst. :—

William Allard, Tewkesbury, Diploma of Membership dated April 12, 1839; Henry Sharp Taylor, Guildford, Diploma of Membership dated June 12, 1840.

Apothecaries' Hall.—Name of the gentleman who passed his Examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, January 4, 1866 :—

Horalcy Thomas Mapleson, 34, Devonshire-street.

### APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Bishop, Mr. W., has been elected Dispenser to the Western Dispensary, Broadway, Westminster.

Green, Edwin S., L.R.C.P. Edin., has been elected Resident Medical Officer to the York Dispensary.

Grosvenor, A. O., M.D., has been appointed House-Surgeon to the London Surgical Home for Diseases of Women, Stanley-terrace, Notting-hill.

Jones, Edward S., L.R.C.P.L. has been elected House-Surgeon to the Weston-super-Mare Hospital and Dispensary.

McWhinnie, Andrew M., F.R.C.S. Eng., has been appointed one of the Surgeons to the Hospital for Diseases of the Skin, Blackfriars.

Pearce, Francis D., M.R.C.S. Eng., has been appointed Honorary Assistant Surgeon to the 26th (Kingsbridge) Devon Rifle Volunteer Corps.

Propert, Mr. J. Lumsden, has been appointed Surgeon to the A Division of the Metropolitan Fire Brigade.

Roberts, John C., L.R.C.P. Edin., has been appointed one of the Surgeons to the Dispensary, Peckham-rye.

Smith, C. H., M.R.C.S. Eng. has been appointed Assistant-House-Surgeon to the General Dispensary, Sheffield.

Snook, James W. M.R.C.S. Eng., has been elected Resident House-Surgeon to the Bradford Infirmary and Dispensary.

Thomas, Mr. W., has been elected Resident House-Surgeon to the Bradford Infirmary and Dispensary.

Veitch, A., M.D., has been appointed Resident-Surgeon to the Birmingham and Midland Counties Lying-in Hospital and Dispensary for Diseases of Women and Children.

Webster, George, M.R.C.S. Eng., has been appointed one of the Surgeons to the Dispensary, Peckham-rye.

Wright, Edward S., M.R.C.S. Eng., has been appointed Surgeon to the Great Eastern Railway Provident Society.

### BIRTHS.

Anderson, Dr. McCall, the wife of, at 1, Woodside-crescent, Glasgow, on January 5, of a daughter.

Bourbouchaki, Dr. J. N., the wife of, at Boulogne-sur-Mer, on January 4, of a son.

Brown, Dr. Frederick J., the wife of, at Rochester, on December 31, of a daughter.

Cockell, F. E., M.R.C.S. Eng., the wife of, at Dalston, on January 1, of a daughter.

Davie, M.D., Assistant-Surgeon G. S., the wife of, at Perth, on December 30, of a daughter.

Edwards, H. I., M.R.C.S. Eng., the wife of, at Bampton, Devon, on December 29, of a son.

Hodges, H. B., M.R.C.S. Eng., the wife of, at Hertford, on December 28, of a daughter.

Jones, M.D., John E., the wife of, at Brynffynon, Dolgelley, N. Wales, on December 29, of a daughter.

Macilwain, George, F.R.C.S., of Albany Courtyard, the wife of, at Matching-green, Essex, on January 6, of a son.

Palfrey, Dr., the wife of, at 25, Finsbury-place, E.C., on January 7, of a daughter.

Sanders, Henry S., Surgeon 49th Regiment, the wife of, at Notting-hill, on January 3, of a daughter.

Spurgin, F. W., M.R.C.S. Eng., the wife of, at Sidmouth-villa, Hammersmith, on December 30, of a son.

Swain, Isaac H., M D., the wife of, at Shaftesbury, Dorset, on January 6, of a daughter.

### MARRIAGE.

Loney—Luke.—January 9, at St. George's, Hanover-square, Dr. Wm. Loney, R.N., Staff Surgeon H.M.'s Hospital, Haulbowline, to Margaret Rose, eldest daughter of the late Henry Luke, Esq., of Exeter.

### DEATHS.

Guest, Edward, F.R.C.S. Eng., at 20, Halsey-street, Chelsea, on January 4, aged 49.

Henry, Richard, late Staff Assistant-Surgeon Royal Artillery, at Seacombe, Birkenhead, on December 21.

McKee, William, L.R.C.S. Edin., at Wesley-street, Liverpool, on Decem-22, aged 72.

Sisson, Andrew, M.R.C.S. Eng., at Reigate, Surrey, on January 4, aged 57.

## POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

### RESIGNATIONS.

*Bridgewater Union.*—Mr. W. J. Bonnor has resigned the Chilton Polden District; area, 9230; population, 2447; salary, £43 per annum.

*Derby Union.*—Mr. John Lindley has resigned the First District; area, 937; population, 20,012; salary, £50 per annum.

*Fulham Union.*—Dr. C. M. Meller has resigned the Walham-green District; salary, £50 per annum.

*Glandford Brigg Union.*—Mr. Moxon has resigned the Kirton District; area, 11,672; population, 2593; salary, £30 per annum.

*Plympton St. Mary Union.*—Mr. Langworthy has resigned the Fourth District; area, 9720; population, 2748; salary, £25 6s. per annum.

*Stroud Union.*—Dr. Turner has resigned the Fourth District; area, 4894; population, 4147; salary, £61 per annum.

*Tonbridge Union.*—Mr. W. J. Procter has resigned the Sixth District; area, 7774; population, 2878; salary, £65 per annum. Also the Seventh District; area, 4500; population, 1385; salary, £35 per annum.

### APPOINTMENTS.

*Freebridge Lynn Union.*—Joseph W. Barrett, M.R.C.S.E., L.S.A., to the First North-Western District.

*Highworth and Swindon Union.*—Alfred L. Griffith, M.D., M.R.C.S.E., L.S.A., L.M., to the Fourth District.

The Paris Imperial Society of Surgery.—Out of forty-eight candidates, the Society has chosen the following ten foreign correspondents :—Donders, of Utrecht; Longmore, of Netley Hospital; Bilroth, of Zurich; Brown-Séquard, of Boston; Holmes, of London; Humphry, of Cambridge; Gurlt, of Berlin; Neudorfer, of Prague; Smith, of New York; and Emmert, of Bern.

THE BARONETCY OF PROFESSOR SIMPSON.—From the *Caledonian Mercury*, January 8:—"We have very great pleasure in announcing that Her Majesty, recognising the valuable services of our fellow-citizen, Professor Simpson, in the advancement of Medical science, has offered that gentleman a baronetcy. In stating Her Majesty's intention, Earl Russell intimates that the distinction is a recognition of the Professor's many services to the science of Medicine, especially in the discovery and the application of chloroform, by which pain in Surgical operations has been alleviated and human life in consequence rendered more secure against disease. The honour thus sought to be conferred must be all the more gratifying to Dr. Simpson, as it was entirely unexpected, and, moreover, has never before been conferred on any member of the Profession practising in Scotland."—(From the *Daily Review*, January 9.)—"The announcement in yesterday's paper, which was received with so much gratification by the public, gave intense delight to the Professor's students. When Sir James made his appearance in his class-room yesterday, the students, taking leave to dispense with academical propriety on the auspicious occasion, rose from their seats *en masse*, and cheered vociferously. When the applause had subsided, Sir James briefly acknowledged the demonstration. He said that he could not affect to misunderstand what their congratulations meant. Of all congratulations in a case of this kind, those of his class were perhaps the most pleasant of any. The honour conferred had come upon him as a complete surprise. He felt almost ashamed that he should have been the individual selected by her Majesty to receive an honour intended for the whole Medical Profession; and perhaps that honour ought to be regarded by him as all the greater, seeing that it was the first time a baronetcy had ever been given to a Scotch Professor or a practiser of the healing art in Scotland. As it had been given, among other things, for the advancement of Surgery, he would now proceed at once to the Surgical subject which was to form the topic of to-day. Sir James then proceeded with his prelection."

PRESENTATION TO DR. EDMUNDS.—On New Year's Day the Committee of the Victoria Benefit, Sick, and Provident Assurance Society presented Dr. Edmunds with a very handsome silver salver, accompanied by a tea and coffee set, and other articles of silver plate. The salver bore the following inscription:—"This salver, and other articles of silver plate, amounting in value to 100 guineas, was presented by the Victoria Benefit Society to James Edmunds, Esq., M.D., in recognition of his distinguished services and Professional skill as Physician to the Society.—London, Jan. 1, 1866."

MEDICAL CHARITIES.—The friends of the following institutions will be glad to learn that the late Captain John Sykes, of the Royal Navy, formerly of Bolsover-street, Portland-place, has bequeathed £100, free of legacy duty, to each of the following institutions, viz.:—The *Dreadnought* Hospital Ship, London University Hospital, the Royal Free Hospital, Gray's-inn-road; St. Mary's, Paddington; the Brompton Consumption Hospital, and £50, also free of legacy duty, to the Convalescent Hospital, Walton-on-Thames. The deceased also made liberal bequests to other institutions not strictly Medical.

LIBERAL BEQUESTS.—It always affords us great pleasure to chronicle the acts of charity conferred on our numerous Medical charities by benevolent individuals, one of whom, the late William Borradaile, Esq., of Worthing, has made the seasonable bequest of £2400 to the following provincial Hospitals, exclusive of large sums to other institutions not strictly Medical,—viz., £500 to the Sussex County Hospital, Brighton, and £100 each to the Infirmary and Dispensary at Wells, Somerset, and the same amount to the Infirmary and Dispensary at Worthing. The same gentleman has left £500 to each of the following metropolitan Hospitals,—viz., the Charing-cross, the Brompton Consumption, and the Seamen's Hospital *Dreadnought*, off Deptford.

CONVEYANCE OF CATTLE PLAGUE BY THE WIND.—Mr. J. A. Clarke, writing to the *Times* on the spread of the cattle plague says,—"Though conveyance of the pest by dogs, by birds, and vermin, and by other subtle agencies might probably be checked, or seldom found to work mischief, there remains carriage of the virus by the wind, against which a thickly-settled country like this, having a farmstead at about every half mile, must be utterly helpless. It is a well-observed fact that in this neighbourhood the pestilence has travelled with the gale, a homestead, in several cases, having been smitten immediately upon a near and infected homestead becoming situated to windward, while (as in my own case) the closest neighbourhood has not brought the pest as long as the wind blows contrary. Field grazing in the summer will, of course, present every facility for disseminating the disease; brooks and ditches will form no sanitary barrier between healthy and infected animals; and every hedge, bush, and tree-trunk may retain a store of the poison past all power of applied disinfectants to remove."

EXTIRPATION OF THE SPLEEN.—M. Philipeaux, in the present paper, refers to a communication he had made to the Academy of Sciences in 1861, in which he stated that the spleens extirpated from three Albino rats were found, on examination being made seventeen months afterwards, to be reproduced, the structure of the new organ being quite normal. M. Peyrani, however, having repeated these experiments came to the opposite conclusion that the spleen, whether totally or in part extirpated, is never reproduced. This led to M. Philipeaux experimenting again on very young field mice and rabbits, and then to his surprise he found that when the spleen was totally extirpated no reproduction took place. When, however, a portion of the organ was left behind (three millimetres out of sixteen in the field mice, and five out of forty in the rabbits) reproduction to a greater or less extent was always found to take place. He therefore concludes that in his former series of experiments he must have inadvertently left a portion of the organ behind, and that the spleen once completely extirpated will not be reproduced, although, perhaps, in some instances a supernumerary spleen may undergo development. He is, however, still at issue with M. Peyrani, and believes this author to be in error when he declared that a partially removed spleen is not reproduced.—*Comptes Rendus*, December 11.

THE following are the last week's Cattle Plague Returns. By comparison with those of the previous week, it will be seen that there have been 9956 attacked, 6630 deaths, 794 slaughtered, and 1242 recoveries, since December 23:—

| Census Divisions. | 1. Attacked. | | | 2. Result of reported Cases from the Commencement of the disease. | | | | |
|---|---|---|---|---|---|---|---|---|
| | Week ending December 30. | Week ending December 23. | Week ending December 16. | Attacked. | Killed. | Died. | Recovered. | Remaining. |
| 1. Metropolitan Police District . . . | 31 | 86 | 48 | 7238 | 3103 | 3263 | 284 | 588 |
| 2. South Eastern Co. . | 64 | 91 | 70 | 4602 | 1460 | 2521 | 379 | 242 |
| 3. South Midland Co. . | 981 | 786 | 745 | 6720 | 1487 | 4926 | 367 | 840 |
| 4. Eastern Counties . | 196 | 243 | 390 | 6306 | 2365 | 3086 | 406 | 449 |
| 5. South Western Co. . | 85 | 70 | 101 | 714 | 178 | 376 | 59 | 101 |
| 6. West Midland Co. . | 143 | 127 | 143 | 1853 | 425 | 1018 | 154 | 256 |
| 7. North Midland Co. . | 530 | 387 | 318 | 2393 | 435 | 1442 | 136 | 380 |
| 8. North Western Co. . | 1823 | 1007 | 945 | 6669 | 440 | 4114 | 441 | 1674 |
| 9. Yorkshire . . . | 1446 | 1212 | 1202 | 10891 | 731 | 6612 | 1297 | 2251 |
| 10. Northern Counties . | 213 | 118 | 109 | 1578 | 518 | 719 | 132 | 209 |
| 11. Monmouthshire and Wales . . . | 206 | 405 | 287 | 2287 | 93 | 1565 | 218 | 411 |
| 12. Scotland . . . | 1975 | 1724 | 1701 | 22298 | 2696 | 12749 | 3172 | 3681 |
| | 7693 | 6256 | 6054 | 73549 | 13931 | 41491 | 7045 | 11082 |

ROYAL GEOGRAPHICAL SOCIETY.—M. Du Chaillu has returned to England, and made his appearance at the Royal Geographical Society on Monday last. He was exceedingly well received, and gave a very amusing account of his expedition. He stated that for the last two years he had no opportunity of speaking either English or French, and had, therefore, to claim the indulgence of the audience for any deficiency they might observe in his pronunciation, proceeded to read his papers. He left London on the 6th of August, 1863, and on the 9th of October in the same year he reached a point called Ferman Bay, on the African coast, immediately to the south of the Equator. He advanced eastwards to the Ashira country, where he had been on a former journey, and where he was well remembered and kindly received. He had many offers of marriage pressed upon him, but these he had respectfully declined. (A laugh.) In reading the works of Grant, Speke, and Burton he observed many words which were identical with and which closely resembled words used in the district he had traversed, and he had no doubt that the tribes of western and eastern Africa had formed originally one common stock. He had seen during his travels numbers of gorillas, and he saw nothing after his renewed experience to retract in the account he had already given of those animals.

(Cheers.) After he and his party had been about three weeks in Ashira a visitation of smallpox ravaged the country. Misery and destruction were spread on every side, and he was himself reduced to a most dejected and prostrate condition. He could not procure sufficient nourishment, and he and his eleven companions had upon one occasion nothing to eat for four days but two monkeys, and very agreeable food they thought them. (A laugh.) He was ultimately enabled to continue his journey eastward, and in the course of those travels he met with a singularly diminutive race, their average height being only from 4ft. 4in. to 4ft. 5in. After he had advanced 200 miles further than any European had yet penetrated his undertaking was brought to an unexpected termination by an accident. He reached a village in which one of his men fired off a gun, and, contrary to his intention, two of the natives—a man and a woman—were thus unfortunately killed. The villagers became at once excited, and attacked himself and his party with their bows and arrows. He could not blame them for the suspicion and irritation under which they acted, and he, therefore, forbade his men to fire on them. He then ordered his followers to retire, which they did, at first in good order, while he himself remained in their rear, as he believed he was in a less degree than they an object of resentment to the excited natives. A panic, however, soon seized his party; he found it impossible to check them; they threw away all the articles which they carried; he himself felt compelled to join them in their flight and to part with many of the most valuable things which he had in his possession. The result was that, although his men energetically rallied, he lost all his instruments as well as his ammunition, and all that could have enabled him to continue his journey with advantage. He at once, therefore, retraced his steps westwards, and immediately afterwards made his way back to England. M. Du Chaillu concluded his address by expressing his gratitude to Sir R. Murchison and to Professor Owen for the support he had received from them throughout his labours, and amid all the opposition with which he had to contend.

**The Weather and the Death Rate.**—The following is an extract of a letter on the weather of 1865, by Mr. Plant, of Birmingham:—" A prevalence of temperature under 40 degrees increases our average death-rate to a most serious extent. In the thirteen weeks ending April 1 cold weather alone increased our death rate 25 per cent. Immediately, however, the mean temperature recovered, then the mortality recovered its average. This is illustrated by the following table, and it also explains that the public health does not materially suffer by excess of heat:—

*Mortality in the Six Large Towns in England.—Rate of Deaths per Annum of every Thousand Persons Living:—*

| | Per Week per Thousand of Population. Highest. | Per Week per Thousand of Population. Lowest. |
|---|---|---|
| 13 weeks ending April 1.<br>Mean temperature 36°. | 40·9<br>Liverpool & Manchester | 25·5<br>Salford, Birmingham, Bristol, and London. |
| 6 weeks ending May 27.<br>Mean temperature 55½°. | 30·7<br>Liverpool. | 19·2<br>Birmingham & Bristol. |
| 13 weeks ending July 1.<br>Mean temperature 55½°. | 33·2<br>Liverpool. | 18·4<br>Birmingham & Bristol. |
| 2 weeks ending Sept. 16.<br>Mean temperature 66½°. | 33·5<br>Liverpool and Salford. | 19·7<br>Bristol. |
| 6 weeks ending Oct. 7.<br>Mean temperature 60°. | 33·9<br>Liverpool, Manchester, and Salford. | 19·3<br>London and Bristol. |

" Leeds was not found in either the highest or lowest mortality. The difference of mortality between the three months ending April 1 and the quarter terminating July 1, is represented by the returns from Liverpool and Manchester, 40·9 and 33·2; and the other town named 25·5 and 18·4; the mean temperature for the respective quarters being 36 deg. and 55½ deg. The hottest period in the last six years was the fortnight ending September 16—mean, 66½ degrees; but it made no important change in the public health; indeed, the range in the healthiest towns for the six months, from April to October, was altogether immaterial. On the average (per annum), in every thousand persons living, twelve to fifteen more persons die every week in Liverpool than in Birmingham or Bristol. There is an average weekly rate of mortality in Liverpool of thirty to thirty-five per cent. beyond Bristol. Unless the high rate of mortality in Liverpool is from overcrowding, I am at a loss to divine the cause. In the six weeks ending July 1, for every eighteen persons who died in each week in every thousand of the living population (per annum) in Birmingham, there died thirty-two persons, on the average, in Liverpool, and the like number in Manchester. In the four weeks ending May 6, for every twenty-one persons who died in each week in Bristol, in each thousand of persons living, (per annum), thirty-two died in Liverpool; and in the six weeks ending November 18, the disproportion was represented by twenty and thirty-nine. It matters not what is the relative disproportion of population; the rate, of course, is all that is required. Bristol stands at present the healthiest of the six large towns. Birmingham is the next, and London ranks the third in pre-eminence. Satisfactory as the public health of Birmingham is, if the municipal authorities would arm their Medical officer, Dr. Hill, with power to receive each week the death returns of the borough in detail, so that he might at once carry into effect every sanitary improvement which such important information would present to him—if he were thus provided, like Dr. Letheby, the Medical officer for the city of London, where the most dense population in the world is still a healthy community under his sanitary supervision, there is no reason whatever why Birmingham, situated so favourably on an elevated sand bed, and the borough standing on more ground than Manchester, which has a population one-third larger, should not be the healthiest of all our large towns. The mortality of Manchester is very great, and I understand there is no special Medical officer for that city. I am, Sir, your obedient servant, Thomas L. Plant, M.B.M.S. Birmingham, December 31, 1865."

**The Murderer Robinson.** — Charles Christopher Robinson was executed on Tuesday, at Stafford. There was far more evidence of his insanity adduced at his trial than has been brought forward in the cases of many who have been respited. The convict, however, is said to have admitted the justice of his sentence before his execution.

**The Fifeshire Caves.**—At the meeting of the Royal Society of Edinburgh on Tuesday evening, Lord Neaves presiding, Professor Simpson gave an account of the visits paid by him last summer, along with other eminent Scottish antiquaries, to the caves on the coast of Fifeshire, at East Wemyss. There were, he said, eight or nine of these caves, and on the walls of most of them they had found sculptured symbols almost identical with those found upon the sculptured stones of Scotland. These sculptured stones were found along the east coast, running northwards from Fife, only two having been discovered south of the Forth. They were for the most part monoliths, and the symbols had hitherto been supposed to possess a sepulchral character, an idea which was not, he thought, consistent with the circumstances that the very same emblems were now found inside these caves, which were the abode of man in his archaic condition. In these caves they found representations of the elephant, the horse, the dog, with collar round his neck, exactly like those found in the sculptured stones. They had also the bear, the deer, the swan, the peacock, the fish, the serpent; also the comb and mirror, the spectacle ornament, the horseshoe, etc. Mr. Stewart discovered something like a human figure in one of the caves, provided, as Lord Monboddo would have our ancestors, with tails, and perhaps constituting the missing link for which the Darwinians were searching. They had in some cases the symbols of Christianity. As to the age of these stones, he believed Mr. Stuart would throw great light on that point in his forthcoming volume; but it was a remarkable circumstance that these symbols, first found on the sculptured stones, and now on these caves, had not hitherto been discovered in the sculptured stones of any other country, so far as they had learnt. Some of them were evidently pre-Roman, while the series continued down to the time of Christianity. The cave sculptures, he had no doubt, were coeval with the monoliths. They found crosses on them in considerable numbers, sometimes the cross standing on a tripod, and in one case they had the cross and tripod inverted. For himself, he had come to no conclusion as to what was the purpose of these carvings, for he thought their supposed sepulchral character was taken away by the position in which they were found. As Dr. Mitchell had found, there were even yet families in Scotland who lived in caves, on the Galloway coast, and they had recently had the description of the district of Charteris, in France, where about 150,000 people still lived in caves. No doubt caves formed a very good shelter for man in his rude state—much better, perhaps, than anything he could construct for himself. In some of these caves had been found the stone weapons in use before man had metallic tools to work with, and at the time when animals which now had no existence were walking over France and England in great abundance. It was a curious circumstance that in Gray's-inn-fields, now the very centre of London, there had lately been discovered the skeleton of an elephant, and near it a flint hatchet of the same form that was found on the courses of the French rivers, the Sâone and Loire, showing that over the site on which London now stands the early Briton had hunted the elephant, and at a time when the British lion was a reality and not a myth. When they looked into this subject it seemed that they were only at the beginning of it. They must yet examine the whole surface of many caves in this and other countries to see if man had left any such traces as those they had discovered in the caves of Fifeshire. Lord Neaves expressed the thanks of the Society to Professor Simpson. He said he felt it of great importance that there should be accurate observation of the facts regarding these remarkable symbols, of which the secret yet remained to be discovered. How far any of the symbols they had met with were to be considered as Phœnician was a question of some difficulty. The Phœnicians had certainly visited the southern parts of England; but the subject was involved in great obscurity, and they ought gladly to receive all who contributed to the ascertained facts. In the present instance they felt under the greatest obligations to Professor Simpson and the ardent antiquaries with whom he had been associated in his inquiries.

THE LATE MR. ANDERSON, OF THE ROYAL INSTITUTION.—Visitors to the lecture theatre of the Royal Institution will miss one familiar face this season—Charles Anderson. Mr. Anderson, who always stood behind Faraday, and handed him the various apparatus, and assisted in the experiments with such precision and coolness, is now numbered with the departed. The deceased was a good instance of a steady course of sobriety, punctuality, and attention to duty. He was born in Edinburgh in 1790, was very early left an orphan, and enlisted in the Royal Artillery, in which he gradually rose to the rank of Sergeant, and retired in 1827 with the best testimonials, after twenty-two years' service at Gibraltar and other parts of the world. He then became Chemical Assistant at the Royal Institution. How greatly his services were appreciated may appear from the following extracts, which the old man caused to be printed for circulation amongst his friends:—

"Royal Institution, 21, Albemarle-street, 1828.

"*First Report* of a sub-Committee, consisting of Messrs. Dolland, Faraday, and Herschall, appointed to conduct the experiments on glass for optical uses at the Royal Institution.—To the General Committee of the Royal Society and Board of Longitude.

"For the maintenance and superintendence of the fire, and for the execution of other manual operations, your sub-Committee has engaged Charles Anderson, formerly Sergeant in the Royal Regiment of Artillery, at the moderate pay of one guinea per week, and find in him in all respects what they could desire, and likely to prove useful, not merely as a labourer, but for a variety of purposes of a higher class—an expense which they doubt not will meet the sanction of the Committee.

"*Second Report.*

"The assistant, Sergeant Anderson, engaged by the sub-Committee, has fully justified their choice, and has proved a useful and valuable servant, not only in mere mechanical processes, but in taking specific gravities, keeping notes of the processes which pass under his immediate inspection, in addition to those made by Mr. Faraday as journalist of the sub-Committee—writing up entries in the minute-book, and, in fact, performing the duties of a clerk.

"1830. Philosophical *Transactions*, page 3, Mr. Faraday says, in his paper on Optical Glass:—

"'A room and furnaces were built at the Royal Institution in September, 1827, and an assistant was engaged (Serjeant Anderson, of the Royal Artillery), whose steady and intelligent care has been of the greatest service to me in the experiments that have been proceeding constantly from that time to the present.'

"1846. Philosophical *Transactions*, in a Note, page 3, Mr. Faraday says:—

"'I cannot resist the occasion which is thus offered to me of mentioning the name of Mr. Anderson, who came to me as an assistant in the glass experiments, and has remained ever since in the laboratory of the Royal Institution. He has assisted me in all the researches into which I have entered since that time, and to his care, steadiness, exactitude, and faithfulness in the performance of all that has been committed to his charge, I am much indebted.'—M. F."

These were followed by numerous testimonials "In recognition of the integrity, zeal, punctuality, diligence, and devotedness to the service of the Institution uniformly manifested by Mr. Anderson during a period of twenty-one years." Like many other active men, Anderson died in harness. He attended Professor Tyndall's first juvenile lecture in the week after Christmas, but that was his last appearance. The history of Mr. Anderson, who rose from a humble position to one of great trust and importance and responsibility, and fulfilled its duties so as to gain the respect of the most scientific men of the day, may be an encouragement to many an industrious young man.

ACTION OF ABSINTHE ON THE ECONOMY.—A discussion on the innocence or danger of absinthe *per se* having taken place between MM. Deschamps and Decaisne at the Académie des Sciences, M. Pécholier communicates the result of the investigations which he has been carrying on for the last two years at some of the absinthe manufactories. These have convinced him that the absinthe contains no hurtful substance whatever beyond the alcohol which is its vehicle. The various juices and essences are added by the manufacturers in such proportions only as to be completely inoffensive in the results they produce; and yet absinthe drinkers seem to be justified in the assertion that, taken in the same quantity and in the same degree of alcoholic concentration as brandy, it exerts much more marked and rapid effects on the economy. This is explained by M. Pécholier by the fact that absinthe is generally taken fasting, when the stomach is empty, and consequently it undergoes much more rapid absorption. Of course, a quantity of alcohol which passes rapidly and almost all at once into the circulation produces much more effect than the same amount which is so gradually absorbed that a portion has become already destroyed and eliminated. The intoxication produced by absinthe takes place very rapidly, and ceases as promptly if additional quantities are not taken. The conclusion of the author is, then, that the more energetic effects of absinthe as compared with alcohol are not due to its composition, but to its mode of consumption.—*Journal de Pharmacie*, November.

PRISON DIETARIES.—The following extract from the "Report of the Directors of Convict Prisons for the Year 1864" (p. 11) must be very gratifying to those who have been in any way instrumental in bringing about so considerable a reform:—"The actual saving during the year in the estimated expenditure for rations for the convicts was £22,581 13s. 6d., the reduction of the dietary having taken place in July. There has been a saving on the estimates for the present year as compared with last year of £25,834 on the item of victualling convicts." This saving, it should be observed, is effected on the dietaries of about 7000 convicts. The authorities of the county and borough gaols, by adopting the new dietaries, which are understood to have been very successful wherever they have been introduced, might add to this sum of £25,000, saved in the convict service, a still larger aggregate sum for the whole of England and Wales. If the new dietaries were in use throughout England and Wales, a saving of not less than from £65,000 to £75,000 a-year might be effected in the food of all classes of prisoners. Taken at the very moderate estimated saving of £50,000 a-year, the old dietaries, which have been in force nearly a quarter of a century, must have cost the nation upwards of a million of money. The printed reports from one of our county gaols bear testimony to the perfect success of the new dietaries. They effect a considerable saving, they keep the prisoners in good health, and they are so unpopular with these folk that they declare their intention of not troubling the authorities of said prison any more. We commend these facts to the serious attention of the visiting justices of all our county and borough gaols.

## NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

*J. W., M.D.*—The subject of Professor Hancock's lectures will, we are told, be advertised in this journal next week; it is stated they will be on the Anatomy and Surgery of the Foot, but Professor Huxley will commence the Course of College Lectures.

Dr. Handfield Jones's concluding lecture on "Nervous Diseases" shall appear next week.

Dr. E. Watson's letter has been received, and shall appear shortly.

*Aliquis.*—Dr. Jeffery Marston, Royal Artillery, Portsmouth.

*A Constant Reader.*—Medical Register Office, 32, Soho-square, London.

*J. H. G.*—Messrs. Lawrence and Cæsar Hawkins are the Serjeant-Surgeons to the Queen.

*P.*—A committee of inquiry *must* be appointed on the Hong-kong affair. It will then be seen whether the Doctors were to blame.

The *Rowing Almanack* for 1866 is a most useful compendium of information on aquatic subjects, but we are sorry to see it disfigured by an advertisement which smacks of the "Manly Vigour" school.

*M. H. and a Student.*—The list is published in another column. You can both enter on your Hospital studies at once, and thus save half a session, taking care to register in March next.

*Associate, King's College, Clapham-road.*—Make your applications to Mr. Francis Mason, F.R.C.S., of Conduit-street; he is the honorary secretary to the testimonial to Sir Wm. Fergusson.

*G. P. R., M.D., and W. D. S., M.D.*—The testimonial will be confined to the past and present pupils of the distinguished Surgeon. The first correspondent is answered above. The second can organise an independent testimonial.

*A Hospital Surgeon.*—It is a rare operation. Œsophagotomy has only been performed twice in this country; the first by the late Dr. Scott, of Southsea, and the second by Mr. Cock, of Guy's. A case is recorded in an early volume of the Memoirs de l'Academie Royale de Chirurgie de Paris.

*A Candidate.*—It is stated that great alterations are about to be made in the examination for the Fellowship of the College of Surgeons; not, it is hoped, by lowering the standard.

*Erratum.*—In Dr. Jencken's letter on Cattle Plague, page 28, line 29, *for* "wells," *read* "walls."

*Voting by Proxy.*—In continuation of the tables which have already appeared in the *Medical Times and Gazette* on the above subject, it is believed that the following analysis will add to the interest taken in the subject by a large number of the Fellows of the Royal College of Surgeons, and more especially by those members of the British Medical Association who discussed the subject at the last meeting of that institution. It appears that, at the thirty-third annual meeting of the Association, held in Leamington in August last, there were present 229 members, of which number 53 were Fellows of the College, viz., 13 by examination and 40 by election. Of the above number who attended the annual election of Fellows into the Council of the College of Surgeons on July 6 of the same year, the numbers of the examined and elected Fellows were nearly balanced, though still in favour of the former, viz., 7 by examination and 19 by election, making a total of 26. There are 2394 members of the British Medical Association, of which number 375 are Fellows of the College, viz., 95 by examination and 279 honorary and elective. Of the former who voted at the last July election, there were 58, of the latter 77. Consequently there were 241 who did not attend, viz., only 39 of those by examination, and as many as 202 of those by elections.

### Diphtheria.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Can any of your readers inform me the safest and best practice in diphtheria, which almost takes off every child it attacks in this country?

California. I am, &c. Inquirer.

### The Griffin Testimonial Fund.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The following subscription has been further received on behalf of the above fund:—Dr. Hutchinson, Bishop Auckland, 10s.; amount previously announced, £132 4s. 3d.; received at *Lancet* office, £9 9s.

I am, &c.

Robert Fowler, M.D., Treasurer and Hon. Sec.

145, Bishopsgate Without, January 10, 1866.

### Recurrent Swelling of the Tongue.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Allow me to ask your numerous and learned readers for some enlightenment in the following case:—A gentleman, 63 years old, a scholar, with sedentary habits, very moderate smoker, fond of snuffing, with rather atonic colon and rectum, but healthy stomach, found himself several times waked up from his sleep by a swelling of the tongue, which is so considerable that the mouth gets nearly filled by it, and articulation impossible. After a few hours the swelling is over, and only some redness remaining; no pain. I am, &c.

London, January 10, 1866. Inquirer.

### The Effects of Alcohol on the Blood and Tissues.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—May I ask you to be so kind as to allow me, through the medium of your columns, to inquire how Dr. H. Bence Jones arrives at the conclusion that the result of the introduction of alcohol into the blood is increased oxidation of the tissues of the body, and especially of the connective tissue of the liver and kidneys? Dr. Bence Jones says that, "weak or strong it combines with oxygen;" which there is no reason to doubt, since it is precisely what occurs in the combustion of alcohol in the presence of free oxygen, carbonic acid and water being the resulting products. It would therefore appear that the effect of this chemical process on the blood, and through the blood on the tissues and secretions, would be to deprive them of a portion of the oxygen which they would otherwise receive, but which is expended in oxidising the alcohol. If this be true, suboxidation, not peroxidation, of the tissues would be the result; and the conditions which Dr. Jones ascribes to increased oxidation—namely, "increased circulation, increased secretion, and increased effusion of lymph"—must be accounted for by some other cause than that assigned to them in Dr. Jones's lecture. Altered nutrition would, doubtless, be produced, and would probably be sufficient to induce all the other morbid changes which occur.

The importance of attaining an accurate knowledge of the causes which localise diseases, which experience proves to be so frequently produced by a substance so widely employed as alcohol, is, I trust, sufficient apology for my trespassing on your valuable space. I am, &c.

London, January 10, 1866. Physiologist.

### The Treatment of Constipation.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The report of "Three Cases of Constipation" in your last number, induces me to send you the particulars of one resembling them in its obstinacy, though in many points different, and relieved by other means. The patient was a very spare woman, aged 55 years, with a complexion remarkably sallow, though her health was usually good. She reminded me, however, that I attended her three years and a half before for inflammation of the bowels. Whilst gathering peas in the field, on July 15, 1864, she was seized with severe pain in the lower part of abdomen and back; afterwards vomiting occurred at intervals; but the following day it became incessant. The bowels acted. The message coming in the night, and her home being three miles away, I prescribed for the vomiting alone, that being the symptom most dwelt upon by her husband. On the 17th—the day following—I found but little pain in the body, and no pyrexia. The vomiting, however, was constant, and the matter ejected bilious. There was no hernia. I gave her an emetic and calomel with opium, one dose.

On the 18th, the unrelieved vomiting had caused some prostration; bowels not opened.

20th.—Vomiting constant and stercoraceous; hiccough persistent; a little tenderness on pressure exists in left lumbar region near its inner margin; the bowels roll incessantly, causing a griping pain; the whole abdomen is tympanitic except in left iliac region, in which part is decided dulness, and a lump as large as one's fist. I could trace no history of organic mischief, and learnt that the bowels were generally healthy in their action.

To-day the symptoms of exhaustion were pressing, the pulse being thready and weak. Brandy was given, and a grain of opium every four hours. I exposed the body to cool air, and sprinkled upon it cold water, without benefit. About noon she had an enema of castor oil and turpentine, and after a time, one of soap and water; but no stool followed.

21st.—Vomiting less stercoraceous. The enema has brought away much flatus. Continue the pills.

22nd.—No relief to bowels; the flatus still passes; the rolling distresses her much, but the other symptoms are less severe; the tendency to sink is decidedly less. Continue the pills.

23rd.—Stercoraceous vomit; flatus passes, but no fæces. Besides three or four warm water enemata, I ordered one containing half a drop of croton oil in mucilage; it was, however, useless.

24th.—Her state being the same, at 11 a.m. I passed an O'Beirne's tube into sigmoid flexure of colon, and threw up the same dose of croton oil. As the enema was slow to return, I advised the tube to be kept in the bowel twelve hours.

At 4 p.m. some fæces came away, and still more did so after soap and water had been injected. A fair motion, though not a copious one, was thus secured. All her symptoms quickly left her, and on the following day, I found the lump wanting, and the whole abdomen free from tympanitic sound.

On the 26th, the bowels acted freely, after which time she slowly recovered strength. I would, moreover, take this opportunity of mentioning the good result afforded by the internal use of tannic acid in a case of hæmoptysis from cancer of the lungs. All other styptics had failed; but gallic acid and tannin in equal parts (gr. ijss.) every hour, gave speedy relief; and the raspberry sputum, which under the microscope showed more cancer cells than blood globules, has for the past fortnight ceased.

I am, &c.,

Collingham, Newark, Dec. 30. E. G. Wake, M.D.

### Promotion by Selection.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Whether the Medical Department of the Army is to form a general staff or not, promotion through all its grades should be strictly regulated by seniority, as in Artillery and Engineers. Whatever may be Sir James Gibson's opinion now, a reference to the Blue Book will show that his evidence before the former Commission was to this effect, and on that occasion he gave expression to the general desire and feeling of the department.

In order to qualify a Director-General to promote by selection, he ought to be intimately acquainted with the relative merits and endowments of six hundred Surgeons scattered over the world, many of whom he has never seen. How would Artillery and Engineers relish the practice of pitchforking a junior second Captain into the rank of Lieutenant-Colonel, for some alleged superiority or accidental distinction? Yet promotion to the grade of Deputy Inspector-General is made from the entire number of Surgeons and Surgeons-Major by selection for so-called merit and ability. That is, a Surgeon happens to be at a station where there is a negro rebellion, a rising of the aborigines, or a visitation of yellow fever. He writes a long report, gets recommended by the General commanding, and attains administrative rank and position *per saltum*. Now if this system of promotion for merit has worked beneficially for the public and the department, its blessings ought to be extended to the scientific corps of Artillery and Engineers. Even with the best intentions, an able and upright Director-General cannot do otherwise than inflict great injustice on individual officers, and confer a very questionable benefit on the State, by exercising this practically irresponsible power of selection, and if he is pliant and compressible, a wide aperture is afforded for the agency of influence and solicitation. Shut this door, and one main cause of wide-spread discontent among Surgeons will be extinguished, viz., the uncertainty of promotion. Senior Surgeons who have served long and faithfully in every climate look for promotion in their turn to the rank of Deputy-Inspector as their just and natural right—and bitter is the feeling of dissatisfaction when that for which they have long looked and laboured is conferred on a lucky junior who owes his premature advancement to accident or influence, rather than merit or ability. Medical officers would acquiesce in selection, if thereby the worthiest were promoted; but as this has not been the case, and cannot possibly be—owing to the inherent difficulties attending the appreciation of relative merit in a body of officers so numerous and widely scattered—the operation of selection must necessarily be as injurious to the public as detrimental and disheartening to the department. Surgeons will, as heretofore, take the earliest opportunity of retiring from a service where promotion is a lottery, and where the long and faithful performance of duty does not with certainty lead to promotion. Every man ought, *quamdiu se bene gesserit*, to attain promotion in his turn, as in Artillery and Engineers, and the advantages to the public service and to the department attending promotion by seniority far outweigh the specious and imaginary benefits ascribed to selection for so-called merit and ability, which is a sham and a delusion. But, it may be asked, is merit not to be encouraged? Are Medical officers who have distinguished themselves not to be rewarded? By all means. If an Assistant-Surgeon or Surgeon, has deserved well of his country, let him not be pitchforked over the heads of his seniors, and thus rewarded at their expense. If he has signally served the State, let him be rewarded by the State, which can readily be done without injustice to others, by conferring brevet rank; the pay and privileges of the superior grade with honorary distinction or decoration. The Director-General can also appoint a meritorious officer to staff or regiment, to Artillery or Engineers, and possibly to this or that station at home or abroad, and thus in various ways advance the views and interests of the deserving, without promoting them over an indefinite number of seniors, a proceeding which never fails to arouse deep and wide-spread discontent. I am, &c.,

A REGIMENTAL SURGEON.

COMMUNICATIONS have been received from—

DR. ROBERT FOWLER; DR. J. MACKIE; MR. F. D. PEARCE; INQUIRER; MR. W. SMITH; DR. MACPHERSON; DR. E. WATSON; DR. J. C. GOODING; DR. TILBURY FOX; MR. JAMES BRUCE; DR. JOHN BROWN; DR. J. NORTHCOTE VINEN; A CONSTANT READER; DR. D. MACLOUGHLIN; PHYSIOLOGIST; MEDICAL SOCIETY OF LONDON; DR. W. CAMPS; SIGMA; DR. THOROWGOOD; A CONSTANT SUBSCRIBER; MR. ALBERT KISCH; HARVEIAN SOCIETY; AN OLD SUBSCRIBER; APOTHECARIES' SOCIETY; PATHOLOGICAL SOCIETY; DR. T. L. PLANT; MR. W. GALLOWAY; ROYAL INSTITUTION; DR. E. DIVERS; MR. CAMPBELL DE MORGAN; MR. JONATHAN HUTCHINSON; DR. HUGHLINGS JACKSON; DR. J. B. FAIRMANN; MR. E. BELLAMY.

## VITAL STATISTICS OF LONDON.

*Week ending Saturday, January* 6, 1866.

### BIRTHS.

Births of Boys, 1127; Girls, 1125; Total, 2252.
Average of 10 corresponding weeks, 1856-65, 1895·7.

### DEATHS.

| | Males. | Females. | Total. |
|---|---|---|---|
| Deaths during the week .. .. .. | 752 | 768 | 1520 |
| Average of the ten years 1856-65 .. .. | 719·3 | 722·0 | 1441·3 |
| Average corrected to increased population.. | .. | .. | 1585 |
| Deaths of people above 90 .. .. .. | .. | .. | .. |

### DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

| | Population, 1861. | Small pox. | Measles. | Scarlatina. | Diphtheria. | Whooping-cough. | Typhus. | Diarrhœa. |
|---|---|---|---|---|---|---|---|---|
| West .. | 463,388 | .. | 16 | 4 | 1 | 6 | 6 | 2 |
| North .. | 618,210 | 6 | 13 | 10 | 7 | 7 | 20 | 2 |
| Central .. | 378,058 | 1 | 11 | 2 | .. | 5 | 20 | 1 |
| East .. | 571,158 | 3 | 4 | 8 | 2 | 11 | 16 | 3 |
| South .. | 773,175 | 5 | 5 | 10 | 2 | 28 | 22 | 2 |
| Total .. | 2,803,989 | 15 | 49 | 34 | 12 | 57 | 84 | 10 |

## COMPOSITION AND QUALITY OF THE METROPOLITAN WATERS IN DECEMBER, 1865.

The following are the Returns of the Metropolitan Association of Medical Officers of Health:—

| | Total Solid Matter per Imperial Gallon. | Loss by Ignition.(a) | Oxydisable Organic Matter.(b) | Hardness. | |
|---|---|---|---|---|---|
| | | | | Before Boiling. | After Boiling. |
| *Thames Water Companies.* | Grains. | Grains | Grains. | Degs. | Degs. |
| Grand Junction . . | 21·35 | 1·28 | 0·96 | 12·08 | 6·10 |
| West Middlesex . . | 21·14 | 1·02 | 0·69 | 13·00 | 4·99 |
| Southwark and Vauxhall. | 22·20 | 1·38 | 1·10 | 13·48 | 5·08 |
| Chelsea . . . . | 20·19 | 1·01 | 1·08 | 12·00 | 5·00 |
| Lambeth . . . . | 20·74 | 0·98 | 0·84 | 12·00 | 5·89 |
| *Other Companies.* | | | | | |
| Kent . . . . . | 26·21 | 0·48 | 0·19 | 18·90 | 6·81 |
| New River . . . | 20·60 | 0·51 | 0·48 | 15·00 | 5·00 |
| East London . . . | 24·21 | 0·92 | 0·86 | 15·94 | 5·86 |

(a) The loss by ignition represents a variety of volatile matters as well as organic matter, as ammoniacal salts, moisture, and the volatile constituents of nitrates and nitrites.

(b) The oxydisable organic matter is determined by a standard solution of permanganate of potash, the available oxygen of which is to the organic matter as 1 is to 8; and the results are controlled by the examination of the colour of the water when seen through a glass tube two feet in length and two inches in diameter.

## METEOROLOGY.

*From Observations at the Greenwich Observatory.*

| | |
|---|---|
| Mean height of barometer .. .. .. .. .. .. | 29·685 in. |
| Mean temperature .. .. .. .. .. .. .. | 43·2 |
| Highest point of thermometer .. .. .. .. .. | 51·8 |
| Lowest point of thermometer .. .. .. .. .. | 32·2 |
| Mean dew-point temperature .. .. .. .. .. | 38·7 |
| General direction of wind .. .. .. .. .. .. | S. W. |
| Whole amount of rain in the week .. .. .. .. | 0·52 in. |

## BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, January 6, 1866, in the following large Towns:—

| Boroughs, etc. | Estimated Population in middle of the Year 1866. | Persons to an Acre. (1866.) | Births Registered during the week ending Jan. 6. | Deaths. | | Temperature of Air (Fahr.) | | | Rain Fall. | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Corrected Average Weekly Number.* | Registered during the week ending Jan. 6. | Highest during the Week. | Lowest during the Week. | Weekly Mean of the Mean Daily Values. | In Inches. | In Tons per Acre. |
| London (Metropolis) | 3067536 | 39·3 | 2252 | 1400 | 1520 | 51·8 | 32·2 | 43·2 | 0·52 | 53 |
| Bristol (City) . . | 163680 | 34·9 | 134 | 73 | ‡99 | 53·4 | 30·4 | 43·2 | 1·47 | 148 |
| Birmingham (Boro') | 335798 | 42·9 | 208 | 163 | 184 | 52·5 | 29·4 | 41·9 | 0·91 | 92 |
| Liverpool (Borough) | 484337 | 94·8 | 375 | 281 | 417 | 52·3 | 35·0 | 42·9 | 0·95 | 96 |
| Manchester (City) . | 358855 | 80·0 | 230 | 203 | ‡239 | 53·8 | 29·0 | 40·8 | 0·66 | 67 |
| Salford (Borough) . | 112904 | 21·8 | 75 | 57 | 78 | 53·4 | 27·0 | 41·2 | 0·69 | 79 |
| Sheffield (Borough) . | 218257 | 9·6 | 154 | 115 | 144 | 50·0 | 28·5 | 40·3 | 0·63 | 64 |
| Leeds (Borough) . | 228187 | 10·6 | 128 | 116 | 143 | 53·8 | 22·0 | 41·0 | 0·63 | 64 |
| Hull (Borough) . | 105233 | 29·5 | 80 | 49 | 60 | 48·0 | 27·0 | 38·6 | 0·47 | 47 |
| Nwcastl-on-Tyne, do. | 122277 | 22·9 | 91 | 65 | 84 | 50·0 | 32·0 | 40·7 | 0·16 | 16 |
| Edinburgh (City) . | 175128 | 39·6 | 106 | 84 | 85 | 52·0 | 32·0 | 39·7 | 1·40 | 141 |
| Glasgow (City) . | 432265 | 85·4 | 339 | 252 | 258 | 51·6 | 33·6 | 40·3 | 2·03 | 205 |
| Dublin (City and some suburbs) . | 318437 | 32·7 | 181 | †156 | 179 | 52·6 | 31·3 | 41·9 | 0·66 | 67 |
| Total of 13 large Towns . . . | 6122894 | 34·4 | 4353 | 3014 | 3490 | 53·8 | 22·0 | 41·2 | 0·86 | 87 |
| | (1863) | | | | Week ending Dec. 30. | Week ending Dec. | | | | |
| Vienna (City) . . | 560000 | .. | .. | .. | 347 | .. | .. | §<br>17·2 | .. | .. |

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·685. The barometrical reading increased from 29·31 in. on Wednesday to 29·95 in. on Saturday.

The general direction of the wind was south-west.

* The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.

† Registration did not commence in Ireland till January 1, 1864; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in that city were the same as the averages of the rates in the other towns.

‡ The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

§ The mean temperature at Greenwich during the same week was 41·2.

## APPOINTMENTS FOR THE WEEK.

### *January* 13. *Saturday* (*this day*).

*Operations* at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free Hospital, 1½ p.m.

### 15. *Monday*.

*Operations* at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.

MEDICAL SOCIETY OF LONDON, 8 p.m. Dr. Tilbury Fox, "On Leprosy, with Notes taken during recent Travel in the East."

### 16. *Tuesday*.

*Operations* at Guy's, 1 p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; St. Peter's Hospital for Stone, 3 p.m.

ANTHROPOLOGICAL SOCIETY OF LONDON, 8 p.m. Meeting.

PATHOLOGICAL SOCIETY, 8 p.m. Meeting.

### 17. *Wednesday*.

*Operations* at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.

### 18. *Thursday*.

*Operations* at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.

HARVEIAN SOCIETY OF LONDON, 8 p.m. Dr. Drysdale, "On the Medical Aspects of Prostitution."

### 19. *Friday*.

*Operations*, Westminster Ophthalmic, 1½ p.m.

ROYAL INSTITUTION, 8 p.m. Prof. Tyndall, "On Radiation and Absorption with Reference to the Colour of Bodies, and their State of Aggregation."

## ORIGINAL COMMUNICATIONS.

ON

# ENTOZOA (?) IN THE MUSCLES OF ANIMALS DESTROYED BY CATTLE PLAGUE.

By LIONEL S. BEALE.

FOR some time past I have been engaged in researches upon the bodies in question, and as public attention has been already called to the subject by Dr. Fenwick in a letter to the *Times* of January 3, 1866, and in a communication from one of your correspondents, I propose at once to describe briefly what I have observed. The results of my observations will be given in detail in my report to the Royal Commission, but it seems desirable that a few of the facts ascertained in connexion with this most interesting matter should at once be published.

The bodies in question are without doubt very definite, very common, and very easily detected. They are for the most part spindle-shaped bodies, each embedded in the sarcous tissue of an elementary fibre. I have also, but in a few instances only, seen these bodies lying free amongst the elementary muscular fibres. They have been found in considerable number in the muscles of every animal dead of cattle plague in which I have sought for them, with one exception,(a) and in all the different muscles examined from a single carcase. They are commonly met with in large numbers in the muscular fibres of the heart.

These bodies are exceedingly distinct; they vary much in size, but invariably exhibit the same general characters. There is little difficulty in finding them if only very small pieces of muscular tissue be subjected to examination; but being very transparent, they are easily hidden from view if surrounded by normal elementary muscular fibres, and thus they may escape detection. They vary in number, and I should think that in some cases I have seen them as numerous as one to, at the most, twenty muscular fibres (Fig. 2), while in others perhaps they may not be found in greater number than in the proportion of one to a hundred muscular fibres. The smallest are oval, but as they grow they become spindle-shaped, and usually one end is pointed, while the opposite extremity is more or less rounded (Figs. 2 and 3). In some there are slight projections from different parts of the surface, as if there were tendency to the formation of segments or lateral pores. But in the larger ones the outline appears perfectly uniform. In all there is a distinct investing membrane of a peculiar structure, varying in thickness in bodies of different sizes, the outer surface of which is in contact with the sarcous tissue, or with the sarcolemma, save in the few instances in which the bodies are free. Even when the peculiar bodies lie embedded in the sarcous tissue, being surrounded on all sides by a thin layer of it, the transverse markings of the contractile material are perfectly distinct (Fig. 3). The masses of germinal matter in the affected tissue are not larger than those of adjacent muscular fibres. There is no evidence of granular, fatty, amyloid, or other form of degeneration. And whatever these peculiar bodies may eventually be proved to be, it is certain that they grow within the contractile material, and by their growth excite no irritation. The muscular tissue in contact with

FIG. 1.

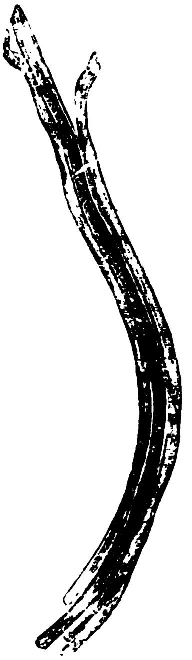
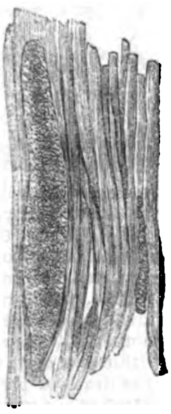


FIG. 2.



FIGS. 1 AND 2.—Entozoon-like bodies of different sizes; elementary muscular fibres magnified with a low power (25 diameters). The longest is $\frac{1}{10}$th, the next $\frac{1}{18}$th, and the smallest about $\frac{1}{5}$th of an inch in length.

FIG. 3.

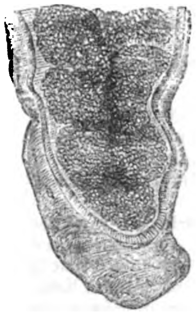


FIG. 3.—Rounded extremity of one of the entozoon-like bodies, showing how it is surrounded with the sarcous tissue of the muscle. Magnified 215 diameters.

FIG. 4.

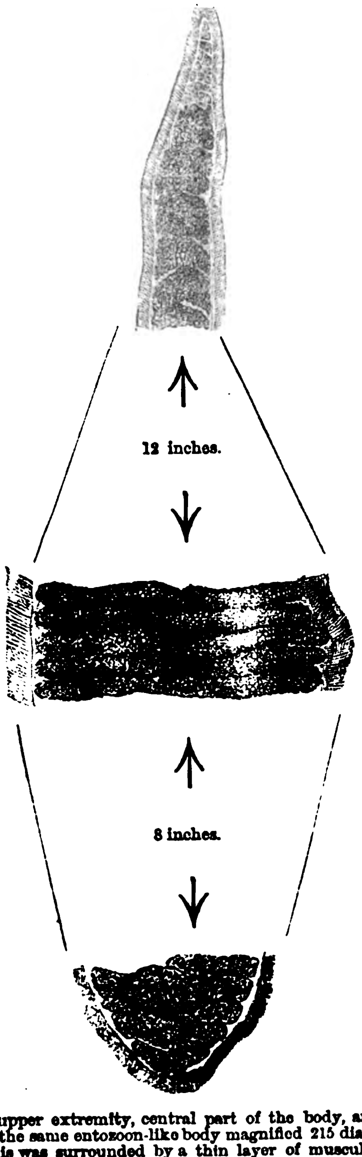


FIG. 4.—The upper extremity, central part of the body, and the lowest portion, of the same entozoon-like body magnified 215 diameters. The whole of this was surrounded by a thin layer of muscular tissue and sarcolemma. The division of the mass into small collections of granules like segmentation was very distinct.

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(a) The exception was an undoubted case of cattle plague, the post-mortem examination of which was witnessed by Prof. Browne, of the Veterinary Department of the Privy Council.

them seems, as it were, slowly to make way for their increased growth, without the occurrence of inflammation or any other morbid change.

A notion of the general form, size, and appearance of the worm-like body when examined under a quarter of an inch object-glass, magnifying 215 diameters, may be formed by reference to Fig. 4.

*Structure of the Investing Membrane.*—Not the least interesting point in connection with these curious bodies is the investing membrane, and it is very desirable to draw the attention of Helminthologists to its anatomical characters (Fig. 4).

The tissue is very transparent, and varies in thickness in different parts. It appears to exhibit delicate transverse markings, but upon careful examination it is found that these are caused by the linear arrangement of minute hair-like fibres. These processes of the investing membrane were described by Mr. Rainey in his paper in the *Phil. Trans.* for 1857.(b) He says they increase in size and distinctness as the animal grows larger.—"They have not the sharp and well-defined outline of true cilia, nor are they pointed like setæ, or curled like cirri." In a specimen in my possession, however, the bodies in question seem to be pointed, and the whole appearance under a power of 1000 diameters is such as would result if the investment consisted of very delicate transparent conical hairs, terminating outwards in pointed processes. In other instances the extremities appear blunt and a little rounded (Fig. 5). When pressed firmly, fluid seems to be forced into the processes, and they exhibit the remarkable appearance delineated in Fig. 6. After lying in water for some time, the projecting filaments exhibited the usual characters of cilia, and would no doubt be termed *cilia* by any anatomist. These hair-like processes appear to be connected with one another when the specimen is perfectly fresh, and in young specimens there is no indication of such a structure. It would seem that they are developed as the body grows, and although formed together in a mass, readily become separated so as to give rise to the structure described. The structure of this membrane is so beautiful and delicate that it might be employed as a test object for estimating the defining power of object-glasses.

FIG. 5.

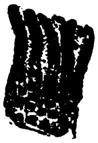

FIG. 5.—Cilia-like bodies covering the whole surface of the external investment or envelope. Magnified 1000 diameters.

The peculiar structure of the external investment, covering, or sheath, will be understood by reference to Figs. 4, 5, and 6, and I shall not here enter into a more minute description of it. I regard it as a peculiar formation, and feel quite certain that the appearances do not result from any modification occurring in the layer of sarcous matter, which was immediately in contact with the body under consideration during its increase in size.

*Of the Contents of the Entozoon-like Body.*—The contents of these spindle-shaped bags, cysts, or investments, without doubt, form the most important part of the mass, and are well worthy of the most attentive consideration. When examined by a low power, the matter occupying the cavity appears granular, and there are distinct indications of the mass being sub-divided into smaller portions, the divisions being most distinct transversely. I do not think these are distinct septa, but the appearance is such as would result if each of a number of masses of germinal matter in the interior of a cavity, with extensible walls, were to divide and sub-divide into numerous masses, which were capable of growth and multiplication. The appearance is given in Fig. 4. The entire contents of every one of these bodies I have seen exhibit the same characters. There is no indication of alimentary canal, ovary, or any secreting gland or other *organ.* It is, therefore, only necessary to call attention to the small individual particles of an aggregation of which each of the peculiar bodies in question entirely and invariably consists.

These bodies are for the most part of an oval form or spindle-shaped. When perfectly mature the body is curved, one extremity being rounded, while the other is almost sharp as represented in Fig. 6. They are flattened, and apparently consist of a transparent material, which exhibits here and there spots differing in refraction from the rest of the mass. These are irregularly disseminated through the mass, and give to it a granular appearance when it is examined by low powers, but under the influence of high magnifying powers the appearance is such as to render it doubtful if, at least in all cases, there are actual granules distinct from the general mass. The body is rendered more transparent and the granules more distinct by liquor potassæ.

FIG. 6.

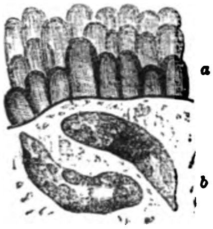

FIG. 6.—*a.* Portion of membrane with hair-like processes distended with fluid and subjebted to strong pressure.
*b.* Two of the small bodies in their fully developed form from the interior of a very long, worm-like cyst. They all exhibited the characters of the two represented. Magnified by the $\frac{1}{25}$th = 1800 diameters.

The bodies approximate to one another very closely in dimensions, but it is difficult to find two of *precisely* the same figure; and it seems to me most probable that they change in form when they escape into the surrounding fluid by the rupture of the sac. In their general appearance, these bodies so closely resemble the nuclei of tissues, that under low powers one might be easily mistaken for the other. But upon careful examination by the highest powers ($\frac{1}{25}$ and $\frac{1}{50}$), it will be found that the outline is sharper, that the general mass is more uniform, while the alterations in form are greater than are observed in muscle-nuclei. Moreover, these bodies are often seen in such great number (fifty or a hundred or more being in the field at one time) that they cannot be mistaken for nuclei. They are also smaller than the nuclei of muscle, and very much smaller than the greatly enlarged muscular nuclei seen in the muscles of animals destroyed by cattle plague.

Upon the whole, it seems to me almost certain that, at least up to a certain period of its existence, each of these little bodies is capable of giving rise to others like itself, by division and sub-division, and these to more in the same way. To what extent this process is capable of being carried, I can form no idea. The spindle-shaped elongated cysts, in which these particles grow and multiply, sometimes reach a very great length. In a specimen of muscle sent to me by Dr. Eade, of Norwich, I found two as much as the *quarter of an inch in length*, and one is so narrow that the muscular fibre in which it lies still exhibits its normal diameter. Although I have never seen a distinct pore or aperture in any part of the cysts, it seems not improbable that an orifice might be formed at one or other extremity, or at a point of the body where the external wall is thinner than in other parts. In this way, the escape of these bodies from their parent cyst, a few at a time, would be effected, while the process of multiplication, still going on within, would not be interfered with. But whether the individual masses are able to migrate from one part of the body to another, or, after having been produced in enormous number within the cyst, they are destined to remain dormant until, by the death of the animal, opportunity for a far more distant migration is provided, or whether, as is, perhaps, upon the whole, least probable, from the collection already described, a true entozoon is evolved, must be determined by future research.

FIG. 7.

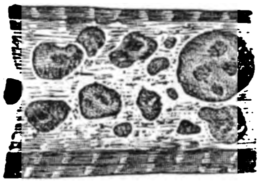

FIG. 7.—Tubular space in the central part of an elementary muscular fibre, extending from one extremity of a very young entozoon-like body. Showing minute masses of germinal matter, probably an early stage of development of the bodies found within the envelope of a fully developed organism. Magnified by the $\frac{1}{50}$th = 2800 diameters.

*Tenacity of Life.*—The little bodies in question are very tenacious of life, and they are not permeated by the carmine fluid till long after every mass of germinal matter (nucleus) of the muscles, vessels, and nerves, have been deeply coloured,—a fact which shows that at any rate these bodies are quite distinct from the muscle-nuclei, and have not descended from them. After remaining for many hours in the carmine fluid they take the colour like every other kind of living matter, and several specimens exhibited one spot darker than other parts.

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(b) "On the Structure and Development of the Cysticercus Cellulosæ, as found in the Muscles of the Pig."—*Phil. Trans.*, Vol. 147.

I have tried some experiments with the hope of causing these bodies to multiply, but my attempts have hitherto failed. In water the bodies may remain for several days without undergoing much change.

*Conclusion of Previous Observers.*—Professor Siebold states that these peculiar bodies were discovered by Miescher in the muscles of a mouse in 1843. Hessling(c) found them in the muscular fibres of the heart of the sheep and ox. They have been also found in the deer. By Siebold and Bischoff they have been seen in the muscles of the mouse and rat. The latter observer found them in all the muscles of a rat in 1845. In 1855, Rainey(d) found and figured similar bodies in the muscles of a pig, and inferred that they represented the early period of development of the "*cysticercus cellulosæ*" of that animal; but later writers, and especially Leuckart and Cobbold, do not consider the evidence upon which this inference rests at all conclusive.

The form of the body, the peculiar structure of the external investing membrane, would incline one to regard the bodies as some species of entozoon in an imperfect stage of development, and from the character of the contents I doubt if any zoologist would consider them allied to the gregarinida or psorospermiæ. There is, I think, no doubt that these bodies are of an animal nature. There is no character that renders it at all probable that they belong to the vegetable kingdom. I am not aware of any gregariniform body exhibiting either the form, very considerable size, peculiar contents, or general characters of the bodies in question, although some species do attain considerable dimensions.(e)

The nature of these very peculiar and striking bodies has not yet been made out, and, although it is possible that they may have nothing whatever to do with the cattle plague, the constancy of their occurrence in very large number in the muscles of animals that have died of this disease is remarkable. Moreover, as there can be no doubt that bodies capable of rapid multiplication, far less than those forming the contents of the spindle-shaped cysts would be competent to give rise to all the symptoms observed in cattle plague, if they passed into the vascular system, it seems of the utmost importance that the natural history of these bodies should be traced out.

## CONCLUSIONS.

The facts concerning these entozoa (?) may be summed up as follows:—

1. That in almost all, if not in all, animals dying of cattle plague, entozoa or entozoon-like bodies exist in considerable number in the voluntary muscles of the system and in the heart.

2. These or closely allied species have been known for more than twenty years, but their nature has not yet been determined. They have been found in the ox, sheep, deer, pig, rat, mouse, and perhaps other animals.

3. They are occasionally found, but in very small numbers, in animals apparently in perfect health when killed.

4. In the muscles of a calf killed by cattle plague, under *six months* of age, these bodies were found in immense numbers.

5. They vary in length from less than the $\frac{1}{300}$th of an inch to at least a quarter of an inch in length. They are, for the most part, embedded in the contractile material of the elementary muscular fibre, but they are occasionally found free.

6. They are for the most part spindle-shaped, and the external investment or envelope exhibits a very delicate and peculiar structure, being completely covered with delicate hair-like processes.

7. The mass within appears granular to low powers, and exhibits a division into numerous segments, but it is found to consist entirely of minute bodies resembling one another, possessing very definite characters, less than the $\frac{1}{5000}$th of an inch in their longest diameter, and of peculiar form, being oval, flattened, the body slightly curved laterally, with one extremity blunt and the other almost pointed.

8. The entire mass increases in size as these small bodies increase in number, probably by division and subdivision, within the cyst.

I trust that my object in thus calling attention to these facts will not be misunderstood. It is almost impossible in recounting facts to avoid speculating a little upon their import, but I trust that I have avoided committing myself to any theory upon the nature of the cattle plague. No one feels more strongly than I do the importance of thoroughly investigating every fact that can be discovered in connexion with this terribly fatal malady. Does it not seem more likely that we might find out how to prevent the attack than that we should discover a remedy to cure the disease when established, and is it probable that we shall discover the means of preventing its occurrence until we have a thorough knowledge of its nature? While, therefore, it appears very desirable that the facts should be generally known, it would be premature to adopt any theory, and it is advisable that steady investigation should be prosecuted with as little theorising as possible.

Now, quite apart from the question of cattle plague, ought we not to have learned long before this the exact nature of these very definite bodies, so common in the muscles of many animals? Here is an entozoon-like body, inhabiting muscles, which appears to have been well-known for more than twenty years, and yet little seems yet to have been discovered concerning its natural history. Entozoa are not common in the voluntary muscles, and the number of species hitherto discovered is very small; while, on the other hand, are not the facts recently made out in connexion with certain muscle-inhabiting entozoa sufficiently significant to render it desirable that any others that may be discovered should be investigated carefully and immediately?

We cannot regard these things as unworthy of attention in face of the fact that, like trichinæ, they inhabit the striped muscles only, and, like them, are found in the muscles of animals of many different classes and orders, extending over a wide geographical area. Are the species of muscle-inhabiting entozoa, or entozooid bodies, so common and so numerous that we may look upon the presence of those in question as a matter of no importance, to be dismissed without further notice? while, on the other hand, are we so well acquainted with the natural history and migration of the now common, but terrible, trichina that we can afford to omit to study any fact which seems to offer even a very slight probability of leading to the discovery of more concerning it? There are surely few subjects in which minute, earnest, scientific research has yielded such important results as have been discovered in recent investigations upon entozoa. It has been shown clearly and unmistakably enough that the lives of many persons might have been saved, and the serious and dangerous illness of *hundreds entirely prevented*, if certain meat sold for food had been subjected to careful microscopical investigation by any intelligent observer. One minute's observation would have at once condemned every particle of the meat to the flames, and have prevented a most serious loss of life.

As regards the cattle plague, let it be borne in mind that living particles of extremely minute size are quite competent to give rise to all the symptoms observed. Such minute living particles might be germs of entozoa or some other form of germinal or living matter. It may be remarked that the intestinal derangement which is so remarkable in cattle plague is such as might be caused by the passage of minute germinal particles to or from the blood of the animal, and if such germs were obstructed in the capillaries, the circumscribed patches of vascular congestion which are invariably met with in the disease would be explained. On the other hand, it might be asked if there are any facts yet known in connexion with cattle plague and some other fatal diseases which resist all modes of treatment yet adopted, which render such a theory untenable?

It would, I think, be at least as easy in the present state of our knowledge to bring an array of facts and arguments in favour of the doctrine of cattle plague being due to entozoa, as it has been to adduce facts and arguments in favour of the small-pox doctrine, while although many facts may be urged against both views, I doubt if there are any yet known which render either of these, or the typhus, or typhoid, or scarlatina notions altogether inadmissible. Nor would it be difficult to propound new theories altogether; but as time wears on it seems to become more and more certain that no such short roads to knowledge will be hit upon even by the most sagacious, the most fortunate, or the most ingenious. Thorough, prolonged, and thoughtful scientific investigation seems now the only course open to us, and that ought to be prosecuted by many, and in earnest.

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(c) Siebold and Kölliker's *Zeitschrift*, Band v., p. 197.

(d) "On the Structure and Development of the Cysticercus Cellulosæ, as found in the Muscles of the Pig," by George Rainey, M.R.C.S., *Phil. Trans.*, vol. 147, p. 111, 1857.

(e) See "Notes on Gregarinida," by E. Ray-Lankester, *Quar. Jour. Mic. Science*, January, 1866, p. 23.

# CONDITIONS UNDER WHICH CHOLERA APPEARS IN ITS HOME.

By Dr. JOHN MACPHERSON.

(Continued from page 7.)

*A Remarkable Outbreak.*—The case before alluded to may be here conveniently introduced. A first-class ship arrived in the Hooghly in the early days of January. There was no cholera in the vessel coming up the river, or during the month. There was very little in the city of Calcutta. A party, consisting of a gentleman and his wife, European nurse, a young lady, and two children, landed in perfect health, on a Sunday. They went to a house in which there had been no cholera for several years, not, however, in a particularly good situation, and small for the party that was received in it. After their arrival, there was a total of eight adults and ten children living in the house. Of these, two adults and three children were residents, two adults and three children from up country, and the rest the new arrivals. Five of the new arrivals occupied a small room on the upper flat—that is, the three females and the two children. They had one bathing-room off it. The rest of the occupants of the house were partly up-stairs and partly down. The nurse and children appear to have had slight diarrhœa during the week, and the children and the young lady ate on Saturday some rather indigestible native fruit. The children having slight diarrhœa, got a dose of Gregory's powder from their mother on Sunday morning. I was sent for at 8 o'clock p.m., and found one child far gone: she died at half-past 12 at night. The other child was in the earlier stage of the disease. About midnight the father had an attack of the disease, which was checked, and towards morning the nurse (who during the evening had felt ill, and had got a dose of rhubarb from her mistress) was seized. She was sent off to the General Hospital, close at hand, before 7 a.m., where she died at 7 p.m. All who could possibly leave the house—*i.e.*, all but its resident occupants—were ordered out of it. The young lady, who had been in devoted attendance on both the children, went at 11 a.m. to Wilson's Hotel. She was seized with cholera late on Monday night, and died at 4 p.m. on Tuesday. The second child, after a long struggle, rallied from her first attack, but in less than twenty-four hours had a relapse; however, she eventually recovered. One of the occupants of a room down-stairs was suffering from chronic diarrhœa. No more cases occurred in the house, or in the servants' out-houses.

A few reflections on these cases naturally occur. The sufferers had just arrived from sea. They were crowded into a space quite unwarrantably small, and hence, probably, an attack of cholera at an unusual season of the year. All the four undoubted cases had suffered previously from diarrhœa, attributed to the eating of indigestible food. They unfortunately had aperient medicine given them, and no purgative is safe at such a time. None but those who lived in the room, and the father, who was constantly in it, were attacked. The cases, as in such sudden outbreaks, were peculiarly severe. Out of the four cases in which cholera was undoubtedly developed there were three deaths. None of the other occupants of the house and none of the servants were attacked, not even the invalid with chronic diarrhœa. The immediate breaking up of the party appears to have exercised a most salutary effect. When such an outbreak and even worse ones are possible in European houses, it seems wonderful that the whole native population is not swept off, considering the infinitely more unfavourable conditions under which they live.

*Cholera Attaches itself to Places.*—But if cholera attacks certain classes of people more readily than others, it also appears to be able to attach itself for a time at least to particular spots, as to certain houses, streets, or barracks, or even boats or ships, camping grounds or banks of rivers. It generally selects inhabited spots, and that, like most other diseases, it finds its nest where there is most population and most filth, is beyond all doubt. Undrained Calcutta remains a lasting proof of this: though much money has been spent—little short of a million sterling—the new system of drainage for the European quarter alone has not yet come into operation; yet there appears to be something beyond any mere filthiness of locality. A good many years ago the large airy houses in Middleton-row were almost deserted, as being a hotbed of cholera. This was attributed to a tank in the neighbourhood which had been filled up some years previously. There has since then been no change in the drainage. The habits of the class of people that live there now are much the same as before, only the class is less wealthy, yet Middleton-row has not more cholera now than any other part of the city. I know another neighbourhood in Calcutta where cholera used not to be common in former years, but in which there have been many cases of late years, the only change in its neighbourhood being the excavation of an excellent tank of water. What has been said of neighbourhoods applies equally to particular houses, which, in common parlance, "have got a bad name name for cholera." But cholera will sometimes localise itself not merely in a particular house or ship, but affect only one side of it. Sometimes defective sanitary arrangements may be discovered that seem to account for this, but much more usually none. In a fleet of thatched country boats sailing up the Ganges cholera has been found to cling for a fortnight to particular boats, yet on the most minute examination it could not be discovered that these boats differed in hygienic conditions from the boats that were not attacked, or that the hygienic conditions of the attacked boats were the least different during, from what they were before, or after the attack. It was long supposed that there were certain localities which cholera would never reach, owing to peculiarity of geological formation or height above the sea. Gwalior was considered one of the exempted spots, yet it has had at least two severe visitations, and it is known that the mountain sanatoriums cannot always count on exemption. Undoubtedly no spot in Lower Bengal is safe from its ravages.

*Attaches itself to the River.*—But the apparent fondness of cholera in Bengal for one particular kind of spot, if one may say so—that is the banks of the rivers Hooghly and Ganges—is specially remarkable. For a ship to come up the Hooghly during the cholera season and not have a few cases of it is very unusual; in the old days for a regiment, European or native, proceeding by water, to escape it was equally unusual. Even when the transit was shortened by the aid of steam, a detachment of Europeans seldom got off scot free; and I have read but recently of the frightful sufferings of coolies (tightly packed, no doubt) in steamers proceeding to the tea plantations in Cachar, scarcely inferior to those of the unfortunate men lately abandoned in the *Eagle*. As illustrative of the way in which cholera occurs on the Ganges, my own experience is subjoined. We left Calcutta with a detachment of 400 rather sickly young Europeans on August 4, 1842, or in the height of the rains. The boats were thatched, and many of them leaky, the roof of the Hospital boat not high enough to allow one to stand erect. Still, the boats were average ones, as was also the commissariat. During the first month there was a good deal of fever, dysentery, and diarrhœa,—sourish bread and bad water got the credit of provoking the two last,—yet we had no cholera. The season was remarkable for a succession of violent gales. On September 8, when we had been drawn up an hour or two on a bank which was known to be one where we were likely to get cholera, but which we had to seek owing to the violence of the storm, and before any of the men had been many yards from the boats, the first case of cholera appeared—of course, a fatal one. Next day we moved off, but the cholera accompanied us, attacking both Europeans and natives, and attaching itself to three or four boats in particular, and getting worse when we lay for two days on a bank close to a native bazaar. In a fortnight as we proceeded upwards we thought we had got rid of the disease, but a last case showed itself singly as late as October 16. It will be observed that the cholera did not attack us at first during the confusion of our start, or when we were in Lower Bengal, where there is most cholera, and where we were drinking the Hooghly, which is far more impure than the Ganges water. We got cholera whenever we reached a bank which was supposed to be a likely one for it, and before we had been there two hours. We were losing the disease, when it appeared to be aggravated by our lying to again for a couple of days. None of the officers, some sixteen in number, who lived in a superior class of boats, got the disease. It would be hard to offer a positive opinion as to how the disease reached us, or how it left us, though easy enough to offer conjectures.

Ships going into the Hooghly constantly get cholera on board. So sensible are naval men of this, that captains of her Majesty's vessels often keep their ships at the mouth of the river, or at Diamond Harbour, in hopes of escaping the disease, and in this they are often, though not always, successful. Captains, as a general rule, attribute cholera to something caught by the men on shore. It has been attempted to make out that the ships lying much in shore, and near the mouths of the sewers, suffer most, but there is little of certainty in this. Moving a ship from the shore to mid-stream will often serve to stop cholera; at other times be of no avail; generally any change of place does good. The only sure way of stopping cholera without sending the crew on shore is to go to sea. A vessel is pretty sure to have a case or two while dropping down the river; but as surely as she goes to sea, so surely does she lose her cholera. This applies to coolie ships, as well as to ships with European passengers. Such a thing has happened as cholera breaking out at sea among coolies a fortnight after leaving Calcutta, but it is the rarest thing possible. Seamen thus get cholera by visiting Calcutta, and lose it by going to sea. As bearing on what has already been said of the period of the year at which cholera prevails most, it may be added that the risk of getting cholera on the Hooghly, either after arrival or on the way down (on the way up it is comparatively rare), is infinitely greater in the hot than in the cold months, and this is a matter of much importance with reference to the sailing of troop or coolie ships.

The water of the Hooghly, although the stream is large, it is well known, is full of impurities of all sorts, and is cleaned very imperfectly before it is put on board ship. Yet captains of vessels are quite satisfied with it, and never on the voyage home attribute any bad results to its use. Invalids with chronic diarrhœa never attribute any injurious effects to it. The ordinary drinking water in Lower Bengal is never free from impurities, especially organic ones.

*Extent and Influence of Epidemics.*—With reference to epidemics of cholera in Lower Bengal, we have ascertained at what seasons they are most likely to occur. It would be very desirable to know, also, their extent. Unfortunately we have no statistics to show this, though we know in a general way that its devastations are often frightful. Besides the extent of an epidemic, the inquiry how far the presence of cholera reacts on other diseases, on the ordinary diseases of the place, and on diarrhœa in particular, is an interesting one. An examination of the returns of Calcutta mortality, already referred to, enables me to answer part of the question satisfactorily. It is quite certain that a cholera epidemic does not affect one of small-pox. This was observed on its first outbreak, and has remained true of it. In Calcutta the hot weather months are the small-pox ones. In the seasons of the greatest epidemics of small-pox cholera ran its usual course. When, however, we come to consider the coincidence of other diseases with it, cholera would appear to exercise a quite perceptible control. If we take the Calcutta returns for the native population for twenty years—from 1840 to 1860—and distinguish the months of the greatest prevalence of cholera from those of its least, the following results appear:—

During the six months of the maximum prevalence of cholera there were 61,984 deaths by it, 68,181 by other diseases. During the six months of the minimum prevalence of cholera there were 24,286 deaths by it, 82,548 by other diseases; or, to put it in another way, in a series of twenty years the maximum of deaths by cholera was in two Aprils. These two months yielded 16,193 deaths by cholera, to 9607 deaths by all other diseases. The minimum of deaths by cholera was in one July and one August. These two months yielded 2432 deaths by cholera, to 12,232 by other causes.

Figures on such a large scale speak distinctly for themselves. It seems impossible to doubt that the prevalence of cholera has a very marked effect on the diseases of the country, which are from one-fourth to one-fifth less prevalent when it is epidemic. The commonest of these diseases are fever, diarrhœa, and dysentery.

The European population of Calcutta is too small and not sufficiently fixed to enable us to examine whether the same holds true with them; but during an epidemic, among the men of H.M. 96th, I was surprised at the small number of admissions from fever and bowel complaints.

As to the prevalence of diarrhœa during cholera epidemics, the Calcutta returns say nothing, and it is difficult to give a positive opinion on the subject, seeing that Calcutta is never free from a great deal of diarrhœa and bowel complaints. My impression is that among Europeans there is usually more diarrhœa—at all events, they observe it more, as they are more anxious about themselves at such periods. Premonitory diarrhœa is often present, but often absent, and relations, and often Doctors, too, make it a point of honour to ascertain that diarrhœa has been going on for some time, and neglected. Be that how it may, many a patient attributes his attack to having taken an aperient, and during cholera seasons tens of thousands of opium, and assafœtida, and similar pills are distributed to the people—judging by the steady demand for them—with much success. Among European soldiers during the severe epidemic in 1842, on board boats, I gave every man who complained of diarrhœa a glass of brandy or wine with thirty or forty drops of laudanum, and he seldom appeared again as a cholera patient. It may be said confidently that during cholera seasons patients in private life who are early treated for diarrhœa very rarely get cholera.

*Communicability of the Disease.*—On one other point of my experience I would remark, as all other Indian officers have done before me—that it is very unusual for the attendants who are commonly employed to rub the extremities of cholera patients in their cramps, to get attacked. I have often seen the the most beautiful devotion of native servants to their masters and mistresses, and they do not lose heart, as European soldiers going to attend on their comrades during an epidemic do. I have very rarely indeed seen a Medical officer or an Apothecary attacked. I never had to imagine that the performance of post-mortems was dangerous to myself or to my assistants. Like my neighbours, I have had occasion to spend hours, I may say days, in a cholera atmosphere, and never took any special precautions; but I never had the disease, and no European in any of the different houses I have occupied ever had it.(a)

Many other interesting subjects of inquiry suggest themselves. Is the character of the disease altered at all in the course of years? Are its ravages as extensive as formerly? Is the mortality among those attacked as great as ever? But to investigate these and kindred subjects would be beyond the limits of these notes, and accurate observations on many points are wanting.

The object of this paper will be served if it recalls attention to the facts, that cholera in its own home is never wholly absent, has very decided seasons of maximum and minimum prevalence; that it appears to influence the prevalence of most diseases, although it does not affect that of small-pox; that it attacks more specially those who are moving about, who are overcrowded, and who dwell in ill-aired localities; and that it also attaches itself to particular spots and neighbourhoods, where it is very difficult to discover any defect or specialty of hygienic arrangements.

To endeavour to determine how far cholera in other parts of India or of the world follows rules in any degree analogous to those that prevail in Lower Bengal, would be to enter on a very wide field of investigation.

## SUCCESSFUL CASE OF OVARIOTOMY.

By J. C. GOODING, M.D. Edin.

J. C., aged 49, married, sterile, states that she first noticed enlargement of the abdomen in September, 1862, which enlargement always appeared central. Menstruation, previously regular, had ceased just before. She has never suffered pain or other inconvenience than that recently caused by the size and weight of the abdomen.

In October, 1863, I first saw her—she was then the size of a woman at the seventh month of pregnancy—and diagnosed ovarian disease. From this date up to January 2, 1865, she gradually increased in size. Various forms of dyspepsia, at first slight, but augmenting in severity with the increasing enlargement, caused much suffering, till at last almost all she took was rejected. There was no pain. She measured at this time 45 inches round. I tapped and removed 36 pints of thick, dark-brown fluid; a mass, about the size of a cocoanut, evidently composed of an aggregation of smaller cysts, occupied the left iliac region. An elastic belt was worn, with the view of at least retarding the refilling of the cyst. She recovered rapidly, soon becoming ruddy and fat.

For some weeks she enjoyed comfort, the abdomen, however gradually enlarging, the dyspeptic symptoms began to recur. I recommended ovariotomy, which, at first accepted, was eventually declined, from her objection to leave home for London, as I advised. It became necessary to tap again on May 27 (five months after the first), when she measured 43 inches round; 32 pints of similar fluid to that first removed was obtained. The mass of smaller cysts had doubled their former size. There was some febrile disturbance and an intermittent pulse for a few days, but on the whole she rallied well. On September 25 (four months after)—ovariotomy in the meantime being again declined—she measured 45 inches, and was suffering so much from the mechanical effects of the growth, it was necessary to tap a third time; 27 pints of a blacker fluid was withdrawn. The mass of smaller cysts had increased considerably, but was moveable. The pulse was regular. She was a considerable time in regaining moderate strength, and before she had done so the size of the abdomen was again so great as to prevent her taking walking exercise. The tumour pressed downwards and forwards so much that she often stood before a table and rested her belly thereon to obtain relief. There was no swelling at the ankles, although before the first and second tappings the legs had been twice their natural size from œdema. I concluded from these two facts, and the mobility of the mass after tapping, that there were no adhesions posteriorly. I again strongly recommended ovariotomy; for her strength was giving way under this rapid accumulation and evacuation of bloody fluid. Everything seemed in her favour; heart, lungs, kidneys, digestive system when not incommoded by pressure, all healthy. Uterus normally placed and mobile; no portion of tumour to be felt on vaginal examination; few adhesions believed to be present. She at last resolved to undergo ovariotomy, but would not consent to leave home. Under these circumstances, I did not hesitate to operate, although I had wished her to benefit by the great experience of Mr. Spencer Wells.

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(a) The people who remove the excretions and those who wash the clothes are not more liable to be attacked than other classes of the population. According to the domestic usages of Calcutta in all well-regulated European houses (there are no privies, and water-closets are unusual), the excreta of each individual are received in a separate vessel and soon carried away by the sweeper. The arrangements in native houses are very bad, and the public privies are generally offensive. There is an *odor stercoreus* around every native village.

On December 6, with the kind assistance of Drs. Eves, Wright, Hooper, and Mr. Rooke, who gave chloroform, I performed ovariotomy. She measured 45 inches round; 20 inches from ensiform cartilage to the pubis. The bladder was empty. A five-inch incision was made midway between the umbilicus and pubis. There were a great many adhesions above and to the right and left of the incision. Most of them yielded readily, but in breaking down those where the punctures in tapping were made the cyst gave way. I extended the incision two inches, to afford a ready exit for the fluid, as the sac could not be drawn out on account of some very firm adhesions near the epigastrium. These were, with considerable difficulty, torn through and the large cyst withdrawn; the remainder followed, as there were no adhesions posteriorly. A long, narrow pedicle was secured with a clamp. There was no bleeding, but some of the fluid had escaped into the pelvis. This was wiped out with flannel; but rather than prolong the exposure, care was not taken to clean it absolutely. The right ovary seemed healthy. The wound was closed by seven silk sutures, which included the peritoneum. A knuckle of small intestine lay just under the wound. Fresh air was admitted by the window into the room, which had been previously heated to 68° F. Two hours after the operation, the pulse, which had been for the first half-hour intermittent, was regular and of good strength, 111. Skin warm; aspect good. Six hours after she was perspiring freely. Pulse 100, good. Three and a-half ounces of urine were drawn off. Hitherto had only ice.

December 7, 2 a.m.—Pulse 105, good; perspiring freely. urine three ounces, slightly ammoniacal; has had no sleep. A few teaspoonfuls of beef juice have been taken at intervals. Nepenthe, ♏x. At 4 p.m. she felt refreshed by sleep. Pulse 102, good. The use of the catheter agitates her so much, I allowed her to pass water in towels placed for its reception; several were saturated with very ammoniacal urine. Great thirst. An ounce of champagne was soon rejected. Ice continued.

On the second day the pulse ranged from 96 to 100, good strength. Skin moist. Urine freely passed; less ammoniacal. Flatus passes freely. Has been sick twice.

Third day,—Sleeps fairly. Has taken beef-juice freely. Pulse 104 to 108. A slimy, bilious motion passed about midday. Eight ounces of urine were passed in bed-pan. Complexion "as yellow as a guinea," as nurse says.

Fourth day.—Slept well after nepenthe. Took beef-juice and sago, gruel, and gin and water. A copious, offensive, bilious motion passed. Urine free, loaded with lithates, not so ammoniacal. Perspires freely. Pulse 90, good. Complexion much clearer.

Fifth day.—Removed sutures; no pus followed. Deep part of wound healed; only an inch or two superficially, near the clamp. Pulse 104, soft. Ordered brandy and water.

14th.—Eighth day.—The pulse since last report has ranged from 96 to 104. The bowels have acted almost daily. The urine is free and healthy. Removed clamp; stump firmly united to the lower angle of the wound.

January 1, 1866.—The patient continued to progress favourably. Occasional flatulence was always relieved by an enema. The appetite has improved under the use of tonics. The dead portion of the pedicle has been cast off and the wound almost healed. She has been walking about the room for several days past, and to-day took an airing in a Bath-chair.

6th.—The wound is completely cicatrised; the site of the pedicle resembling an umbilicus. Her strength is fast returning.

The solid part of the tumour consists of a large cyst, whose walls were the thickness of two lines, except at the lower part, where a large mass of closely aggregated, thin walled cysts grew. The interior of the large cyst was studded with numerous small cysts. At the site of the firm adhesions these had attained the size of an egg. These smaller ones were filled, with the exception of two or three that contained disintegrated blood, with fluid having the physical characters of glycerine. The whole weighed 6 lbs. 12oz., and there was about 35 pints of thick, black fluid evacuated during the operation.

This, I am told, is the first case of ovariotomy that has been performed in Cheltenham.

6, Sussex-place, Cheltenham.

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# REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

## SAMARITAN HOSPITAL.

### CASES OF OVARIOTOMY.

(Under the care of Mr. SPENCER WELLS.)

Our volumes last year contained a series of cases of ovariotomy performed by Mr. Spencer Wells in the order in which the operations were performed. We propose to continue this series in the same order. From his first case in 1858 till his first in Hospital in 1866, Mr. Wells has completed ovariotomy in 75 Hospital patients. Of these 54 have recovered, and 21 have died, a mortality exactly of 28 per cent. Of the last 10 Hospital cases only 1 has proved fatal. Five of these cases we have now to report.

*Case 71.—Multilocular Cyst—Never Tapped—Cyst Inflammation—Ovariotomy—Recovery.*

An unmarried schoolmistress, 34 years of age, came from Oxfordshire, at the end of September, 1865, to consult Mr. Spencer Wells, by the advice of Mr. Jones, of Leamington. Mr. Wells saw her on October 3, when she was suffering from abdominal pain, feeble rapid pulse, vomiting, furred tongue, and hot dry skin—symptoms which, in the absence of friction sound, he referred rather to cyst inflammation than to peritonitis. A multilocular ovarian cyst, hard to the right side and fluctuating to the left, extended half-way between the umbilicus and the sternum. It had been of very rapid growth, as she had not noticed any enlargement of the abdomen until after Easter, 1865. The increase had been slow till July, but rapid since. The inflammatory attack had come on on September 29, after the journey to town. Rest, linseed poultices with laudanum, and morphia in small doses led to a cessation of the urgent symptoms, and she was admitted to Hospital on October 9. The catamenia appeared on October 8, scantily, three weeks after the preceding period. The intervals generally varied from three to five weeks. Sometimes there was excess amounting to menorrhagia, and "large lumps" often passed. There had never been amenorrhœa or dysmenorrhœa. She was kept under observation in Hospital, as she was still feverish and the pulse seldom below 120. There was also cough, and pain under the right clavicle, but nothing abnormal could be detected in the lung. These symptoms would have led to further delay; but as the tumour was growing rapidly and the suffering from distension was increasing, ovariotomy was performed on October 25. Dr. Ritchie gave chloroform; Dr. Marion Sims, Mr. Smyly, of Dublin, and Dr. Walker, of Peterborough, were present. The incision was commenced one inch below the umbilicus, and carried downwards to the extent of six inches. A patch of vascular adhesion directly beneath the incision was separated, and one large cyst tapped and emptied. On tapping a second cyst it gave way, and the contents escaped. Mr. Wells then broke up the tumour and drew it out. One portion of it was firmly pressed into the pelvis, behind the uterus, but was not adherent there. A pedicle as thick as two fingers was secured in a small clamp about three inches from the right side of the uterus, and the tumour was cut away. The left ovary was healthy. Two small vessels which bled on the surface where the adhesions were broken down, were stopped by torsion. The wound was closed by six deep sutures. The tumour was composed of ten pints of fluid and four pounds of small cysts with mucoid and puriform contents.

The patient went on remarkably well for the first forty-eight hours. She said the night after the operation was the best she had had for six weeks. On the second day uterine epistaxis came on. On the third afternoon a sharp attack of peritonitis came on suddenly. The pulse rose to 130; there was vomiting of grass-green fluid, and pain. Opium was given and hot poultices applied. She improved on the fourth day. The pulse fell to 112. There was some vomiting, and the urine was highly concentrated; but uterine epistaxis and perspiration went on freely. On the fifth day improvement continued, and all the stitches were removed. On the eighth day the clamp came off. On the tenth and eleventh days the bowels acted after a teaspoonful of castor oil. Cicatrisation was complete on the twenty-first day. The patient left the Hospital on the twenty-second day after operation, soon afterwards returned to the country, and has been heard of since as quite well.

*Case 72.—Ovarian Tumour—Pleural Effusion—Four Tappings —Ovariotomy—Recovery.*

On March 2, 1865, a single woman, 42 years of age, a teacher of music, was admitted into the Samaritan Hospital under the care of Mr. Spencer Wells, to whom Dr. Brabant, of Havant, had sent her. She was a healthy-looking woman, but rather thin. She complained of constant coldness of feet, her mammæ were enlarged, and the areolæ deeply injected, but no follicles were to be seen. Her bowels were regular; her appetite indifferent; she occasionally suffered from piles. Her spirits were good; her sleep was disturbed by coughing. The right side of the chest was bulging, and was dull on percussion as high as the third or fourth rib; the respiratory murmur was almost inaudible in the dull part. On the left side percussion was clear, the murmur distinct. There were no cardiac murmurs. The urine was normal in quantity and quality. In the abdomen was found a fluctuating tumour, which occupied the hypogastric, umbilical, left iliac, and left lumbar regions. It reached about two inches above the umbilicus. The abdominal parietes were of normal thickness, and unmarked with lineæ albicantes or dilated veins. The girth at the umbilical level was 37½ inches, the distance from the umbilicus to the ensiform cartilage 7 inches, to the symphisis pubis 8½ inches, to the right ilium 9 inches, and to the left ilium 9½ inches. According to the patient's statement, she had menstruated during the previous week, and also during the week immediately before that; she had lost but very scantily each time. She had commenced to menstruate at the age of 15, and had continued regular till she was 38. She then saw nothing for four months, but afterwards the catamenia returned regularly till within five or six weeks of her admission to the Hospital, when the periods came more frequently, but less copiously than before. The uterus felt heavy and not very moveable. The cervix was soft, the os uteri closed.

The patient said that she had always enjoyed good health until she was 40 years of age, when her strength began to fail. She soon found that her dresses were too tight, and fourteen months before admission she discovered a small tumour in the abdomen, whose size remained almost stationary until within the last few weeks, when it began to increase somewhat rapidly.

On auscultation, a double murmur was heard over one portion of the tumour, very closely simulating the fœtal heart. Although the character of the patient was quite unblemished, this murmur, and the state of the os and cervix uteri, as well as the condition of the right side of the chest, made some delay advisable. The patient went home, but returned to the Hospital on May 23. The tumour now filled the entire abdomen, reaching up to the sternum. The respiration was much oppressed. Dr. Savage having introduced the uterine sound, and shown that the uterine cavity was only three inches in length, Mr. Wells tapped and emptied a cyst of twelve pints of clear, viscid, ovarian fluid. On examining the right side of the chest, it was evident that the pleura was full of fluid.

On June 12, Dr. Jenner saw the patient, and recommended a blister, with the internal administration of iodide of potassium and bark. On June 17, the respiration being very much oppressed, Mr. Wells tapped at the same spot as before, and removed eighteen pints of amber-coloured, viscid fluid. There was no great relief, and the Medical treatment was pursued. On July 25, Mr. Wells tapped again, removing fourteen pints, and then sent the patient home for the benefit of country air.

She was re-admitted into the Hospital on October 31, having been tapped early in the month by Dr. Brabant, who reported that the state of the chest had greatly improved. Dr. Jenner examined her again on November 3, and said that there was nothing in the state of the chest to forbid ovariotomy. The patient was suffering much from pressure on the rectum, producing piles. The uterus was jammed up against the pubes. There had been no catamenia since the first tapping; the urine was very scanty; the pulse rapid and feeble. Notwithstanding these very unfavourable symptoms, Mr. Wells performed ovariotomy on November 8, 1865, Dr. Brabant, Dr. Boeck, of Christiana, and Dr. Makeyeff, of Moscow, were present. Dr. Ritchie gave chloroform.

An incision was made five inches in length midway between the umbilicus and the symphisis pubis. Six pints of fluid had previously been evacuated through a small trocar, so as to lessen the shock of withdrawing suddenly the pressure from the diaphragm. Some extensive adhesions to the anterior abdominal wall were easily broken down; a large cyst was tapped, but as its contents were too viscid to escape, the whole of the interior of the tumour was broken up by the hand, and the mass in this way removed. The pedicle was as thick as three fingers, and sprang from the left side of the uterus. It was secured in a clamp and kept outside, but with some traction. The right ovary felt rather hard, but as it was not enlarged it was left alone. The wound was closed in the usual way by six deep sutures.

The patient rallied well, but the pulse went up to 150. Pain was relieved by opiates. The urine was somewhat scanty, but high-coloured. Next day she was better. The pulse remained at 120, but there was no sickness; urine was abundant, and the skin was moist. On the second day the pulse was 116. Some bile was vomited with relief. On the third day Mr. Wells removed two stitches; the rest he took away on the fifth day. On the sixth and seventh days there was some vomiting of bile and mucus. The urine, too, contained a good deal of mucus. Nitromuriatic acid was prescribed. The bowels were acted upon on the eleventh day after a teaspoonful of castor oil. On the thirteenth day the clamp was removed. The patient was put on quinine. She gradually regained strength, left the Hospital on the twenty-first day after the operation, and arrived safely in Havant, where she soon acquired strength.

The tumour removed at the operation was examined by Dr. Ritchie, who reported that it was a semi-solid mass, weighing from six to seven pounds, and in structure identical with the tumour described and figured by him at page 291 of Mr. Wells' first volume on "Diseases of the Ovaries."

*Case 73.—Ovarian Cyst Tapped Twice—Pregnancy—Tapping —Birth of Living Child—Ovariotomy four months after— Recovery.*

On the 9th of May, 1865, a married woman, 40 years of age, was admitted. She was sent to Mr. Wells by Mr. Ward, of Newark, who had tapped her twice, removing nearly four gallons of fluid each time. The first tapping was in April, 1864; the second in February, 1865. She had been married three years, and had not had children. The catamenia became scanty about the time of her marriage, and got less and less till they "quite left her in November," 1864. The abdomen was very large, and nothing could be detected except a very large ovarian cyst; but on examining *per vaginam* the cervix uteri was found soft, short, and velvety, and very distinct *ballottement* was felt. The mammary areolæ were injected, the corpuscles well developed, and a little colostrum was squeezed from the nipples. Taking these signs into consideration, with the cessation of the catamenia in November, although the patient would not believe that she was pregnant, Mr. Wells made the diagnosis of an "ovarian cyst in front of the uterus, which contains a six to seven months' fœtus." Symptoms due to distension being urgent, he tapped and removed eighteen pints of clear fluid. The enlarged uterus was then felt nearly up to the umbilicus, the collapsed cyst to its left, and the fœtal heart was heard below and to the left of the umbilicus. Great relief was obtained, and she went home in a few days. A healthy child was born at the full term of pregnancy, but the patient was too weak to nurse it. The cyst refilled; she suffered from pain and loss of rest from distension, and she was readmitted on the 25th of November, 1865. She was much emaciated, but was otherwise in a fair state for ovariotomy, and Mr. Wells performed the operation on the 29th of November. Dr. McDonnell, of Dublin, Mr. Wright, of Nottingham, and Mr. Jones, of Leamington, were among the visitors. Dr. Ritchie gave chloroform. An incision, 4 inches in length, was made upwards from 2 inches above the symphisis pubis, and a closely-adhering cyst was opened and emptied of fluid and large lumps of fatty fibrine before any adhesions were separated. Then some very firm and extensive adhesions to the abdominal wall were broken down, and the cyst was drawn out after separating a long strip of the left broad ligament, which was expanded over it and adhered to it. This strip was tied and cut off, after securing a long pedicle in a small clamp. The ligature on the broad ligament was tied to the clamp. The right ovary was healthy. There was scarcely any bleeding, but a few clots due to the separated adhesions were sponged from the pelvis. The wound was closed as usual. The patient made an excellent recovery. A troublesome cough, with expectoration of very viscid mucus, went on for several days after the operation, but it did not interfere with the healing of the wound, which was well united on the fifth day, when Mr. Wells removed all the sutures, and the clamp also, as there was some prolapse of the pedicle. The bowels acted daily after the ninth day, and the patient returned to Nottinghamshire on December 23. She bore the journey well.

## ABERDEEN ROYAL INFIRMARY.

### LOCOMOTIVE ATAXY—TREATMENT BY IODIDE OF POTASSIUM—PARTIAL IMPROVEMENT.

(Under the care of Dr. ARCHIBALD REITH.)

THE following cases, for the report of which we are indebted to Mr. Fowler, are the first cases of locomotor ataxy which we have published in our Hospital Reports. They will be read with interest, as the disease is now exciting considerable attention in this country. Trousseau has given a most interesting account of progressive locomotor ataxy, and it may now, we are glad to say, be read in English. Dr. Bazire has just published the first part of his translation of the Professor's lectures. Dr. Bazire has added to the lecture on locomotor ataxy a most valuable record of cases observed by himself at the Hospital for Epilepsy and Paralysis, with important observations thereon.

James M., aged 39, plasterer, was admitted into John Forbes' Ward March 23, 1865.

*Previous History.*—His health generally has been very good, and he has been very temperate in his habits. He has never had any disease with the exception of measles and hooping cough in childhood. About three years ago he passed water very frequently for a week; but he did not feel ill at the time, nor did he observe anything peculiar in the urine. His father died of cancer of the penis, aged 72, and his mother of natural decay, at the same age. Other near relatives healthy. He declares that he was never addicted to venereal excess of any kind.

*History of Present Illness.*—In the month of November, 1863, without any known cause or premonitory symptom, he began to lose the power of his right leg. The weakness seemed to commence at the ankle, and gradually crept up to the knee, and was accompanied by partial loss of feeling and a sensation of deadness. About two months subsequently the left leg became almost suddenly in the course of one day similarly affected, though not to the same degree. There has been no change in condition for the last fourteen months. He has used a few simple remedies, but without benefit; and he did not persevere in their employment, because he thought he would recover spontaneously.

*Present Condition.*—Body well nourished, firm, and wiry. Skin natural. Feet habitually cold.

*Nervous System.*—He has no pain in the head nor giddiness. Consciousness and memory perfect. The mouth is drawn slightly to the right, best seen when he smiles. He is sometimes troubled with jerking of his legs. When he attempts to walk, he feels as if he had got a blow on the thighs, and his legs suddenly start up. If he attempt to put one leg before the other, it is sometimes jerked outwards or forwards, and planted rather forcibly on the ground without his control. His gait is that of a drunken man; but although he staggers forward in a rather precipitate manner, yet with the assistance of a stick he manages to get along without falling. When his eyes are shut, however, or when he has no support, he can scarcely move a step without falling; and if his two feet be placed parallel close together, with his eyes shut at the same time, he falls over as if he had no idea of the perpendicular, and has to be supported. He does not think his legs have wasted since the commencement of his attack. Speech quite unaffected. No abnormity in the spine.

*Organs of Sense.*—The left pupil is a little larger than the right. Taste unimpaired. There is partial anæsthesia in the right leg. He has sometimes stinging pains in his thighs apparently depending on the feelings above mentioned. Respiratory, circulatory, and digestive systems healthy. Urine natural.

The treatment consisted in the administration of iodide of potassium in doses of ʒj. daily. The facial paralysis disappeared; but when he left the Hospital on April 17 he did not appear to walk better, although he himself thought he could.

### LOCOMOTIVE ATAXY—TREATMENT BY IODIDE OF POTASSIUM—PARTIAL IMPROVEMENT.

[Reported by Mr. GALLOWAY.]

Jane S., aged 19, domestic servant, unmarried, was admitted into Ruth's Ward May 11, 1865, complaining of inability to walk.

*Previous History.*—She has not had robust health since her childhood, when she suffered from scarlatina, typhus, and "remittent" fevers. She had inflammation of the eyes shortly after birth, and they continued weak for four years afterwards. Her mother died four years ago of cancer of the womb; her father is still alive, and in good health; but he has had three or four attacks of transitory paralysis of one side of the body. Menstruation is regular.

*History of Present Illness.*—About eight months ago her right knee swelled and became painful. She was treated with tinct. iodin., applied externally; but after some improvement the knee again got worse, and she was admitted into the Surgical wards of this Hospital about a fortnight ago. The swelling of the knee gradually subsided, and she was then transferred to the Medical wards. She now complained of inability to walk, the loss of power being so gradual that she does not remember when she first felt it. She thought that the state of her right knee was the cause of it until it began to appear in the left leg. Before she became unable to walk she had a feeling of weakness across her back, latterly amounting to a dull aching pain. She has suffered for the last two months from a constant headache, like a feeling of weight on the top of the head, with a darting pain, sometimes over the right side near the brow. She feels her sight getting dim, and her eyes growing tremulous.

*Present Condition.* — Stout and well-made, though not robust. Hair and iris dark. There is slight swelling of, and a feeling of stiffness in the right knee and also in the ankle. *Nervous System.*—She complains of severe headache, almost constant, like a weight on the top of her head, and of pain of a sharp darting character over the right eyebrow, and over the right side of the head. There is pain behind her eyes, mostly in the right. She complains, also, of a dull aching pain across the loins. When she walks she staggers as if she were drunk, and would often fall if not supported. She cannot walk at all with her eyes shut, and would instantly tumble down if she had nothing to lean upon. When her feet are put together and her eyes closed at the same time, she immediately falls over. In bed, however, she moves her legs quite well, and has so much power in them that several persons holding them cannot prevent her from moving them. Sensation is unimpaired in both limbs. *Organs of Sense.*—There is a tremulous motion of the eyeballs from side to side; no difference between the pupils, which contract equally to the stimulus of light. Her sight has lately become dim and misty, but she sees moderately sized type perfectly. Respiratory, circulatory, and digestive systems healthy. Urine healthy. Catamenia regular.

Large doses of iodide of potassium were given till July 4, when she left the Hospital relieved of her headache, but with little perceptible improvement in the walking.

*Clinical Remarks.*—Locomotive ataxy is commonly mistaken for paraplegia. The features of each are so distinct that it is surprising Physicians did not sooner recognise the difference. Duchenne's vague definition of locomotive ataxy is, "Progressive abolition of the co-ordination of movement, and apparent paralysis, contrasting with integrity of muscular power; these are the fundamental characters of the disease." Trousseau's is more definite, but commits science to what is yet but theory—"A spasmodic neurosis characterised by a want of co-ordination of the voluntary movements, often complicated with disorders of sensibility and partial paralysis." The chief feature of the disease, when fully formed, is, more or less, inability to perform the reflex functions of standing or walking. On attempting to walk the patient finds his legs refusing to obey the ordinary co-ordinating power; they are thrust outwards or forwards spasmodically, and planted on the ground in an irregular way beyond the control of the individual, who is in constant danger of losing his equilibrium. If he succeeds in getting a start he moves forward in a precipitate manner, staggering and stumbling, and is obliged to use a staff to prevent himself from falling. A paraplegic patient, on the other hand, if able to assume the erect posture, drags his legs slowly, but uniformly along, his difficulty being not to control the movements of his legs, but to get them to move at all. The most characteristic differences between locomotive ataxy and paraplegia are the following:—First, *in bed*, the patient with the former affection has complete power over the voluntary movements of the legs, as was well seen in the two cases above recorded, both of whom tossed about their legs with the utmost facility, and defying all attempts to hold them, while in paraplegia the power of voluntary motion is in a greater or less degree lost; secondly, in locomotive ataxy, if the eyes be shut, the patient can no more walk, or even stand, with his feet together than a person can stand or walk on stilts who has never been accustomed to them, while nothing similar is observed in paraplegia, or indeed any other kind of paralysis. In fact, a patient with ataxy closely resembles a tyro endeavouring to walk upon stilts. These diagnostic marks are, therefore, very important, and ought not to be overlooked. They were well seen in the above cases. A woman affected with paraplegia was brought beside the girl S——, and the differences between them were most striking.

Locomotive ataxy seldom comes on without premonitory symptoms. The chief of these are rheumatic pains, partial and temporary attacks of paralysis, and disorders of urinary and generative organs. The pains are irregular, coming and going, and are generally mistaken for rheumatism. They were so in the girl S——; but that they were not rheumatic was at once evident from the fact that they were confined to one knee and ankle—a point of some importance, for rheumatic pains of this kind are mostly due to lesion of the nervous system. There does not appear to have been any other premonitory symptom in this girl, except amaurosis, which was, however, but slight, and the excessive pain on one side of the head. Amaurosis is a very common symptom, as also paralysis of the third and sixth nerves, and indeed of any nerve. The paralysis of the ocular nerves is, in general, more persistent than that of others. Transitory attacks even of hemiplegia may occur, and it is singular that the father of the girl S—— was thus affected, although there is no history of ataxy in him. The premonitory symptoms in the man M—— were partial paralysis of the left facial nerve, and at one time what looks very much like incontinence of urine. He also had cutaneous anæsthesia, which is a frequent attendant on the disease.

The usual post-mortem appearances found after death in these cases are grey degeneration of the posterior columns of the spinal cord, and atrophy of the posterior roots of the spinal nerves. So long as the posterior columns were believed to be the channel for the transmission of sensitive impressions to the brain, this state of parts existing with little or no loss of sensation, but with loss of the reflex power of standing and walking, was rather perplexing, especially as the anterior columns were free from disease; but since the experiments of Brown-Séquard have shown that the posterior columns have not the office formerly assigned to them, and moreover that section of them causes hyperæsthesia, instead of anæsthesia, together with locomotive ataxy, the pathology is more intelligible. But how does it happen that with atrophy of the posterior roots there is often little or no loss of sensation? The explanation given is, that the hyperæsthesia which would be produced by disease of the posterior columns alone is counteracted by the atrophy of the posterior roots, in which some nerve tubes remain intact, sufficient to account for the persistence of sensation. This may be true, but it is not quite satisfactory. It is to be regretted that the state of the sympathetic nerve has not received the attention it deserves. There seems evidence to show that that nerve has more to do with reflex motion than has generally been supposed. Last year M. Voisin presented to the Société de Médecine of Paris a case of locomotive ataxy of the upper extremities where the cervical sympathetics were found diseased.

An attempt has been made to distinguish locomotive ataxy caused by disease of the posterior columns from that caused by cerebellar disease. I am afraid this will be found impossible in practice, at least in many cases. It may be possible to diagnose the locality of the lesion, whether in the cerebellum or in the spinal cord; but that both varieties belong to the same category I have no doubt. For, in ataxy from spinal disease, we also find sometimes structural change in the optic nerve, the optic tract, the corpora quadrigemina, and the motor oculi, without disease in the cerebellum; and yet in some cases of so-called ataxy, the only lesion found has been cerebellar. The ataxy likewise is not confined to the legs, but may proceed to the upper extremities, or even affect them solely, as in Voisin's case just mentioned. The cerebellar and spinal diseases are, therefore, probably varieties of the same evil, the ataxy being the symptom. And here I may be permitted to quote some observations of Dr. Hughlings Jackson. Speaking of cases of paralysis of one or more cranial nerves, with paralysis of both legs, and no paralysis of the arms, except now and then a little paralysis of the hands or fingers, he says:—"One of three inferences may be drawn from these facts. 1. The symptoms may by some be considered to occur together by a coincidence. 2. That the paralysis of the cranial nerve is the result of reflex action, set up by the disease of the cord which produces the paraplegia. This is the explanation given by Dr. Brown-Séquard. 3. That there is a tract in the higher part of the nervous system which contains nerve-fibres from the legs and not from the arms, or, at least, only from the fingers or hands. Some of these cases resemble, and perhaps are, locomotive ataxie. There is in some a loss of power in walking properly, whilst the legs seem to retain considerable power. This, of course, applies only to those whose sight is merely impaired. When the guiding power in the legs is lost, we use the eyes to direct our movements. Even in health 'we lean,' says a distinguished physiologist, 'on our eyesight as on crutches.' Patients who have ataxie, therefore, cannot walk in the dark, or when their eyes are shut. Blindness, following loss of guiding power in the legs, seems then to be not so much a complication as the loss of a similar faculty. But, when the patient has lost both these helps to guide himself, it is just possible that he may struggle his way from object to object by touch. But a third factor in the general power to guide movements is frequently affected also, there is numbness of the fingers; so that the power to combine movements in the legs, or to do so in a supplementary way by help of the eyes, or of touch, is lost altogether. This, I think, renders it plausible that there may be in the higher parts of the nervous system a tract of nerve-fibres passing from the legs, fingers (tips) to the corpora quadrigemina for the general purpose of guiding movements in progression."(a)

The prognosis of locomotive ataxy is bad. Patients, if they do mend for a little time, mostly go from bad to worse till they can no longer maintain themselves in the erect posture, and die cachectic. Various remedies have been tried. Electricity and nitrate of silver are favourite remedies with some, but not much confidence can be placed in them. There is this comfort, that the disease may remain stationary for many years.

*Note.*—The second patient has just recovered from an attack of typhus. The symptoms of ataxy are more developed, but there is now some loss of voluntary power in the legs, probably from extension of the disease to the grey matter.

A SEVERE, BUT JUST PUNISHMENT.—A court-martial has been held on private Bernard Daly, of the 40th Regiment, for a savage and unprovoked attack on Surgeon-Major Webb, M.B., during the time he was undergoing a Medical inspection at the Chatham General Hospital. Daly, having been found guilty, has been sentenced to be dismissed Her Majesty's service with ignominy, to be branded with the letters "B. C.," and to be kept in penal servitude for five years.

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(a) *London Hospital Reports*, vol. i. p. 377.

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Medical Times and Gazette.

SATURDAY, JANUARY 20.

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## ENTOZOA AND RINDERPEST.

In connexion with the still vexed question of the nature of cattle plague, we would direct our readers' attention to the elaborate and interesting paper and drawings of Dr. Beale which we publish in the *Medical Times and Gazette* of this day, on the nature of the entozoa found in the voluntary muscles and in the muscular tissue of the heart of animals that have died of the cattle plague. Attention was drawn to this matter by Dr. Fenwick in the *Times* of January 3, but it is evident that the bodies in question had not escaped Dr. Beale's notice, and he must have been for some time actively engaged in minutely investigating the question. We would add, if it were not unnecessary, one word of just eulogy on the thoroughness of his investigation.

It is clear, in the first place, that these bodies are found universally in all the muscles of beasts which have died of the cattle plague. Dr. Beale certainly brings forward one case in which they were not found; but, with this exception, the testimony of all observers as to their universality is unanimous. That they are found in *very small* number in some few beasts apparently healthy is a fact also to which due weight must be given.

The second question is, What are they? Dr. Beale's account of the investing membrane and of the contents renders it impossible, we think, for any one to doubt that they are entozoa.

We have heard it said that they are more closely allied to the Gregarinidæ or Sporospermiæ; but what member of either of these classes is known to attain a length of *a quarter of an inch*, or to possess such a structure as these bodies exhibit?

Again, the form and structure of the minute bodies occupying these cysts put us in mind of many of the larval forms of entozoa at a very early period of development.

Indeed, looking at all the facts, it seems difficult to escape the conclusion that these bodies are true *entozoa* in some imperfect stage of development, during which most rapid multiplication proceeds, and that, like many members of their class, they have to undergo another migration before they reach their fully developed state.

Their connexion with cattle plague is altogether another matter, and nothing can be more cautious than Dr. Beale's remarks upon this point. Yet we suspect that they will throw a light upon the subject which will be new to some of our readers.

We are all familiar enough with the word *zymotic*. We know how it is applied to a class of febrile diseases which are produced by the implantation of a poison, and in the course of which that poison is multiplied a millionfold, just as yeast is in fermenting beer. We are not equally familiar with the class of "*febrile helminthic* disorder," yet we have one marvellous example of it in the case of the trichina disease. Certain worms are swallowed; they hatch myriads of young ones, which immediately begin to bore the intestinal canal, and wander all over the body to lodge themselves in the muscles. During this process the unlucky "host" (as the unwitting victim of worms is courteously called by the helminthologist) suffers from general febrile disorder, diarrhœa, acute pains in the abdomen, and weariness and aching of the limbs. In most fatal cases the patient is said to have died "with all the symptoms of severe typhus." Now, is this not a tempting field for speculation? May not the Rinderpest be an *acute helminthic?* We must still maintain the reserve which this journal has hitherto kept, and wait a bit before deciding. If not the cause, at any rate these bodies seem to accompany the cause so closely that they may furnish a clue to it some day.

Meanwhile, the observations made upon the minute structure of these bodies may be the end of a thread which, cleverly and intelligently followed up, might, perhaps, lead to the determination of the nature of some obscure and fatal diseases which it is of the utmost importance should be discovered, and of which we are now utterly ignorant; for this may lead not only to the prevention of disease, but to its extirpation.

If we were well acquainted with the natural history and migration of the trichina, can it for a moment be doubted that every civilised Government in the world would at once take measures for annihilating the noxious race? Nor does this seem a very difficult matter. Microscopical investigation of the muscles of every slaughtered pig would infallibly discover the trichinæ, and the thorough combustion of every particle of the animal might be enforced by law. Civilised man would then be spared the pain of hearing of such dreadful and preventible catastrophes as those of Heltstädt and Hedersleben.

## THE POLYMORPHISM OF DISEASE.

In these times, when science is apparently budding so freely and division of labour an economical necessity, it is highly important for the prevention of narrow views that attention be closely directed to the teachings of analogy and to the generalisations of trustworthy observers in departments of Medicine other than those which we severally may have selected for our own special study. In this age of neck-to-neck race for eminence, enlarged views are perhaps comparatively far too rare. It is manifest that living beings, animals, plants, and even chemical bodies, wander considerably from their ideal pristine type; the degree of variation, as the rule, being in direct ratio to the simplicity of organisation. At the same time, as a salutary check to ultra interpretations, there is a law of limitation, in virtue of which species preserve each their *essential*, though they may vary as regards *accidental*, features.

The best exemplification of this truth is afforded by components of the vegetable kingdom, the whole of which, as Dr. Hooker truly observed, is pervaded by the element of mutability; and no better illustrations are afforded than by the history of the potato, of wheat, and of garden flowers in general. Analogous instances in the animal kingdom in the lowest forms of life are referred to by Quatrefages in his "Metamorphoses of Animals," and illustrated by the facts of "the alternation of generations." When this theory was first promulged, the word Di-morphism was coined, used timidly, then more frequently and freely, and now has given place to the more correct designation—polymorphism. Very admirable examples are given by De Bary, who has shown that *uredo*, *uromyces*, *puccinia*, and *æcidium* are but stages of the same coniomycetous fungus. It would appear also that there are from four to six aspects of pyrenomycetes, and the third volume of Tulasne's "Carpologia" contains similar evidence in his magnificent plates of polymorphism in the entomogenous *spheriæ*, and other allied groups; and as fructification has been regarded as the only real differential test of species in fungi, it is easy to understand that the natural variations of one have been looked upon as separate and distinct kinds of plant. In the mineral kingdom, the same condition is confirmed by the behaviour of certain crystalline salts. In the animal kingdom, the principle of natural selection interferes somewhat. Many of the various species of acari are thought mere modifications, to be accounted for by the influence of differences of habitat and the like.

No less is polymorphism exhibited in the case of diseased conditions. The instances of intestinal and other entozoa will at once occur to the mind. There is scarcely a disease which has not a considerable range in aspect according to the different degrees of intensity in quality or quantity of the virus, and the state of the living being upon whom it plays; hence the varying character of epidemics — malignant, sthenic, asthenic, fatal, or mild. As the local expressions of disease depend, of course, upon the degree of development of the general condition, variations are met with accordingly, and this is an important consideration at the present time in reference to Rinderpest. It is asserted that the chief objection to the reception of belief in its identity with small-pox exists in the contrast presented by the eruption in the two cases. Is the affirmative consistent by analogy with what we know of diseases in general? Variola, vaccinia, and cow-pox are now admitted to be identical in nature. Bastard vaccinia must be included also; and the French have adduced evidence in support of the view that grease and apthous stomatitis of horses are modifications of variola; whilst in India the latter, as to its eruption, assumes unusual garbs in man and animals. Puerperal fever may be erysipelatous, gastro-enteric, or malignant. Measles may be mild (as in the East)—malignant, abortive, as in Rubeola sine catarrho, or anomalous, as Rubeola notha, and the pseudo-measles of Dr. Salisbury. Scarlatina is peculiarly mild in the puerperic woman in Ireland; and its least expressed form is not unlikely Rosalia. In northern climates leprosy assumes the tubercular, and in India the anæsthetic form by preference; whilst in mid-climes one occasionally observes its least expression, Morphœa, as the total disease. In Scotland Sibbens is its remnant. Syphilis is mild in the East, bad in India; and Radesyge is supposed by Dr. Böeck to be a peculiar phase in Norway. The distinctions of gout, rheumatic gout, and rheumatism are not well defined. Gonorrhœal rheumatism is a puzzle as to its exact relations. Turning, however, to examples that are more immediately appreciable by the eye, and, therefore, not so likely to mislead —viz., eruptions on the surface, we observe the same polymorphism in acute specific diseases; for some early stages may represent the total malady. This opens out the wide question of "abortive forms" to which Dr. Stokes especially directed attention. In typhoid fever we frequently notice certain special characters peculiarly marked, as in the "latent" cases. Erratic and metastatic occurrences are further illustrative. Amongst the more chronic maladies, there is no dearth of examples. Eczema is rarely observed to be vesicular; fissuring, squamation, papulation, or even erythema, may predominate, or a translation of morbid action to the mucous membranes may take place, and alternate with the changes usually noted on the surface. Strophulus in its several forms and lichen, the whole parasitic group of diseases, and the phases of scabies only confirm what has been said. Age, sex, constitution, texture (*e.g.*, the hairy covering of animals), the transmission through different species, hereditary peculiarities are some of the chief agencies in effecting modification; and in reference to hereditary peculiarities, it is worth noting that in eruptions the local changes are peculiarly well marked and obstinate.

The duty of the scientific man is clearly indicated by the often repeated words of Mr. Bentham in reference to plants— "That neither size nor outline affords any basis for distinction into species until it has been ascertained, from extensive comparison of forms brought from different localities in the widest area over which the species can be traced, what are the average characters of the type and what is their range of variation." The doctrine of polymorphism is an important one to be aware of, since the various influences that play upon the individual differ much at and in different times and places; and whilst close similarities are often produced, it is all the more needful that diseases should be studied in their entire history, and that no one special feature be exalted into undue significance, if we would travel the safest road in the discovery of truth.

## SCURVY.

The fact that a disease called sea-scurvy still exists in Medical nomenclature is humiliating in itself, and cannot be too strongly reprobated as a disgrace to the mercantile marine of this country. More than half a century has now passed away since it claimed its scores of victims from the Royal Navy; but that service now knows the disease only in name. The remedy has been applied, is simple and efficacious; but the merchants of Great Britain, and the underwriters connected with her shipping, still, with unaccountable blindness to their own interests, persist in ignoring the fact that risk of an outbreak of scurvy indicates great and grave risks to ship, passengers, and cargo. For, when the tables of this disease kept on the *Dreadnought* show that from 20 to 90 per cent. of a ship's crew are often prostrate from scurvy, it boots not to speculate how many of our East Indian and Australian vessels are lost from this cause alone. A short-handed ship, in a north-west gale off the Cape, or in a smart squall near the Line, has to struggle for existence against fearful odds, known only to those who have seen the use, and felt the want, of helping hands at such a time. The art of navigation, with its scientific aids and appointments, has steadily increased, year by year, as our commerce has extended over the globe; and the prospects of comparative immunity from danger at sea should increase likewise. But the number of vessels that sail from port, "and have not since been heard of," has by no means diminished in a justly proportionate degree, nor will it diminish as long as bad and insufficient lime-juice is carried in our ocean-going ships, and scurvy is thereby allowed to reduce indefinitely the available force of the crew on the homeward passage. The *Dreadnought* Hospital ship, always a great depôt for scurvy, has entered from 80 to 90 cases per annum during the last 10 years. In 1865, however, an increase of no less than 20 per cent. has obtained, and of 103 cases brought in during the past year, 1 only was admitted from a foreign vessel. This fact raises the average of British-made scurvy during the last year in a still greater degree; for in former years from 12 to 14 cases have been sent from ships not carrying the British flag. A correspondence has lately been going on between the Board of Trade and the Seamen's Hospital Society, which formed the subject of a leading article in the *Times* of December 16, and of a letter to the same journal two days after, from the resident Medical officer of the *Dreadnought*. The Board of Trade not being furnished with powers to appoint Medical inspectors of lime-juice, have proposed to the local Marine Boards of the chief ports in the kingdom to institute such inspectorships. Two only out of seven to whom communications were addressed have enclosed favourable replies, and the project is likely to be abandoned, unless the Board of Trade apply for powers to appoint inspectors under their own jurisdiction. It is urged by the local Marine Boards, and in some degree supported by the *Times*, that such inspection would involve an incalculable amount of trouble and inconvenience, and that a partial inspection is worse than useless. To this latter opinion we heartily subscribe. But it has been clearly proved to the Board of Trade by facts, into the particulars of which we need not enter here, that an inspection of lime-juice in ships proceeding to ports east of the Cape (and this latter restriction lessens the number of examinations considerably), would be effectual in removing three-fourths of the scurvy now annually brought home by our mercantile marine. We cannot agree with the *Times* in entertaining the idea that forcible interference is not necessary. The Board of Trade, at the instance of the Seamen's Hospital Society, have given warnings and instructions over and over again, all of which have been habitually disregarded. Lime and lemon juice are adulterated to an enormous extent for the purpose of shipment, and lose their identity in all but the name. The Merchant Shipping Act, as at present constituted, affords no remedy whatever for this evil; and so our sailors go to sea, are supplied with these filthy mixtures, and on their return are hoisted into the *Dreadnought*, or are laid up in lodging-houses, helpless for the present and ruined in stamina for the future. An appeal from the underwriters (who are chiefly interested in this matter) to the Board of Trade would act powerfully in the right direction. In counting the cost of inspectorships, let the cost also be counted of those annual and apparently mysterious losses of men and money in open sea, the amount of which the members of Lloyds' know, perhaps, a little too well. We shall aid commercial economy as well as humanity by removing this national disgrace, and so materially improving the sanitary condition of the men in our merchant navy.

## THE WEEK.

### THE SCIENTIFIC STUDY OF THE RINDERPEST.

We have reason to believe that we overstated the opinions of one of the speakers in the recent discussion at the Pathological Society in our notice January 6, page 14. That notice was written under difficulties which we have already explained, and last week we gave a full and accurate report of what took place.

It is one thing to state arguments forcibly and yet precisely, and another to come to a conclusion; the former is difficult, the latter easy. And in reference to the Rinderpest there have been, we think, more conclusions than arguments, and more explanations than facts. To state arguments broadly and yet clearly, forcibly and yet fairly, requires judicial calmness and considerable mental vigour; whilst, on the other hand, making theories and drawing conclusions is often but the sign of a prurient ingenuity—a sort of thing for which a schoolboy ought to be whipped. We have now to say, then, that although Dr. Quain urged that the amount of evidence as to the relationship of Rinderpest and Variola was too considerable to be overlooked, he did not by any means conclude that they were identical diseases. In the discussion we have alluded to, Dr. Quain particularly drew attention to the many absurdly ingenious surmises in the newspapers—Rinderpest being compared to all sorts of things, among others to Small-pox. It may be right to cut the Gordian knot sometimes, and "guesses at truth" by first-rate men on perplexing subjects are sometimes useful; but that every schoolboy who carries a pocket-knife should be allowed to have a cut at it is simply a vexatious annoyance. There have been so many of these theories that it is not impossible that some one of the theorisers may be right by accident. In an important question like the present, however, "conclusions" and "explanations" do little more than choke up the way of investigation. An ingenious first-year's student would make theories and plans of treatment good enough for the newspapers by the yard. The absurdity of the suggestion that we should treat Rinderpest by hanging onions round the affected animal's neck does not altogether destroy the effect of its repetition sixty or seventy thousand times by the printing machine of the *Times*. The logical power of machinery is of the sort reprobated by Dr. Johnson. It is rather a raising of the voice than the enforcing of an argument. The newspapers and the public are not alone to blame. A readiness to put forward conclusions is, we, think, one great bane of our department of science. Medical science is manifestly uncertain, and those who have not vigour enough to keep their minds balanced amidst conflicting arguments—who cannot trace resemblances without ignoring differences—are always groping about for some theory to rest on. They will come to an anchorage, although it often turns out that their anchor ground sinks from under them, as in the case of Sindbad, who came to rest on a whale's back. Hence, in every important investigation there are heaps of generalities to be got rid of before we can arrive at scientific generalisation. To be always ready to found a doctrine on facts, whether many or few, is a sign of restlessness from weakness, rather than of activity from vigour. In great contrast to this is the temperate way in which such men as Quain, Murchison, Sanderson, Ceely, Gamgee, and others have investigated the Rinderpest. In the discussion it was very noticeable how carefully some of the speakers guarded themselves from allowing it to be believed that they wished to force the question to an issue on the then evidence. Dr. Quain, to whom we have to apologise, justly considers that we must wait the result of experiments before we can with anything like precision conclude that the resemblances of the two—we may still call them two—diseases are essential and characterise small-pox, whether human or bovine, and that the apparent differences are such as might be expected necessarily to occur when small-pox appears under such varied circumstances as it must do when it affects both men and cattle.

### THE COMMITTEE AT THE ADMIRALTY.

There is, very naturally, a great desire on the part of the Medical officers of both services, as well as the Profession generally, to know something of what the Committee has recommended. Until the Report has been published nothing positive can be known; but so many rumours are afloat, that there can be no harm in stating what we have heard, and believe to be probable. The inquiry has terminated, then; but, as far as we can gather, the recommendations of the Committee, in the case of the Naval Medical officers, have not been finally settled yet. With regard to the Army, it is understood that an optional earlier retirement at a small rate of pay will be recommended, and that some concessions will be advised as to matters affecting relative rank and position. The pay of Surgeons will remain the same, or nearly so; but a slight addition to that of the Surgeons-Major, and some little increase to the Senior Assistant-Surgeons' pay, are said to have been recommended. The Committee are likewise said to have recommended the addition of a few Deputy-Inspectors to the present number. We have endeavoured to ascertain whether anything has been suggested in the way of promotion for the junior grades; but we believe nothing has. If this be so, there will remain the hopeful prospect for a man now entering of retirement at twenty years as an Assistant-Surgeon on a small retiring allowance. It is simply ridiculous to suppose that Assistant-Surgeons of twelve years' service will quietly and contentedly submit to proceed to India, where they will have to serve in a subordinate rank to those Medical officers of the Indian Army who have attained the rank of Surgeon by virtue of their twelve years' service, in accordance with the terms of the Indian Medical Warrant. It struck us with surprise that no Army Assistant-Surgeons were examined before the Committee. The men who entered upon the faith of the Royal Warrant of 1858 were unquestionably a better class of men than the Department commonly attracts, and we know that the Crimean War drew some able young men into the Army. For what length of time does the Government expect these to continue in their subordinate capacity? It is tolerably well known that the most irksome duties—the petty details, the monotonous, half-Professional, half-military duties—fall to the lot of the Assistant-Surgeon. Of this there is no reason to complain, perhaps; but a long continuance in a subordinate office is a sure means of promoting that habit of relying on others which tends to unfit a man for a position of weight and responsibility when he does attain it. Hope and independence are driven out of him. The Government authorities, perhaps, neither wish for nor require any independence or decision of character in their Medical officers; but a man in a high position abroad must possess them, or bring discredit on the Department to which he belongs. Every epidemic at a colony, every disaster in the field, teaches us this lesson. The Naval Medical Department has come to a standstill for want of men, and that service must be something very different from what it now is before the deficiency will be supplied. We hope our Profession has learnt this lesson. The recommendations of a Committee are one thing; their approval by the authorities, quite another. Our belief remains the same: if men be forthcoming, improvements will not.

### DEAF MUTISM.

A MEETING was held on Monday evening in the Hanover-square Rooms for an object of no less physiological than philanthropical interest. It was convened primarily to raise a sufficient sum of money to provide a chapel with class and lecture-rooms for the deaf and dumb of London; and secondly, to give a number of these unfortunates an evening of amusement—tea, dissolving views, and addresses in sign language. How perfectly possible it is to address a large assembly by sign language is proved by the feat performed by the Rev. S. Smith, the Secretary and Chaplain to the Association in Aid of the Deaf and Dumb, who, standing in front of the Chairman, Capt. the Hon. R. Grosvenor, managed to reproduce on his fingers the whole of the Chairman's tolerably long address, sentence by sentence, almost as rapidly as it was uttered. The whole history of deaf mutism involves a problem of great Medical interest. What is the defect in nervous structure which entails it? How often does it depend simply on absence or defect of the auditory nerve, or in what proportion does such a defect coexist with a radical deficiency in the whole nervous centre? A certain proportion of deaf mutes are imbecile, but a larger proportion, as the results of training show, are capable of an extraordinary progress in mental culture. Still, on watching the deaf mutes who crowded the Hanover-square Rooms on Monday, we were struck with the remarkable cranial conformation—often defective in size and development—the small forehead, and scanty lower jaw, which a large proportion of them exhibited. Probably low cranial development may be, in part, the result of the absence of one great channel by which ideas and materials for thought are obtained. But it is also, we have little doubt, a mark of general congenital cerebral deficiency, of which the deafness and dumbness are only the most striking proofs. Still, there are not wanting instances of great intelligence and aptitude for acquirement amongst deaf mutes. Some of them have been admirable painters; others have learned to perform well the duties of ordinary business—they have been good accountants and handicraftsmen. The subject of the alleged location of the powers of speech and expression by words in a particular portion of the brain has lately attracted considerable notice in France. We believe that the location of speech in the anterior lobes of the cerebrum is an assumption which does not stand the test of pathological facts; but it is certainly true that the cranial development of a large proportion of deaf mutes is below the average—a circumstance closely connected both as cause and effect with the absence of speech and hearing.

### FEVER AND SMALL-POX HOSPITALS.

THE St. Pancras guardians, roused by the death of their Senior Surgeon, Mr. Roberts, from fever, are urging upon the Government the necessity of providing more Hospital accommodation for fever and small-pox in London. A deputation from the parish had an interview with Mr. Villiers at the Poor-law Board on Monday last, the result of which was that the President acknowledged that the parochial authorities had made out a very strong case, and promised that the whole matter should receive the earnest consideration of the Board. We suppose that whatever is done will be paid for by the ratepayers of the metropolis; and we do not see why the guardians of parishes should not be bound to provide suitable Hospital accommodation, at a proper distance from the crowded populations of town, for their fever and small-pox cases. The fever-stricken poor should not be at the mercy of a charitable institution to receive or reject them according to its means of relief. The sum of 1s. a-day paid to the London Fever Hospital by the parochial authorities for every case admitted is totally inadequate to provide nursing, medicines, and nourishment; and the fact is that at present the resources of the Fever Hospital are bearing a large part of a burden which should fall on the parochial funds. Fever now is rife in St. Pancras as well as in other parts of London, and it is likely to increase whilst high prices, inclement weather, and destruction of the dwellings of the poor by railway companies continue. We are very sorry to see that a promising young Surgeon, Mr. Stuart, of University College Hospital, has fallen a victim to fever during the past week.

### FROM ABROAD.—THE OUTBREAK OF TRICHINOSIS AT HEDERSLEBEN.

THE outbreak of trichinosis at Hedersleben, of which we gave some account in our number for January 6, is of so remarkable a character that we recur to it again on the occasion of two communications just published by Drs. Rupprecht and Kratz in the Berlin *Medicinische Wochenschrift.* To Dr. Rupprecht the subject is not a new one; for he was the historian of a similar, though somewhat less formidable outbreak which occurred at Heltstadt, of which place he is a *Sanitätsrath*, or Sanitary adviser. The account he then gave was supposed by some to have been exaggerated, but the ravages of the disease, as observed at Hedersleben, surpass those observed at Heltstadt; for Dr. Rupprecht repairing there during the fourth week of the epidemic, found matters to be worse even than they had been represented. Ample investigation is likely to take place, as not only is Dr. Kratz, an enlightened Physician of the locality, preparing an elaborate report on the subject, but Virchow has sent some of his assistants to work out the details. It seems that on the second day after eating the pork about twenty of the factory hands were seized with "trichinous cholera," which, notwithstanding suspicions of its true nature expressed by Dr. Kratz, was pronounced to be true cholera. However, the discovery of trichinæ in great numbers set the matter in its proper light; but a week had been lost in treating the patients for cholera, while, owing to the cholera panic that prevailed, many of the workpeople already infected with trichinæ fled the town and perished amidst great misery, some of whom would have had a better chance of recovery had they remained in the excellent Hospital attacked to the factory. It is evident that in all similar cases early diagnosis of this diarrhœa, which sometimes only accompanies the disease, is of great importance, and Dr. Kratz reports that it may always be distinguished by its being accompanied by a peculiar muscular pain, a sense of painful distension, like muscular weariness, especially affecting the flexors of the extremities. This pain is increased on every movement, or by the slightest pressure. Appearing at so early a stage, it can only be due to reflex irritation, derivable from the innumerable trichinæ in the intestines. In the Heltstadt outbreak diarrhœa was not one of the early symptoms of the disease, and any of the muscular pains which were observed at a later period were explicable by the presence of the trichinæ. In Heltstadt, too, the first deaths did not take place until the third week, and were all due to paralysis of the respiratory organs, brought on by the migration of the trichinæ to the diaphragm and other respiratory muscles. But at Hedersleben three deaths occurred within six days after the infection, and were the consequence of widely-extended gastro-enteritis. The disease in both towns followed the eating the flesh, however prepared, the symptoms being most virulent from the chopped raw flesh. But cooking, unless very complete, affords no security, the trichinæ of the surface alone being destroyed. In Heltstadt, with about 4000 inhabitants, there occurred 158 cases with 27 deaths; while in Hedersleben, with only 2000 inhabitants, there were 309 cases with, up to the time of Dr. Rupprecht's visit, 60 deaths, and 20 more certain to follow. In one ward of the factory Hospital he found 25 patients, 18 of whom were dying. Dr. Kratz gave benzine a very complete trial, but it is very doubtful whether it proved of any utility, for it seemed to exert no effect upon the migration of the trichinæ, while these animals could be kept alive in it for several hours. Continued in large doses for some days, Dr. Rupprecht believes that it may favour the occurrence of the muscular exhaustion which is to be dreaded in the disease.

Notwithstanding the great attention which has been paid to swine since the prevalence of *trichinosis*, it has never yet been observed to spontaneously appear in these animals, although in young animals artificial infection may be produced and very severe enteritis or peritonitis result. At all events, an animal, in no wise apparently diseased itself, may convey a most fatal disease to man. Whether season or locality has anything to do with it is doubtful, for the especial prevalence of the affection hitherto observed in Saxony may be due to the great proportionate consumption of swine's flesh in that country. As to the important question of preventing the disease in future, Dr. Rupprecht sees great difficulties arising from popular ignorance and incredulity and the sinister influences of trade interests. He believes that the only security will be the official prevention of the sale of swine's flesh until this has been microscopically examined by authorised experts, and he thinks much may be done by spreading abroad popular information on the subject and generalising the use of the microscope.

Dr. Kratz, in a preliminary report upon the outbreak, states that commencing at the end of October it still remained formidable at the time of his writing, Dec. 10. It differed in several respects from other epidemics that have been recorded. Its most constant symptom at first has been the occurrence of vomiting and choleriform diarrhœa, accompanied by peculiar pains of the flexors of the extremities. Excessive sweating, sleeplessness, small and quick pulse, and great abdominal pain were other symptoms. The diarrhœa sometimes ceased spontaneously, and between the third and fifth week great oppression of the respiration set in, marked by paroxysms of intense dyspnœa, occurring chiefly at night; and when autopsies have been made in these cases abundant migration of the trichinæ into the respiratory muscles, and especially the diaphragm, was discovered. Frequently in the course of the affection there was so considerable a subsidence of the symptoms that a very favourable prognosis seemed admissible; but in many of these cases a sudden aggravation of symptoms occurred, which soon led to a fatal termination. The period of the outbreak of the disease, after eating the infected flesh, was very varied, so that the period of incubation might be said to range from two days to four weeks; individual susceptibility seeming, however, to have little to do with this, the amount of the meat eaten chiefly determining the rapidity of the supervention of the symptoms. The favourable condition of childhood is remarkable, for of more than 100 children affected none have died. This may be due to the more active condition of the alimentary canal at that age; an observation corroborated by the unfavourable results which occurred in the early cases treated by opium. Of about 350 cases from 80 to 90 had died at the date of the report, about 200 of these persons having eaten the flesh completely raw. As to the effects of benzine, Dr. Kratz reserves his final opinion, stating in the meantime that even in the large dose of one and a half ounce per diem it does no harm.

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## AFFINITIES OF THE RINDERPEST.

*(From a Provincial Physician.)*

We return to the subject of cattle plague,—a subject, indeed, which increases both in interest and importance; in interest, because of the direct proof, on the one hand, of the identity or otherwise of cattle plague and small-pox, which is now being sought throughout the country by the testing of the preservative influence of vaccination; and, on the other, because of the uncertainty which still exists as to the significance of the parasitic bodies described by Dr. Fenwick;—in importance, because the plague continues its ravages, or rather appears to be steadily on the increase.

Pending the solution of these questions, Dr. Murchison has addressed a long letter to a contemporary, in which he replies to arguments which have been advanced in this journal and elsewhere, and also points out some analogies which unquestionably exist between the two diseases. But whilst admitting that such analogies do really exist, we yet cannot but feel that the points of divergence between them are greater still, and that they are such that if they do prove to be identical we must perforce admit a far greater modifying power in differing constitution than we have hitherto been justified, by our knowledge of disease, in attributing to it. But even in the respect in which perhaps the two affections most strongly resemble one another, viz., the congestions and ecchymoses found in the mucous membranes, the condition of these parts in cases of cattle plague is by no means identical with those described by the various authors enumerated in Dr. Murchison's letter, as found in fatal cases of small-pox. For in our experience not only is the condition of the mucous membranes one rather of passive, poisoned blood congestion, than of one which can rightly be called inflammation, but there has been uniformly an absence of those products which are the ordinary indications of the existence of this morbid process.

We have seen the most copious red spottings and congestions of the trachea and bronchial tubes without any apparent (or the very slightest) hypersecretion of mucus, far less with anything like the ordinary products of inflammation of this mucous surface; and we have again and again seen the vessels of the stomach and bowels gorged with blood, even to the rupture of the capillaries and the formation of direct ecchymoses, and yet the mucous membrane has shown upon its surface nothing nearer to an inflammatory product than a somewhat copious layer of soft gelatiniform mucus. In no one case have we seen anything approaching to the distinct layers of lymph, or to the copious puriform secretion described as found upon the different mucous membranes in certain cases of small-pox.

But how, we again ask, is it possible theoretically to comprehend the identity of the two diseases, when we know that the sheep itself is liable to a disease which, from its close resemblance in many of its characters to human small-pox, veterinarians have most confidently classed with it; and yet these same sheep most readily take the cattle plague, and develope, not small-pox, but a disease with exactly the same phenomena as the beasts from which they are inoculated. Can sheep, therefore, have two forms of small-pox?

But in reference to the argument which has been urged that the skin of oxen may be of such a nature as to be unable to take on the morbid process which results in other animals in development of the ordinary small-pox eruption, we have quite recently seen a portion of the hide of a beast whose loins had been freely rubbed for some days before death with tartar emetic ointment, with the result of the development of as much diffused inflammatory redness, and of as complete, and large, and perfect pustules as could have been produced on the human skin by the application of the same substance. Inability to take on pustulating or suppurating action is therefore clearly not the reason why the eruption on the bovine skin partakes so little of the variolous character.

But, whatever may be our opinions, the sure and only test of experiment will now very soon settle this disputed but most important question. Vaccination of cows and beasts is being most extensively practised; but even on this point we would suggest that as after successful vaccination from one to three weeks must elapse from the time of exposure to the infection before the plague *could* be developed, whilst a much longer time must elapse before we could be sure of immunity, a more speedy, if not a more decisive, proof could be obtained by vaccinating a number of animals which have recovered from the disease. If only one of these developed the true vaccine disease, the point would be settled even more conclusively than by the supposed protection of many hitherto healthy animals.

With regard to the foreign bodies found overrunning the muscular system, and which have been described by Dr. Fenwick as entozoa, Dr. Cobbold has publicly called in question their animal or entozoal nature, and has written to the daily papers some letters in which he expresses his belief that they are "sacs of psorospermiæ, and, therefore, also entophyta rather than entozoa," and that "their granular contents when highly magnified resemble the non-ciliated zoospores of certain confervoid algæ."

The scientific question as to their proper classification and nomenclature is of course very interesting, and a very desirable one to determine; but when this is done, the further question still remains for solution, what is their precise signification, and what is the meaning of their presence in the flesh of the diseased oxen? We know that they are living germs, that they pervade the muscular tissue of the diseased animals, and in our present ignorance, not only of their exact meaning, but also of whence they are derived, and of what are their effects upon the living solids and fluids, it appears to us that they are likely to be just as pernicious to life, and just as likely to be the disease itself, in the case of their being of a vegetable as of an animal nature. As far as we know at present, these bodies are present in every case of cattle plague, and are absent from the flesh of healthy oxen, or if present at all are in such sparse quantity that a long search has to be made to find one. This alone is a very strong fact, and when a similar connection was found between the presence and absence of trichinæ in human muscle and somewhat similar symptoms, no difficulty was found in at once arriving at the conclusion that the presence of the trichinæ and the morbid train of symptoms called trichinosis were really cause and effect.

If these parasitic bodies should prove to be vegetable rather than animal germs, we think the fact should not be forgotten that our late long and dry summer and autumn were most prolific in all the lower forms of vegetable life, and that on the first outbreak of the cattle plague the question was seriously mooted whether it might not in some way be due to the *uredo rubigo* or red rust which infected some sorts of grass to a remarkable extent. In one of the earliest occurrences on a large scale in England of this pestilence, both amongst oxen and sheep, the grass upon which they had fed was observed to be most remarkably affected with this blight, and at that very time we directed our attention to the possibility of a connection between it and the disease, and particularly with reference to the inhalation of the spores into the lungs; but although these bodies could be readily enough traced in the mucus of the air passages of the dead animals, nothing further confirmatory of such an idea could be elicited.

Whilst waiting for the attainment of more definite knowledge, such speculations as these cannot be out of place, but rather must be of use as a means of calling attention to all the circumstances connected with the history of this formidable disease; but we would go further and say, that if by good fortune cattle plague should prove to be modified variola, the presence of these living germs must still be of the most intense significance, and it will then behove us to examine carefully into the condition of the muscular system of human subjects dead of small-pox, and if such or any analogous bodies are found to be present in them, we shall have added one further triumph to those which the microscope has already achieved, and shall have paved the way to a knowledge of specific diseases far in advance of anything we have lately dreamed as likely to be accomplished in our day. Not only so, we think it is the bounden duty of microscopic observers, as opportunities occur, to investigate the condition of the muscles in all the specific fevers, whether of such as are most closely allied in character to cattle plague, as scarlatina, or of others less nearly resembling it, but still specific, such as measles, typhoid and typhus fevers, and (dare we add?) syphilis.

In the meantime it appears to us that the following questions await a solution:—How early in cattle plague do these bodies appear in the muscles? Is their number proportioned to the intensity of the disease? Do they produce symptoms in other animals? Are they ever found in other animals which during life have been kept in fair hygienic conditions, and have appeared to be in good health? Is it possible that they can produce such effects upon the blood as to cause the escape of its colouring matter, or of this fluid itself from the containing vessels? Can they by their growth or decay produce the other phenomena of cattle plague? If the Rinderpest be a modified small-pox, have they still any direct or constant relation to it? Are they in any way related to the uredo?

## REVIEWS.

*On the Cattle Plague, or Contagious Typhus in Horned Cattle.* By H. Bourguignon, M.D. Paris, &c. London: Churchill and Sons. Pp. 379.

This book, although written in excellent English, is yet in style and composition essentially French. It has many of the excellences, a few of the eccentricities, and some of the faults which we are accustomed to look for in the literature of our lively neighbours. It appeared before the Government Commission had given the public the first fruits of their labours, and before the variola theory of the cattle plague had become the prominent scientific topic of the day. The author, however, has evidently read a great deal and has seen something of the disease on which he writes; and his work is not the less interesting that it was promulgated from a lower stage of observation than that we have now attained.

One of the faults of the book is a dogmatic assertion of unproved theories and hypotheses, as if they were established articles of orthodox scientific belief. For instance, we are told in the first page of the introduction, in reference to the antiquity of the cattle plague—an antiquity which is now admitted by all parties—"Nature did not wait until the second half of the nineteenth century to generate a new distemper. No! Nothing new has appeared for a long time in the world of space. The cosmic phenomena pursue their perpetual course, and the organic phenomena, *à fortiori*, do the same." Now we have no hesitation in saying that with regard to disease all this is utterly groundless. Was not the English sweating sickness of the Tudor age a new disease? Has it ever appeared since, or is it likely ever to appear again? Did Cortes and his companions meet with *vómito* in Mexico, or was there any tradition of it amongst the native populations? Was constitutional syphilis known before the siege of Naples and the return of Columbus? Has the black death ever appeared in an epidemic form since the fourteenth century, and is not cholera, *par excellence*, the pestilence of the nineteenth century, as plague was the pestilence of the seventeenth? We have every reason to believe that from time to time new diseases do originate, and the theory that would trace back all morbific germs or agencies to one and the same epoch of creation is neither supported by observation nor by common sense.

The author's theory of the origination of Rinderpest in Hungary and Russia is, that the disease arises amongst the cattle after bad seasons and scarcity of forage have reduced their power of resistance to infectious and contagious miasmata, which he believes emanate from the swampy soil of the Steppes. He adduces, however, no facts in proof of his assumption. We do not think that in the case of this particular disease well-fed animals resist the morbific influence better than badly fed. The cows of the London dairies were probably better fed than any store cattle in the country, and yet they fell *en masse* before the first breath of the episootic.

These are instances of the loose assertion of which we complain. There are other faults in the book, of which in our opinion a grave one is the offence against good taste which illustrates a theory of the eternity of the laws governing organic matter, and of the passive submission of matter to the laws of transformation by the Eucharistic belief of the Catholic Church.—P. 19.

We have hitherto spoken of the faults; we now turn to the more pleasant part of our duty. M. Bourguignon has given his readers an excellent summary of the history of the cattle plague, of which the most interesting passages, perhaps, are these having reference to inoculation. Inoculation was first recommended by Malcolm Flemming, in 1755, and afterwards by Layard, in 1757. The possibility of transmitting the disease by inoculation had been established in Holland in 1754, where seventeen animals were inoculated with the morbid secretions discharged from the eyes and nostrils of diseased beasts. That inoculation could be a means of controlling the disease seems, however, to have first suggested itself to the mind of Flemming, who, however, did not himself submit his notion to the test of experiment. Layard gives minute directions for the performance of the operation, and the management of the animals before and afterwards. He recommends that the incisions should not be made near vital parts, but on the shoulders or buttocks. "In the incision is to be put a dossil or pledget of tow, dipped in the matter of a boil full ripe, opened in the back of a young calf recovering from the distemper." The tow was to remain in the wound for forty-eight hours. "On the third day after inoculation, the discolouring of the wound, whose lips appear grey and swollen, will be a sign that the inoculation has succeeded; but the beasts, as Professor Swenke" (the Dutch Physician) "informs us, did not fall ill till the sixth day, which," he adds—evidently recognising an analogy between cattle plague and small pox, "*answers exactly to the observations daily made in the inoculating of children.*" Layard's recommendations, however, were made at the end of the epizootic, and it does not appear that they led to any good result; and the practice of inoculation seems to have been forgotten until it was adopted by the Russian Government in 1853. Of their experiments we quote M. Bourguignon's account:—

"The first experiments in the inoculation of *Tchouma*, or cattle typhus, were made in the year 1853, by order of the Government, in the neighbourhood of Odessa, at the Heridin Farm, by Professor Jessen.

"The first inoculative attempts were very fatal; they caused the death of all the inoculated animals. But it was soon perceived that these grievous results, far from prejudicing the theory, really confirmed it; and that the virus, attenuated in its toxical properties, would prove as effectual as was expected. And truly, in 1854 and 1855, at the Dorpat establishment, the inoculations made with a better selected virus afforded results less disastrous. At Kozau they were still more satisfactory. In fine, passing from experiment to experiment, they arrived at the conclusion that it was necessary to inoculate several heads of cattle, the one after the other, without having recourse to any other virus than the first inoculated, so that they might thereby obtain virus of the second, third, fourth, fifth, and up to the tenth generation. The virus thus attenuated in its morbid effects answered at length every experiment, and oxen thus inoculated could mingle with impunity with diseased cattle.

"At the veterinary establishment of Chalkoff, they inoculated, during eight meetings, 1059 animals with virus of the third generation, and the results were as satisfactory as could be wished for, only sixty animals having sunk under the effects of this preventive operation."

If Rinderpest, small pox, and vaccinia be one and the same disease, it is marvellous that the fact was not discovered during these repeated experiments. It is almost inconceivable that after successive generations of the poison had been propagated, its virulence diminishing with each inoculation, no case has been recorded which assumed the well-known benign characters of cow-pox. Nor on the other hand, that any accident should have led to the suspicion that the operators were working with a virus which was capable of producing in man one of the best known of human diseases. It is, however, useless to argue on an open question which must ere long be completely cleared up by experiment. On any showing it is clear that there is a close affinity between the diseases in question, but as far as evidence at present goes, we think it in favour of there also being some specific difference. Here we must stop—not, however, before saying that, besides the excellent historical account from which we have quoted, M. Bourguignon's work contains much of interest on the production of episootic and epidemic diseases; some account of an admirable series of experiments conducted by the author, which establish the influence of deprivation of nourishment as a cause of parasitic diseases in the lower animals, and much besides of pathological and social interest. We entirely concur with the author that a study of the diseases of animals and plants should be made a part of general Medical training, although we are not sanguine enough to expect that his project of a College of Natural and Medical Science, to be founded at an outlay of £100,000 or £200,000, as a means of teaching comparative pathology will be realised in the present generation.

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*The Malformations, Diseases, and Injuries of the Fingers and Toes, and their Surgical Treatment.* By THOMAS ANNANDALE, F.R.C.S. Edin., Lecturer on Surgery, Assistant-Surgeon to the Edinburgh Royal Infirmary. Edinburgh: Edmonston and Douglas. Pp. 285. Plates.

THIS volume is the embodiment of the essay submitted to the College of Surgeons of London in December, 1864, in competition for the Jacksonian Prize, which was awarded to it this year. Many additional facts and cases have since been added, and it has attained to a work of considerable size. The author in his preface states that he has been encouraged to present it to the public owing to the want of any book treating specially on these diseases. The work is divided into seven chapters, commencing with 1, Congenital Affections of the Digits; 2, Inflammatory Diseases of the Digits; 3, Tumours of the Digits; 4, Injuries of the Digits; 5, Non-Congenital Contractions and Distortions; 6, Excisions of the Joints and Bones of the Digits; and, lastly, Amputation of the Fingers and Toes.

In the first chapter, on congenital affections, speaking of hypertrophied digits, Mr. Annandale recommends amputation of the distorted organs, provided without injury to the remaining members, as pressure does not always produce satisfactory results. The same method of treatment being applicable to deficiencies or abortive development, supernumerary digits should be removed, unless possessing metacarpal or metatarsal bones of their own, as these have usually independent and useful motions. Webbed fingers are treated on the plan mentioned by Liston, of perforating the root of the web, introducing a foreign body, such as a piece of indiarubber, retaining it till the wound has healed, and then dividing up the remaining portion of it.

The remaining sections relate to contractions and tumours. An immense number of cases and sketches of most curious malformations have been brought together; and the various ingenious methods of treatment adopted will be of great service, as hints in similar cases, which, however, are comparatively rare in general Surgery.

Some slight sketch of development might have been added with advantage to the first chapter. The author gives a case of "intra-uterine amputation with abortive digits springing from the stump." The existence of this state of things we think hardly sufficiently established to warrant its being beyond a doubt.

In our estimation, by far the most important part of the volume is the second chapter, "On the Inflammatory Diseases of the Digits," as these are of daily occurrence, and very frequently, through negligence on the part of the patient, or carelessness on the part of the Surgeon, fingers or toes become useless or have to be removed, where they might have been saved by proper management—in such cases, for instance, as whitlow, or onychia.

Mr. Annandale mentions an interesting fact with regard to whitlow which has not been generally noticed by other writers on the subject—viz., "that whitlow attacking the first and second phalanges usually recovers under proper treatment, without the slightest extension of the inflammation to the deeper textures; while the same form of inflammation, treated in the same manner, and at as early a stage, when it affects the extremity of a finger, is not unfrequently followed by the destruction of the tendon or bone. . . . A proof that the fibrous sheath resists the extension of the inflammation from the more superficial tissues." The application of nitrate of silver is recommended in the early stage of this disease, and to make a free incision, even before suppuration can be detected.

In the two following chapters, on (1) Tumours and (2) Injuries of the Digits, nothing of any importance, beyond a few interesting cases, can be gathered. Some hints on the present absurd fashion of tight boots, in the following chapter on "Non-congenital Distortions of the Digits," would do well to be more acted on, in saving the hideous distortions of the feet so commonly seen.

The treatment by excision of the joints of the digits either for injuries or disease, we think should be more frequently adopted than it is, as it often happens that what might turn out a useful finger is condemned and lost. The metacarpal or metatarsal bones of the thumb, index finger, or great toe seem most suitable for this treatment. The last chapter contains some useful hints on the method of performing the various amputations which may be required.

The work, which was originally merely a prize essay, has swollen into a considerable volume, and of course a great deal has been said about a comparatively minor subject.

But as a treatise it shows a considerable amount of research and hard work, in bringing facts to bear upon the subject. The plates, which are twelve in number, are good. But the same remark applies here as in many instances, that they should be interpolated amongst the letterpress, as a great deal of unnecessary trouble in alluding to them would be avoided.

As a book of reference we can recommend it to those who desire further information on this subject than is to be found in the ordinary text-books on Surgery.

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*The Ophthalmic Review.* A Quarterly Journal of Ophthalmic Surgery and Science. Edited by J. Zachariah Laurence, of London, and Thomas Windsor, of Manchester. No. 7. 1865.

This is one of the ablest reviews of the day. The article, "Hints on Cataract Glasses," by Dr. Mackenzie, of Glasgow, contains the results of many years' scientific research, and abounds in valuable practical instruction. For ordinary cases Dr. Mackenzie prefers plano-convex to bi-convex lenses; he considers that they are generally made unnecessarily large and heavy, and that they ought not to exceed three-quarters of an inch in diameter; he mentions the singular case of the late Professor of Music in Edinburgh, who, after the extraction of a cataractous lens, retained an amount of accommodative power which is not readily explicable by the generally received theories on this subject. We have next the commencement of a series of clinical lectures by Professor Von Gräfe, on "Amblyopia and Amaurosis." This eminent Surgeon does not express his views in very lucid language. These lectures demand very close attention; but we need scarcely say that they will amply repay any amount of labour that may be bestowed on them. Professor Von Hasner contributes a paper on "Cancer of the Eye and of its Appendages." It is chiefly statistical, and gives an analysis of 156 cases which have come under his observation during the last eight years. In addition to these papers there is much other valuable matter in the form of Hospital reports, reviews, &c.; but we would especially call attention to the "Retrospect of British and Foreign Medical Journals," by Mr. Windsor, as containing notices of everything of importance that has been written on Opthalmic subjects during the last quarter. This will be of great convenience, and will save much time and labour to students of this branch of Surgery.

We heartily wish success to the *Ophthalmic Review.* It cannot fail to attain it so long as it is conducted as it has hitherto been.

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*On Long, Short, and Weak Sight, and their Treatment by the Scientific Use of Spectacles.* By J. Soelberg Wells, Ophthalmic Surgeon to, and Lecturer on Ophthalmic Surgery at, the Middlesex Hospital. Second edition.

The subject of which this book treats is one of great importance, and one on which every Practitioner is liable to be consulted; and yet we believe it to be only too true that the safe and scientific treatment of defective vision by means of spectacles is very little understood, and that their selection and adaptation are in the great majority of instances left to the optician. To those who are desirous of having a sound, practical knowledge of the subject, we would confidently recommend Mr. Wells's book. It is a careful and accurate exposition of the views of the most recent investigators, among whom may be especially mentioned Professors von Graefe and Donders, and it is written with a clearness and simplicity which renders it easily comprehensible even by those who are not deeply versed in optical science; and it contains a fund of useful and practical information, which cannot fail to prove of the greatest value.

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*Elements of Physics or Natural Philosophy; written for General Use in Non-technical Language.* By Neil Arnott, M.D., F.R.S., etc. Sixth and completed edition. Part II. London: Longmans. 1865.

This second part of Arnott's "Elements of Physics" includes the sections on Heat, Light, Electricity, and Astronomy, with an appendix on the art of measuring or geometry, and a popular view of arithmetic and mathematics. There is a charm in this work, depending on the simplicity with which the principles are laid before the reader, and the enthusiasm which pervades the author's exposition of the wonders of nature, which render it extremely popular with all persons who have not received a rigorously scientific education. In this edition some account is given of the most modern doctrines of heat and its equivalents in other forms of force.

## PROVINCIAL CORRESPONDENCE.

### SCOTLAND.

(*From an Edinburgh Correspondent.*)

Edinburgh, January 13, 1866.

We are very much amused here by a curious trap into which your contemporary, the *Lancet*, has fallen, and about which, I am sure, a considerable amount of soreness will be felt when the truth is known.

In a recent number the *Lancet* admitted to its columns a correspondent who signed himself "H.," about a new remedy for rheumatism, neuralgia, lumbago, sciatica, toothache, and kindred affections, which goes by the name of "Erskine's Brahee Sugar." This letter, or abstracts from it, has been copied into nearly all the dailies, and has created an immense sensation. The demand for the Brahee sugar is immense; and to-day, being in Duncan and Flockhart's, I had the curiosity to ask to see it, and was rather surprised on being presented with a small packet, round which was a stamp of some kind, and for which the modest sum of two shillings and ninepence was asked. The thing looked suspicious, and I would have nothing to do with it. I had not left the shop many minutes when I met a friend with whom I commenced a conversation about this packet, and to my horror he gave me the following information:—The *Lancet's* correspondent, "H.," is said to be brother to a well-known homœopathic practitioner, and this gentleman is said to be supplying the trade with packets of the Brahee sugar. My friend had seen a packet opened, and told me that it contained some small powders made up of what he believed to be sugar of milk—in fact, that the whole thing is probably a piece of homœopathy. I have now before me the bill which accompanies the packet, and it certainly has a very quackish appearance; while it states that this substance is prepared under *Medical authority*. Query, whose? "Of this remedy," continues the red bill, "a *writer* in the *Lancet*, the leading Medical journal, says—" etc.; "and the following were among the cases reported in the *Lancet*:—" and there is an abundance of the ordinary "*extraordinary cures!!*" Is this *writer* not also the author of the red bill, and can he give an account of his Brahee sugar (of milk) that will satisfy the Medical Profession that it is not a homœopathic humbug? In the meantime, let me caution the Medical Profession and the public not to invest two and ninepence in this suspicious article till they know more about it.

I notice in your columns of to-day a letter from Dr. John Brown; but surely "Randolph" had better have withheld his pen from paper when he began to write such an epistle. Either Dr. Brown must have forgotten Mr. Syme's appearance on the day of public execution, or he must have seen with jaundiced eyes; for other spectators beheld Mr. Syme with a very red face, and evidently in a huge passion, and presenting the very reverse of a cool demeanour; while the story of the quack and the flea powder is fresh in the minds of some, though the author of "Rab" may have forgotten it. Mr. Syme's two or three abortive attempts to rend the pamphlet in twain are trifles, and his final consignment of his opponent's broken arguments to the blood-box, are scarcely to be mentioned after his gloating letter over the hideous scene of a *public execution*.

The recently conferred baronetcy of which we are so proud here has been deprived of all the pleasure which its noble recipient might have expected, by the rude and sudden hand of Death; his eldest son has just died, cut off

> "In the very May-morn of his youth,
> Ripe for exploits and mighty enterprises."

He had graduated but little more than two years, and had already distinguished himself both in the practice and in the literature of his Profession. He had endeared himself to a large circle of friends, and to many of his old college companions he was far more than a mere friend. He had that rare power of winning the regard, almost the affections, of every one who knew him; while his gentlemanly, kind, and sympathising manner towards his patients rendered him an invaluable assistant to his father. As a public speaker his abilities were of a high order, and in the debates of our junior Medical societies he always took a distinguished part. Through his entire character ran a vein of deep humour, which he derived from his father, and which, when occasion required, became the most pungent satire. Even had he not been the son of Sir James Young Simpson, Davie had the talents, the genius, the enterprise, and industry which would have placed him high in his Profession.

> "To live in hearts we leave behind
> Is not to die."

and assuredly he will have a corner in the memories of many more than the writer of this.

> "Mortalitate relicta, vivit immortalitate indutus."

## GENERAL CORRESPONDENCE.

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### THE ERUPTION OF THE RINDERPEST.

LETTER FROM DR. TILBURY FOX.

[To the Editor of the Medical Times and Gazette.]

SIR,—The chief reason for refusing to allow the identity of small-pox and cattle plague is based not upon any apparent contradiction in the general outline and aspect of the two diseases, but upon the differences of eruption in the two cases. Perhaps it may help towards the solution of doubt to direct attention to the very wide range which is often exhibited by the manifestations of variolous eruption in man. As in all other instances, the typical features become strangely modified at times. In ordinary variola we notice a series of transitional stages before the full bloom of the pustular stage—erythema, papulation, vesiculation, etc. Now it would seem, from clinical observation, that any one of these stages may be the sole representative occasionally of the small-pox eruption, and this result is brought about by abortive development or modifying influences, such as vaccination. In 1864, in the *British Medical Journal*, I called attention to an epidemic which I witnessed amongst the patients of the Farringdon Dispensary, and which generally, as the average condition, assumed the form of large flattened bullæ, containing just such a pellet of lymph as is seen in variola. In addition, there were greater and lesser degrees of expression; in some instances appearances exactly resembling variola, in others "bastard vaccinia," in others modified impetigo were observed. I showed that the disease was inoculable, depending upon some specific poison, and argued out the connexion between variola and this disease, which I termed impetigo contagiosa, called attention to the implication of the mucous surfaces, its analogical relations (as exhibited by the experiments of French observers with the grease and aphthous stomatitis of horses), its diagnosis from other diseases (especially furunculoid, referred to by Mr. Gamgee), its rarity at certain periods, and frequent disappearance for years together.

It appears to me that the doctrine of polymorphism, best illustrated by the recent remarkable researches of Tulasne on the coniomycetous fungi, is exemplified by the case of small-pox in an eminent degree; that the results at which I was compelled to arrive (long before any idea of Rinderpest visited us) in regard to the epidemic of contagious impetigo—and I saw a very large number of cases and made many experiments with my colleagues—show how impossible it is to find any objection to the identity of Rinderpest and variola from the differences in the mere aspect of the eruptions; and conversely it appears that my position taken in reference to the nature of I. contagiosa is peculiarly supported by some of the facts which have recently been brought to light in the matter of variola and Rinderpest.

I am, &c. TILBURY FOX.

43, Sackville-street, Piccadilly, W., January 14.

### RINDERPEST AND VARIOLA.

LETTER FROM MR. F. CROOK.

[To the Editor of the Medical Times and Gazette.]

SIR,—I have delayed answering your note until I had further satisfied myself by some experiments with the lymph. I have been for some time past considering the nature of the cattle disease, and must confess my opinion lay between malignant typhus fever or small-pox; but the result of later investigations have proved to me that it is small-pox only. For further proof of this assertion I am willing to supply the animal which I shall vaccinate at a market price, that she might be sent into the district where the plague is most prevalent, and I am certain she will come out safe.

I have been asked how it is that the Profession have not found out the nature of the complaint. In reply I say that it is new to us; animals have not been subject to its ravages, consequently science has not been called into requisition upon it.

Again, it is asked, if it is small-pox, how is it other animals have not been attacked? To this I reply that animals of a different species are rarely if ever subject to the effects of a disease, be it ever so contagious, provided they are not inoculated, which the other species may be suffering from. As a preventive to a further spread of the Rinderpest, I recommend instant vaccination of every head of cattle, including sheep, and most particularly deer, which are the nearest allied to our cattle species.

I am, &c.

Vine Cottage, Forest-hill, January 9. F. CROOK.

### THE SMALL-POX HYPOTHESIS OF THE CATTLE PLAGUE.

LETTER FROM DR. JOHN FAIRMANN.

[To the Editor of the Medical Times and Gazette.]

SIR,—It is a rather difficult matter to get hold of reliable and relevant facts generally, and the present instance is no exception. I am now endeavouring to obtain all the information I can in continuation of the principle involved in my last communication to you; and meantime it may be interesting to know that there have been fifteen cases in all attacked by the plague in that herd I referred to in my last communication as having had the cow-pox extensively among them; five of these are dead, one has recovered, and nine remain under such treatment as seems the most promising. I am informed by a letter yesterday that "more than one-half that are now ill and dead had cow-pox last summer."

It would help most materially to arrive at some certainty as to the nature of the disease if information could be got on this point—whether, where cow-pox has prevailed, vaccinated animals have hitherto escaped the plague; while others, not having had the cow-pox, but in close neighbourhood to the former, have been fatally or otherwise attacked. Any information on this point sent to my address would be esteemed. This is purely a scientific question, primarily, and to be determined by unprejudiced observation and truthful experiment.

I am, &c.
John Fairmann, L.R.C.P. Edin., etc.
Staffordshire, Hanley, January 17.

## CHLORODYNE AND THE PHARMACOPŒIA.

Letter from Mr. W. B. Kesteven.

[To the Editor of the Medical Times and Gazette.]

Sir,—May I be permitted to offer a few remarks upon your leader of the current week, entitled "Chlorodyne and the Pharmacopœia?" I am not ashamed to own that I am one of those "many orthodox Practitioners" by whom chlorodyne is prescribed (without reference, be it observed, to its "funny" name). I prescribe it because, as you observe yourself, it "supplies a want;" because it is a compound which practically is in many cases of great service where simple opium, or morphia, have been found to be the reverse of serviceable.

I protest against the imputation that in using this compound, or its imitations, we are allowing a "secret remedy to creep into use." Your own words convey a refutation of the charge, when you tell us that the ingredients are well known, and yourself enumerate these.

That you "have never prescribed it, and never shall," is perhaps to be regretted, as you would otherwise have learnt "its virtues," and would have afforded to suffering a relief not so surely to be obtained from other means. For example, I have to-day prescribed it with complete satisfaction and success in a case wherein a "bumper of Burgundy" would have been strangely out of place, and likely to have done more harm than good.

That chlorodyne and its imitations are compounds affords no argument against their value; for, to adopt your own allusion to domestic or culinary matters, "the proof of the *pudding* is in the eating;" and so, in like manner, the value of a medicine is estimated by its effects.

I respectfully submit, Sir that for myself, as I believe also I may say for others, that with as cordial a hatred of quackery as animates yourself, I have prescribed chlorodyne and its imitations, and hope to continue to do so without the least scruple of conscience arising out of the supposition of its being a secret remedy, seeing that, although not mentioned in the Pharmacopœia, I know its principal ingredients.

I am, &c.,
W. B. Kesteven, F.R.C.S.
Upper Holloway, January 17.

# REPORTS OF SOCIETIES.

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## ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, January 9.

Dr. Alderson, F.R.S., President.

A paper, by **Richard Barwell**, F.R.C.S., was read on

### CERTAIN PRACTICAL POINTS IN THE PATHOLOGY AND TREATMENT OF LATERAL CURVATURE OF THE SPINE.

Certain cases under the care of, and certain investigations undertaken by, the author, led him to perceive that the lateral flexibility and rotatory power of the spine during movement of the limbs had not received sufficient attention either in a physiological or curative point of view. The results of his experiments may be thus briefly stated:—The act of walking produces serpentine undulations of the spine. When the weight is on the left leg, and the right behind about to be lifted from the ground, the lumbar spine curves to the right, and the dorsal to the left. In bringing the right leg forward, the column straightens; and, when that foot is put down, the curve reverses, again becomes straight as the left foot is brought forward and so on. Some peculiarities of these inflexions induced the author to extend the number of his observations on living persons. The lateral movements of the spine, as above described, were found constant in character, various in amount, and with each lateral bend a commensurate amount of rotation takes place. The spinous processes always incline towards, the front of the vertebræ from, the chord of curvature. In fact, Mr. Barwell declares the spine incapable of assuming a lateral bend without at the same time undergoing rotation, which although, perhaps, in part due to the reasons given by Shaw, the sideways distribution of the weight, is also caused by the lateral and posterior position of the forces which bend the spine, and more especially by the action of the semispinalis dorsi and rotatores spinæ muscles. To ascertain the amount of rotation of which the spine is normally capable, the average of ten experiments was taken. The normal rotation average was 43° 17′; the largest amount just over 49°. Movement and weight-bearing with the arms also produce a certain amount of lateral flexion, whose object is twofold—fixation of the spine as a sure basis of action for the shoulder, and balance and economy of power. This flexion is not produced by direct action of the muscles passing between spine and scapula, but by the spinal muscles proper on the opposite side. Thus the column is constantly bending laterally and rotating. These positions are, therefore, not in themselves abnormal, but may become morbid either by fixity or amount. A posture much beyond what the spine can normally assume may, nevertheless, be simply due to muscular action on the one side, inaction on the other; but such cases will (unless treated) overstep the limits of any posture muscular force can produce, and are then due also to some external agency—weight, relaxation of ligament, alteration of bone-surface, etc. But these organic changes are always secondary. Want of balance between muscular forces, either by redundancy or deficiency, is the primary and efficient cause of lateral curvature; and our treatment must be directed to restoration of balance. The mere transference of a weight always carried on one arm to the other side, will not merely be inefficient, but often injurious; so also are many of the exercises prescribed for the left arm. The author, taking advantage of the necessity of balance, and the consequent normal tendency to form double curves, throws the spinal column out of its abnormal balance and rest on the ligaments by causing the pelvis to slope downwards from left to right, thereby necessitating a lumbar curve to the right, a position which, if carefully watched, cannot be long maintained without producing a contrary curve in the dorsal region. Thus in both parts of the spine a posture the reverse of the abnormal is enforced, not by machinery, but by muscular action. Several exercises are used by the author. A few are described as most potent: 1st. The sloping seat, with a fall commencing at an inch and a half in the foot, used for a quarter of an hour thrice a day. 2nd. Lateral gyration of the body, in strict measure, with the back against the wall, the pelvis sloped by a block under the left foot. 3rd. The patient, standing with the feet together, knees straight, a block under the left foot, lifts the left hand over the head, and in it is placed a spring attached above and to the right side. This is extremely potent, and requires careful watching. Certain other contrivances—viz., a thicker sole to the left boot, weighting the right leg and left arm, are used only late in treatment. Against rotation, the following exercise is used:—The patient, standing with the right shoulder about three inches from the wall, lifts the left hand over the head, and leans over till it comes against the wall, and supports some of the weight. She then, with the feet together, passes the head and right shoulder under the left forearm, and tries to see as much as possible behind the left shoulder. All these exercises must be used with caution and in order generally as above given, though variations may occur for particular cases. After each, horizontal repose is to be enforced. In all but very slight cases, these exercises will not suffice without some form of support. The machine commonly called a spinal support is false in principle, aiming at superseding muscular action, thereby weakening the muscles: moreover, it is clumsy, heavy, and barbarous. If it fulfilled its office of keeping pelvis, spine, and shoulder stiff and immovable, it would be unbearable; not fulfilling its office, it is merely irksome and inefficient. A patient with moderate curvature can be straightened by placing one hand on the point of greatest dorsal excurvation, the other in the opposite axilla, and pressing in contrary directions. The bandage invented by Mr. Barwell is so contrived as to prolong this action in the same directions. It consists of webbing straps secured to the pelvis, to the right side below the point of greatest curve, and to the left shoulder. In certain parts of the webbing, strong india-rubber springs are placed in such wise that the forces act from the pelvis, exactly in the directions of greatest mechanical advantage, such as in practice are found most efficacious in straightening crooked spines. By placing the pad at the right side, a little posteriorly, much power may be exercised on the rotation. The construction of the bandage is such that there is no tendency to flatten the ribs against the spine. The whole apparatus weighs but a few ounces, is worn with ease and relief, and is very efficacious. By means of the exercises above described and the bandage, the action of them being rigidly under surveillance, the author has been very successful in the treatment of even advanced curvatures, as is shown by the appended cases.

The PRESIDENT said that many present would be able to give opinions as to the author's able and interesting paper. He remarked that if such papers were not well received by Medical societies, they would be read at societies for general sciences. For his part, he had an aversion to mechanical restraints. If girls were brought up as boys are, there would be fewer curved spines. The President then spoke on the bearing of mathematics on the subject, and said it was one dangerous to touch without a knowledge of the higher branches of mathematics. He spoke also of the risk of damaging the pelvis in trying to remove the curvature of the spine.

Mr. WM. ADAMS was glad that the subject of lateral curvature of the spine had been brought before this Society, as there were so many members present who could contribute to its elucidation. He had listened with attention to the paper in the expectation of hearing some new pathological facts, or some new theory of the production of lateral curvature, or some new system of treatment; but in all these respects he had been disappointed. Mr. Barwell had relied upon physiological experiments and observations upon the production of curvature in certain attitudes; but all that he had said upon these subjects had been long since brought before the Profession in the very excellent treatise by Mr. Bishop, who had thoroughly investigated the subject from a mechanical and physiological point of view. Mr. Adams was glad to hear Mr. Barwell assert that the spine is incapable of undergoing any amount of lateral curvature without rotation of the bodies of the vertebræ, as this led him to the point he had long endeavoured to insist upon—viz., that rotation of the bodies of the vertebræ always accompanies and, he believes, precedes lateral deviation of the spine. For the diagnosis of this condition, Mr. Adams relied upon the posterior projection of the angles of the ribs in the dorsal region, and the posterior projection of the transverse processes in the lumbar region, rather than upon any lateral deviation of the spinous processes. Mr. Adams believed that no lateral curvature, as judged of by these conditions, however slight, could exist without structural changes affecting the intervertebral cartilages and the oblique articular processes—in fact, that these conditions formed the diagnosis between functional and structural deviations, and practically constituted the broad line, on either side of which our treatment would differ. Previous to these structural changes, we might rely upon gymnastics and partial recumbency, and after these changes in the transverse relations of the angles of the ribs in the dorsal region, or the transverse processes in the lumbar region, we must rely upon firm mechanical support with partial recumbency. The result of Mr. Adams' experience had been to convince him that where lateral curvature of the spine existed in any marked degree, and before it amounted to an external deformity, it was essentially an incurable affection by any and every method of treatment. Mr. Adams did not believe that the structural changes which existed in confirmed lateral curvature admitted of removal, or repair, so as to allow of the affection being cured, unless the case were treated in the earliest stage, and with youth and growth in its favour. It was only in the slightest cases that we could hope to produce a cure. In severe cases of spinal deformity all the Profession were agreed in recommending mechanical supports as the only system affording relief and comfort to the patient. Sir Astley Cooper and Sir Benjamin Brodie always sent such cases to the instrument makers; but in the treatment of the slighter forms of curvature the greatest difference of opinion had always and still existed. Mr. Adams thought that attention to the diagnostic indications between structural and functional affections upon which he had insisted, would lead to the treatment being determined either in favour of gymnastics or mechanical support; but the curability of any particular case must rest upon the evidence of the existence of structural changes. Mr. Adams believed that further experience would convince Mr. Barwell that the employment of elastic force, such as he now recommended, by means of straps, would be quite useless where actual curvature existed; and that either to arrest the increase of curvature or to produce such improvement as the cases admitted of, it was indispensably necessary to use firm mechanical supports.

Mr. BRODHURST remarked that Mr. Barwell had given no idea of the amount of curvature in the cases he had treated. He wished to ask Mr. Barwell if the curvature were slight or severe, commencing or confirmed. He (Mr. Brodhurst) had made many experiments, and had found that when rotation had taken place appliances were useless. He was surprised, too, that Mr. Barwell should have obtained such results from such a bandage. It had been given up in France. He (Mr. Brodhurst) had brought it over from that country in 1851, and had found it fail wherever there was anything like a fixed curve. Mr. Barwell had not told the Society of the nature of his cases, either by description or by photographs, and, as he appeared to have made his experiments on healthy and vigorous persons, he might have arrived at the results he had announced. If he were to try his plan on severe cases of curvature, the trials would not justify his conclusions. Sir Benjamin Brodie had tried a similar method in early life, but had given it up, and had acknowledged that recourse must be had to mechanism when rotation had been established.

Mr. NAYLER stated that he should wish to ask Mr. Barwell how he proposed treating certain forms of lateral curvature, whether by the method just described or not; for example, the lateral curvature which is sometimes seen in young children, in whom it has existed from birth. Again, in older patients the septem of two curves is occasionally so abrupt as to constitute an angle rather than a curve, or there may be three curves, and the superior one situated in the neck; and lastly, he wished to ask how he would treat lateral combined with posterior curvature. There is this objection to the employment of muscular exercises as set forth by Mr. Barwell, that we cannot so accurately or nicely regulate them as to prevent their action on the convex as well as the concave part of the curve; and when this takes place the only possible consequence is an increase of the deformity. One essential condition in the treatment of lateral curvature had been completely overlooked by Mr. Barwell—viz., the removal of the superincumbent weight of the head and shoulders by means of the pelvic instrument, provided with a double crutch. Another point is, to have the pressure properly applied to, and constant in its action on, the weaker part of the curve. Mr. Nayler was greatly surprised to hear Mr. Adams say that lateral curvatures are, as a class, incurable. It was only when attended by certain complications, as when the ribs projected posteriorly, that our means were limited to prevent the deformity from becoming more aggravated. In other instances, and especially in early life, a favourable opinion as to recovery might be given.

Mr. BARWELL thanked the President for his kind remarks. It appeared to him strange that Mr. Adams should be disappointed with the amount of novelty in this paper, for the experiments concerning lateral and rotatory movement of the spine during walking, those fixing the amount of normal rotation permitted by the column, the whole plan of treatment by throwing the spine out of its morbid balance on the ligaments, and other points, were new. He was sorry to hear from Mr. Adams that his experience caused him to look upon lateral curvature as utterly incurable; yet the enunciation of that opinion only confirmed Mr. Barwell in his conviction that the mode of treatment at present in vogue was quite inefficacious—a conviction which had led him to make the above experiments and to devise a better method. The results did not lead him to the same sad conclusion as that to which Mr. Adams had come. The author was surprised to hear from Mr. Brodhurst that a belt similar to his own had been made in Paris, because no mention of such could be found in any one of the many French, German, or Italian writers on spinal curvature, and its construction was the result of entirely independent thought; but Mr. Barwell could well believe it must be ineffective if tried alone, for it is not intended to be so used. The oblique bandage is an adjuvant—a very valuable, indeed a necessary, adjuvant to his method of exercising the spinal muscles when thrown by the position he enforces out of their abnormal posture of repose. Finally, Mr. Barwell showed some photographs from severe cases of curvature, dorsal and lumbar, some of which were cured, others in the course of improvement.

# THE PATHOLOGICAL SOCIETY.

TUESDAY, DECEMBER 19.

DR. PEACOCK, President.

Mr. HEATH and Mr. Thomas Smith were appointed a committee to examine further Mr. Gay's case of glandular disease exhibited on the previous meeting.

Dr. Duffin and Dr. Dudfield were nominated auditors.

Dr. MORELL MACKENZIE exhibited a specimen of

### COMPLETE ATROPHY OF THE LEFT CRICO-ARYTÆNOIDEUS POSTICUS MUSCLE,

which he had diagnosed, by the aid of the laryngoscope, eighteen months before death. The patient had applied to Dr. Mackenzie in May, 1864, on account of hoarseness and shortness of breath. With the laryngoscope it was seen that, on inspiration, the left vocal cord was not drawn back, but remained in a nearly central position. It was therefore presumed that there was pressure on the left recurrent nerve from a tumour near the arch of the aorta. No evidence of an aneurism could be discovered, but at a later period a hard, nodulated tumour was felt, and seen projecting just above the sternal notch. Dr. Herbert Davies was kind enough to admit the patient into the London Hospital, and afterwards he was taken in by Dr. Parker. At the post-mortem a cancerous growth was found incorporating and completely destroying the left recurrent nerve. The growth appeared to have originated in the thyroid gland, to have penetrated the trachea, and to have grown right across that tube into the œsophagus. In the specimen exhibited the right crico-arytenoïdeus posticus was seen to be large and well nourished, whilst there were only a few fibres of the left muscle.

### FRAGMENTS OF A GROWTH REMOVED FROM THE LARYNX.

Dr. MORELL MACKENZIE also exhibited some Fragments of a Growth which he had removed from the larynx of a boy, aged 12, who had suffered from loss of voice for more than seven years. The growth was attached beneath the anterior insertion of the cords and along the anterior half of the right cord. Mr. Mason had examined the case at the commencement and at the termination of the series of operations, which resulted in the entire removal of the growth. Dr. Andrew Clark, who had made an examination of the particles, considered that the growth was likely to return.

Mr. BRYANT exhibited

### AN HYDATID CYST DEVELOPED BETWEEN THE RECTUM AND THE BLADDER,

and causing retention of urine and constipation, on which he had operated.

The particulars of the case have been already published.

Mr. BARWELL inquired whether in such a case, the symptoms not being urgent, it would not be better to abstain from operation.

Mr. BRYANT explained that interference was urgently needed, and that all other methods had been tried in vain.

Mr. HEATH asked whether the general treatment of hydatid tumours—that of making a small puncture and suffering the fluid to drain away—might not have been better in this case than by a free incision to set up so large a suppurating cavity.

Mr. BRYANT said he was compelled to enlarge the puncture made by the trocar, because it became continually blocked up by the masses of small hydatids, though these were again and again removed. Not more than a table spoonful of fluid was obtained by the trocar. The opening he made did not exceed an inch and a half in length.

Mr. HUTCHINSON mentioned a somewhat parallel case occurring under the care of a colleague at the London Hospital as illustrating the importance of not deferring operative interference too long. A young man was admitted *in extremis* from retention of urine, very many ineffectual attempts to pass the catheter having been made. An hydatid cyst was found, which had been developed between the bladder and rectum, and pushed the former (as in Mr. Bryant's case) quite out of the pelvis. It was punctured, but the patient sank in three hours.

Dr. C. HILTON FAGGE exhibited hearts showing

### DEPOSITS ON THE VALVES IN PYÆMIA.

The hearts had been taken from patients after death from pyæmia, in which there were deposits of granules on the auricular edge of the mitral valve. These deposits resembled very closely those constantly found in cases of chorea. The preparations were taken from surgical patients at Guy's, in both of whom primary amputations had been performed—in the one case the forearm, in the other the leg, having been removed. The first symptoms of pyæmia came on in one patient on the fourteenth, in the other on the seventeenth day after the amputation; and death followed on the ninth and on the eighth day after the commencement of that disease. The post-mortem appearances were well marked, abscesses in the liver being found in each case, as well as commencing disease of the spleen and other organs. With the exception of the deposits on the mitral valve, the heart was in each patient healthy, and the pericardium was also free from disease. The granules of lymph on the mitral valve were quite soft; and although it was not known that these persons had not suffered from rheumatism, still there was no reason to doubt that the deposits on the valve were due to the pyæmia, as the appearances did not resemble those of old rheumatic disease.

Dr. FAGGE added that it was well known that endocarditis may accompany muscular disease of the heart in pyæmia; and he showed a third preparation, taken from a patient of Dr. Barlow, in whom this had been the case. The patient was admitted into Guy's Hospital for rheumatism, but the case was at once recognised to be one of pyæmia; and after death recent pericarditis was found, and the muscular tissue of the heart was in a state of suppuration, forming a cavity through which a probe could be passed into the left auricle, where a mass of soft lymph had formed, occluding the aperture. But, as far as he knew, no cases had hitherto been recorded in which affections of the valves had been met with, apart from disease of the walls of the heart, in this disease. The point was of interest, as suggesting a fresh difficulty in the diagnosis of pyæmia from acute rheumatism. He also thought it cast a doubt on some of the cases recorded by Dr. Kirkes and others, in which rheumatic valvular disease was supposed to be the starting-point of an infection of the blood. He instanced particularly Dr. Kirkes' fourth case, in the Med.-Chir. *Trans.* for 1852. This Dr. Kirkes believed to be an example of rheumatic endocarditis, in which the detachment of matters deposited on the valves of the heart gave rise to symptoms resembling those of pyæmia. If, however, we admit that pyæmia can itself cause endocarditis, it would be much more consistent with the history of the case to suppose that the case was originally one of pyæmia. The disease in this patient of Dr. Kirkes was much more extensive than in those shown by Dr. Fagge; but this was hardly a sufficient reason for rejecting this view. Virchow had expressed his satisfaction at conquering some of the territory which belonged to pyæmia; but perhaps it might hereafter be found that the boundary line now required to be rectified in the opposite direction.

Mr. HUTCHINSON had seen cases in which lymph had been deposited on the valves of the heart during pyæmia. In one of these cases the heart had been previously carefully examined and found free from disease; the lymph was deposited on the tricuspid valve. In another case during pyæmia an endocardial bruit was developed which had not existed before, but no post-mortem examination was allowed.

Mr. BROOKE exhibited some

### TUMOURS REMOVED FROM THE SKIN OVER THE SCAPULA

of a young man who desired to get rid of them only because they prevented him from enlisting. They were six in number, and covered a space about equal to the palm of the hand. The history showed them to be nævi, which had undergone alteration.

Mr. CANTON exhibited the

### SUPERIOR MAXILLARY BONE

removed from a woman resident in Malta. It had commenced about three years ago after a blow. When seen, the teeth were loosened, the palate softened, and a fungoid mass projected against the nostril. Two partial operations had been previously performed, and a more radical one was undertaken only at the patient's urgent desire. After the bone had been removed, there appeared at the back of the chasm a mass of gelatinous material, like the ordinary nasal polypus. This, however, was entirely scooped out by the fingers, and gave exactly a mould of the sinus of the sphenoid bone. The patient has made, so far, a good recovery, and has returned to Malta.

Mr. Adams and Mr. Bryant were appointed to examine the tumour.

Dr. Murchison exhibited a series of drawings to illustrate the

MORBID ANATOMY OF THE CATTLE PLAGUE,

and especially the question of the relation of that disease to typhoid fever in man. He had before expressed his opinion that they were not related, and these drawings strongly confirmed that view. The first exhibited the condition of Peyer's patches in an ox on the tenth day of the disease; they were quite smooth and flat, and of healthy appearance, contrasting strongly with a drawing of the same glands in man on the sixteenth day of typhoid. Other drawings showed ulceration of Peyer's patches in typhoid—a condition which never occurred in the cattle plague, so far as his observation extended (twenty-nine examinations). The solitary glands, however, were often found enlarged in the latter disease; and these might be mistaken for a condition analogous to typhoid; but, in fact, they were no part of the disease at all, occurring often in healthy oxen. In healthy oxen, also, Peyer's patches were sometimes elevated and prominent, which renders their almost atrophied condition on the tenth day of the disease even more striking. Another drawing was taken from a case of unusually intense disease, and showed an exudation, not of the ordinary viscid mucus, but of solid lymph adhering to the membrane of the intestine.

Dr. Murchison also showed a drawing of a supplementary nipple in the male.

In answer to Mr. Nunn, Dr. Murchison stated that in his opinion the cattle plague is an exanthematous disease. An eruption that is apparent on the skin after removing the hair has lately attracted attention, and he had at an early period noticed vesicles upon the udder like those of cow-pox. A man inoculated from the hide of a diseased animal had a vesicle exactly like that of cow-pox—so much so, indeed, that he was sent up to London on that account by Mr. Rayner, of Uxbridge. Still, inoculation from the diseased animals generally produced merely the same unhealthy inflammations as other putrid matter.

(To be continued.)

## OBSTETRICAL SOCIETY OF LONDON.

### Wednesday, December 6, 1865.

Dr. Barnes, President.

The following gentlemen were elected Fellows:—Drs. Brunton, Moxey, M. M. Orsey, A. E. Sansom, and Messrs. H. M. Townsend and S. Spencer Ferris.

Dr. Ritchie exhibited a Dermoid Cyst developed in the Fallopian Tube, about the size of a plum, composed of four loculi which contained dendritic growths, similar to the dermoid cysts of the ovaries, and which he thought bore analogy to uterine mole pregnancy. He considered that, arguing from this case, it was not impossible that dermoid cysts might some day be found in the uterine cavity, the result of conception.

Dr. J. Braxton Hicks exhibited a Polypus weighing 2¼ lb., removed by Dr. Oldham with the wire-rope écraseur. Before removal it reached from the vulva to just beneath the umbilicus. The patient was doing well.

Dr. Greenhalgh exhibited a Polypus removed by the wire-rope écraseur; and also a Growth removed from the Cervix of a Pregnant Woman without hæmorrhage, but the patient aborted a few days afterwards.

A paper, by Dr. R. Uvedale West, was read on

AN ANOMALY OF THE PLACENTA.

In this paper, which was illustrated by drawings, the author related several cases of "battledore placenta," in which the funis was inserted in the membranes, and divided into its vessels, at a considerable distance from the edge of that organ; and described how great doubt and awkward embarassment may arise to the accoucheur when, as happened to the author, this anomaly occurs with one of the funes of a twin placenta, through its accidental tearing away from its very lacerable attachment.

A paper, by Professor Berry, Birmingham, was read on

TWO CASES OF OBSTRUCTED LABOUR; WITH REMARKS.

After alluding to the obstructions which occurred to the birth of the child, he instanced a case of obstruction by an ovarian tumour, in which the child had been, with considerable force, delivered by the forceps. The next day, after coughing, the patient felt something descend. Dr. Berry was then called in, and, on examination, found it to be an ovarian tumour, the pedicle of which was traced through a rent in the upper part of the vagina. Opiates were given; and, two days afterwards, a ligature was put round the pedicle, which was then cut through just below. The patient recovered without much anxious symptoms, and was about again at the end of a month. She has also been delivered since, and without any trouble. In the other case there was a soft tumour springing from the sacrum, which reduced the antero-posterior diameter to about two inches. This was explored by trocar; but nothing but blood flowing, it was debated whether Cæsarean section should be performed or not. It was ultimately agreed to perforate. This was done, and the fœtus then turned. Very great difficulty occurred; but at last it was accomplished. The patient, however, died afterwards from rupture (as it subsequently appeared) of the uterus. Dr. Berry pointed out the inferences to be gathered from these cases: that, in the first, the tumours should have been tapped before the use of forceps; and, in the latter, the Cæsarean section would have been probably much the safer treatment.

After remarks by Dr. Tyler Smith and the President,

Dr. A. Hall related a case similar to the last one, where version had been adopted, and rupture of the tumour, with internal hæmorrhage, caused death shortly afterwords.

Dr. Greenhalgh read a paper on the

COMPARATIVE ADVANTAGES OF CÆSAREAN SECTION OVER CRANIOTOMY IN EXTREME DISTORTIONS OF THE BRIM.

He recited cases of difficult craniotomy; together with another case of Cæsarean section which he had recently performed, in which the patient afterwards died. After analysing the cases on record and his own, he considered that craniotomy should not be attempted where the effective antero-posterior diameter was less than two inches, considering the chances for the patient better under Cæsarean section.

In the discussion which followed,

Dr. Barnes showed a fœtus that he had drawn through a very deformed pelvis by the craniotomy forceps, bringing by it the face to present; the mechanism of which instrument had been pointed out to the Society by Dr. Braxton Hicks last year.

Dr. Playfair referred at length to the statistics of the Cæsarean section published by M. Dufeillay in the *Archives Générales de Médecine*, which showed that, where the operation had been performed under favourable circumstances, 80 per cent. of all the patients had recovered, whereas in unfavourable circumstances 17 per cent. of the operations had been successful. Even this was a better result than had been obtained in England; but if anybody would take the trouble to read over the history of the recorded cases, and would note the semi-moribund condition in which the patients generally had been before the operation was resorted to, he would be surprised, not so much at the mortality, but rather that even the small success of 11 per cent. had been obtained. Dr. Playfair did not suppose that M. Dufeillay's statistics could be taken as absolutely correct, but they at least proved that the Cæsarean section need not be the almost certainly mortal operation we were generally taught to consider it. He wished, however, particularly to refer to the question of the proper treatment of cases of labour obstructed by ovarian tumours which could neither be pushed out of the way nor punctured. He had lately collected the details of more than fifty cases of this complication, and found that more than one-half of all the cases in which craniotomy had been performed had terminated fatally. It was doubtful whether, if the Cæsarean section had been employed in preference, the mortality would have been greater; and not only would the children have been saved, but a radical cure of the disease might have been effected at the same time. Even if the patient survived craniotomy, the disease still remained, and in all probability at no distant period she would again have to undergo the risk of an equally serious operation for its removal. It might even be possible to remove the ovarian cysts, which must necessarily be small, without incising the uterus. At any rate, it seemed that the ordinary rules of practice laid down for this emergency should be considered.

Dr. Eastlake referred to one of Dr. Greenhalgh's cases, where, after the head had been perforated, the labour was left to the natural efforts. He wished to ask the author whether under such circumstances he had ever, in his experience, met with any change in the presentation of the fœtus. A case of this nature had occurred in the Rotunda Lying-in Hospital, and was recorded by Dr. Shekleton in the *Dublin Quarterly*

*Journal.* The patient had been delivered on two or three occasions by craniotomy, owing to great disproportion, due to a pelvic tumour. On the occasion of her last labour delivery by the Cæsarean section had even been contemplated. The majority of accoucheurs in consultation were, however, in favour of again using the perforator; the head was accordingly opened, and a large quantity of the cerebral mass evacuated. The patient was then left for a couple of hours, when, to the surprise and regret of the Medical attendants, the left arm of the child was found to occupy the narrow space in the vagina. This untoward event of the altered presentation compelled them to separate the child's arm from the body, and eviscerate and extract under the greatest difficulty. The woman died within ten minutes of her delivery. At the autopsy a laceration was discovered in the posterior wall of the uterus. The fatal issue in this instance might be justly attributed to the increased difficulty of the labour due to the altered presentation. With the experience of such a case before us, Dr. Eastlake considered that where it was thought advisable to postpone extraction after perforation it would be well to adopt some means by which the head could be fixed or tethered so as to correspond with the pelvic aperture.

Dr. **Braxton Hicks** thought that before the statistics of craniotomy could be fairly compared with those of other operations it was highly necessary that they should be fully revised; because he had found, on searching to the original cases of recognised statistics, that nearly all the deaths which had arisen had occurred rather from the want of the operation, or from neglecting the proper time for its performance. In many it was specially mentioned that had the operation been performed some three, four, or five days previously, the patient would probably have recovered.

Dr. **Greenhalgh** having replied to the several speakers the meeting adjourned.

## MEDICAL BARONETS AND KNIGHTS.

*(From the Observer.)*

The baronetcy recently bestowed on the most eminent of metropolitan Surgeons, Sir William Fergusson, has been followed by a similar honour to the most eminent man in the whole Medical Profession, Dr.—now Sir James—Simpson, of Edinburgh. As Physician, as Surgeon, or as accoucheur, Sir James Simpson is universally acknowledged by his Professional brethren to stand pre-eminent. At home or abroad, his fame is wide-spread, and his name will add lustre to the order which he honours. Indeed, it has long been a matter of surprise that a man whose discoveries have been of such vast service to the whole human race should have been left so long without a title, a pension, or the thanks of Parliament. When we remember that it is twenty years since the discovery of the use of chloroform in rendering the most terrible Surgical operations and the most agonising of woman's natural sufferings painless was made by Dr. Simpson, every one must admit that the man who made the discovery by which so many lives have been saved, and so much pain has been prevented or mitigated in all parts of the world, has been late in receiving any reward from the State. We trust, however, that even this tardy recognition of national service, as well as the honour conferred upon Sir William Fergusson and Sir Roderick Murchison, may be accepted as some confirmation of the hope entertained by some leading men of science that the systematic neglect from successive Governments under which they have suffered will be at length redressed by the Ministry of Earl Russell. If we only compare the decorations and titles, the parliamentary thanks and grants, the places and the pensions, which reward the successful soldier, sailor, or lawyer, and the life peerages which are almost certainly obtained by any really able churchman—the rewards granted by the State to men of science are so few and disproportionate, that the injustice and impolicy of the neglect at once become evident. This view has recently been so well expressed in the *Medical Times* that we place on record what we believe to be a very general feeling in the Medical Profession. When making known how the Emperor Napoleon and the French Academy of Medicine had rewarded a successful Surgeon by a pecuniary grant and enrolment in the Legion of Honour, our Medical contemporary said—and we most fully concur in his conclusions—"It is certainly most unjust that, while national honours are heaped upon those who have distinguished themselves by military courage or by political talents, no public recognition is given to men who have been pre-eminently benefactors to humanity. A tardy and insufficient tribute has, it is true, been paid to the discoverer of vaccination; but there live at this moment men in our Profession who have done as much to deserve public gratitude as did Jenner. There are great men now alive who have robbed operative Surgery of half its horrors by abolishing its pain; and there are those who have manfully overcome every opposition which prejudice threw in their way, and have triumphantly rescued one disease from the black list marked incurable. We believe that those men are themselves sufficiently repaid by the inward consciousness of having been pre-eminently useful to their fellow men, and having added to the sum of human knowledge. But for the sake of others, and especially for the sake of those still hesitating as to the Profession which they will embrace, it is extremely desirable that some tangible evidence should be given that the nation appreciates the sacrifices daily and hourly made by those who devote their energies and their talents to the promotion of its physical well-being." We hope that all this is likely to be well considered by the Government and their advisers, and we trust that the day is not far distant when a deserving Medical man may not only look forward to a knighthood or a baronetcy as a reward of meritorious service, but—like the churchman and the lawyer—may hope for a seat in the House of Lords. Until a system of life peerages becomes recognised in our constitution and extended to the Medical Profession, it will always be less attractive to young and able men than law and divinity. This, we believe, to be a national evil. The day may be distant before it is remedied; and in the meantime we trust that the honours conferred upon Sir W. Fergusson and Sir J. Simpson may be accepted as a sign that at length Government will recognise and reward Medical men whose labours have done honour to their country, and have improved the science and art of their Profession to the benefit of mankind.

## ROYAL COLLEGE OF VETERINARY SURGEONS AND THE CATTLE PLAGUE.

On Thursday, the 11th inst., the Royal College of Surgeons held a *conversazione* at the Freemasons' Hall, Great Queen-street, where Professor Simonds, of the Veterinary College, delivered an interesting lecture on the cattle disease. He handled the subject with great ability, and his remarks were listened to with marked attention.

The lecturer alluded to the outbreak of a cattle disease which occurred in the year 1712, which, he considered, so we understood him, as resembling the present one. In 1714 it was again introduced into England, probably from Holland. He quoted at some length from a paper in the Philosophical *Transactions*, by Mr. Bates, Surgeon to the household of George I. In this paper Mr. Bates speaks of the disease as contagious, and describes its symptoms and the means adopted to eradicate it. The cows first refused their food; the next day had husky cough, and voided excrements like clay, their heads swelled, and sometimes their bodies; in a day or two more there was a great discharge of mucous matter from the nose, and their breaths smelled offensively; lastly, a severe purging (sometimes bloody), terminating in death; that some died in three days, others in five or six; but the bulls lived eight or ten days; that during the whole illness they refused all manner of food, and were very hot. As to the means of stopping the disease, Mr. Bates, in his Report, recommended that all diseased cows should be killed and burnt, and that those which appeared well should be secured and kept on the grounds on which they then were, and that such of them as should sicken or die should be removed and burnt. It appears that these suggestions were adopted, and the result was, that the disease was effectually stopped. The disease again visited England in 1769, and was referred to by George III. in his speech from the Throne in 1770. Dr. Layard, who had written an essay on the cattle plague of 1744 to 1756, was applied to by the Privy Council for his advice and assistance. He was consulted in drawing up those Orders of Council and Acts of Parliament, which being put into immediate execution, stopped the spreading of the contagion, and totally extirpated it in less than six months at an expense of £3000. Dr. Layard's opinion was—1st, that the distemper in 1756 was similar to the small-pox in the human body, to be managed with the same intentions, that it was communicated in the same way as that disease and the plague; 2nd, that killing the cattle without the effusion of blood—viz., by strangling them and burying them deeply with their whole skins, and avoiding communication both of persons and beasts—was the surest way of extirpating the malady; 3rd, that, by inoculation, the sound cattle might be preserved; 4th, that the utmost attention should be paid to prevent the introduction of infected cattle, hides, straw, hay, or cloth packages from foreign countries; 5th, that the variolous affection is a different disease from the gullsey, which is a putrid sore throat, natural to, and common to, Great Britain and Holland.

He alluded to the present cattle plague, and the means by which it had found its way into this country. He did not believe in its spontaneous origin. We could only have received it from Russia. He here showed on a rough map certain districts of Russia in which he said the disease was prevalent at the time of its introduction into England, and where preventive measures were not observed. It was a remarkable fact that some cattle had been shipped at Revel, landed at Hull, were thence forwarded to London, and within nineteen days the disease had made its appearance in the metropolis. He then traced the disease from London to the various counties in which it had successively appeared, and cited facts which left no possible room to doubt that London had been the centre from which the whole country had received the infection. In each case he had discovered evidence of the transport of cattle, hides, or some other material which might contain it. He was of opinion that birds might be the means of conveying it, particularly pigeons, which were in the habit of visiting neighbouring farm-yards, and might thus convey the poison on their feet. He mentioned one case in which there was, he thought, little doubt that it had been so conveyed. He also thought that hounds passing over pasture fields might carry the infection on their feet. and thought that hunting should not be practised in infected districts. He considered that improper burial was a means of spreading the infection, and cited a case that came under his own observation where some carcases had been placed in shallow holes near a small stream of water, and that the disease had appeared subsequently along the course of the stream. As to the pathology of the disease, he agreed with the opinion of Dr. Layard, that it was variolous; but he could not say if it was identical with the variola of the human subject; he, however, referred to the case of Mr. Hancock, of Uxbridge, who had slightly wounded the back of his hand with a knife used in skinning a diseased animal; on the second day a vesicle made its appearance, which ripened into a pustule, and subsequently ran the usual course of a variolous pustule. (A very excellent drawing of the hand, with the pustule in its two later stages, was exhibited by Mr. Tuson, and it certainly looked very like variola.) Mr. Simonds thought that if the distemper was not variola it certainly belonged to the class exanthemata. He said he would just allude to another theory —namely, entozoa. He did not believe that the disease was owing to the presence of those bodies, and it was doubtful whether they were entozoa or not. With regard to the treatment, it was a subject on which he felt some disinclination to express his opinion, as it might not accord with the views of others on the subject; however, if pushed into a corner, he would say do not treat it at all. He was not aware that any special medicines could be mentioned as having power over the malady. It had been stated that some animals had recovered under the administration of mineral acids, others by diffusible stimulants, some from doses of salts, and some from simply good nursing; the latter he thought was that which would ensure the greatest amount of success, as more have recovered from good nursing than from any other treatment. The nervous centres were so paralysed that the animal was not susceptible of the effects of medicinal remedies, but that by care the system might gradually throw off the poison, and recovery take place. He was of opinion, however, that treating the affected animals was a means of keeping the disease in the country; and therefore, as a preventive measure, he should say kill all—that is, all animals stricken with the poison. He might express his views regarding preventive measures in a few words—isolation and disinfecting. Disinfecting was seldom properly carried out; it was not sufficient to apply a deodoriser to remove an offensive smell. Deodorising is not disinfecting, and therefore a sufficient quantity of lime, or chloride of lime, must be mixed with the manure or other matters to completely destroy the poison. Merely sprinkling a little chloride of lime over a large mass of manure is of no use at all.

He did not enter into the question of the post-mortem morbid appearances, but referred his hearers to the elaborate drawings and models of morbid specimens, by Mr. Tuson, exhibited in the room. These attracted a good deal of attention at the conclusion of the lecture. The models were most beautifully executed. The majority of them represented severe inflammation of the mucous membrane, with foul-looking ulcers. One specimen showed ulcers of the first stomach as large as a crown piece; another, the second stomach greatly congested, with small, deep, ragged ulcers; another of the larynx and trachea showed severe inflammation of the lining membrane, studded with foul ulcers. In a model of the upper jaw the palate was of a deep pink colour, partially denuded of mucous membrane, and partially covered by a greyish crust. One of the drawings represented a piece of lung in which pleuro-pneumonia was distinctly marked. A drawing, also, of a piece of skin denuded of hair showed marks resembling the pits of small-pox. Whatever may be the true nature of the disease, inflammation and ulceration of the mucous membrane appears to be one of its most prominent features.

## OBITUARY.

### DR. DAVID JAMES SIMPSON.

It is our melancholy duty this week to record the decease of Dr. David James Simpson, the eldest son of Professor Sir J. Y. Simpson, of Edinburgh. The sad news of his death has followed fast on the intelligence of the honour paid by the Sovereign to Medical science and public and private worth in the person of his father. Seldom has the mutability of human affairs been taught by a sadder lesson or been presented in a more touching example. The whole Profession, who so lately rejoiced in Professor Simpson's well-merited advancement, will unite in regret and condolence over the grave where such high hopes and the promise of so noble and useful a career lie buried. The universal feeling of sympathy with which the news will be received by the Medical brethren of Sir James Simpson, although it cannot alleviate the grief of such a bereavement, will, we may hope, help him to bear it, and, as time rolls on, may throw a softening and healing ray over the dark shadows of his loss.

Dr. David Simpson was only twenty-four years of age, but he had already shown that he was likely to prove worthy of the name he bore. The story of his Professional career was only begun, but its short page was a history of successful work, and of public duty well and honourably performed. He took his degree in the University of Edinburgh in 1863, and in the same year acquired the license of the Royal Colleges of Physicians and Surgeons. He then held the office of Resident Physician in the Edinburgh Royal Infirmary, a post in which he remained until he was called to succeed his cousin, Dr. Alexander Simpson, in assisting, conjointly with Dr. Black, Professor Simpson in his private practice. He was for a considerable period Senior President of the Royal Medical Society of Edinburgh; and his tenure of office was signalised by the delivery of an able Inaugural Address, on December 4th, 1863, which address was afterwards published as a pamphlet, and by a paper on the "Cure of Constitutional Syphilis by Syphilisation," which was read before the society on the 26th February, 1864, and published in the December number of the *Edinburgh Medical Journal* of the same year. At that time syphilisation had excited but little attention in this country; and Dr. Simpson was the first British writer who had directed attention to Professor Boeck's remarkable conclusions. In his paper he details two well-marked cases of constitutional syphilis, of long standing, which came under his own cognizance. The subjects of them, after trying various means in this country, repaired to Christiana, to place themselves under Dr. Boeck's care. The results of their treatment by syphilisation were most satisfactory, all traces of disease disappearing, and up to the date of the reading the paper, between two and three years afterwards, no relapse in either case occurred. This paper also contains an interesting summary of the views concerning the syphilitic poison held by Dr. Boeck and Dr. Danielson, of Bergen, and the attempts of the latter to substitute "tartarisation," or irritation produced by means of tartar emetic, in place of syphilisation. An analysis is also given of the records of the Christiana Hospital, comparing the treatment of syphilis by mercury, iodide of potassium, tartarisation, and syphilisation, exhibiting the decided superiority of this last. Dr. Simpson, therefore, while discountenancing the employment of syphilisation as a prophylactic, as recommended by Auzias-Turenne, pressed upon the notice of the Profession its utility as a valuable curative agent.

The career thus commenced was one of the highest promise. Dr. Simpson had excellent natural abilities; and had inherited from his father a love of scientific truth and investigation, which would in all probability have led to a distinguished position in Medicine. His kind heart and affable manner endeared him to all with whom he came in contact. In fact, it would have been difficult to have found one on whom Fortune had been more liberal in the bestowal of her gifts. But all the high and well-grounded expectations which clustered round him were to be broken. A fortnight ago he was seized with icterus. At first there seemed no ground for serious apprehension; but during the eight days which preceded his death the symptoms of his attack became graver and more alarming. Insensibility supervened on Saturday, and he died on Sunday at his father's house in Queen-street, Edinburgh.

## LEGAL INTELLIGENCE.

### COURT OF QUEEN'S BENCH, WESTMINSTER, JAN. 11.

(*Sittings in Banco, before the* LORD CHIEF JUSTICE, *Mr. Justice* BLACKBURN, *Mr. Justice* MELLOR, *and Mr. Justice* LUSH.)

#### HUNTER V. SHARP.

This was an action by the person describing himself as "Dr. Hunter" against the printer of the *Pall-Mall Gazette* for an alleged libel upon him in that paper. The article set out in the declaration, and read by counsel, was as follows:—

"Impostors and Dupes.—The modern system of easy advertising, and the facilities of the penny post have many advantages, but they have also their attendant evils of no little weight. One of these evils is nothing less than a curse upon English society. Occasional exposures in the law courts and the newspapers have made us familiar with the advertising practices of a certain class of Medical impostors, and with the misery they inflict upon their unhappy dupes. And now a series of recent proceedings in the Marylebone Police-office has revealed the existence of ramifications of the detestable system in question for which few ordinary readers will have been prepared. Persons who turn over the pages of the cheap newspapers in search of the curiosities of advertising will have noticed the frequent recurrence of a whole column, purporting to give a consecutive series of extracts from a Medical work on consumption by a person signing himself 'Robert Hunter, M.D.' If they have taken the trouble to read its uninviting paragraphs they will have found that they are a long rigmarole of some scientific declamation, professing to expound to the non-professional invalid the causes and symptoms of disease of the lungs, and to prove that nobody knows how to cure it except this same Dr. Hunter, whose method is one of inhalation. On the face of all this there is nothing more than the puffery of the dealers in the various pills, potions, ointments, and liniments, who rejoice in the profusion of testimonials from innumerable correspondents who bless the day that they first made their acquaintance. That any reputable Physician would thus advertise for patients is, of course, out of the question; but, although these advertisements are free from the mysterious hints and suggestions and the scarcely veiled offensive phraseology of the basest class of Medical puffs, one is led to suspect the existence of very serious malpractices by observing the length and frequency of these recommendations of Dr. Hunter and his inhalations. When a man finds it worth his while to insert a very costly advertisement in several papers, and to go on with it from day to day, or week to week, it is clear that his patients must be dupes of a very different class from the simple people who buy pills by the gross and potions by the gallon. Nor need there be any actual difficulty in putting a stop to such advertisements by Act of Parliament. It should be an indictable offence for any man to call himself a Physician, Surgeon, apothecary, or dentist unless empowered to practise by the colleges or societies recognised by the law of the land. The assumption of all foreign Medical degrees should be absolutely forbidden under the same penalties, whether claimed by English subjects or foreigners. English subjects are forbidden to assume any foreign title of rank without the permission of the Crown. But what would be the evil of permitting some foolish gentleman to call himself "count" or "baron" compared with the mischief done by scoundrels who utter this base, forged coin and claim to be respected as qualified Physicians on the strength of some diploma obtained in Canada or New York?"

The plaintiff complained that the article, in effect, imputed to him that he was an impostor and duped persons who became his patients, and that he was a scoundrel and had done something morally wrong, which might be fairly described, metaphorically, as uttering base, forged coin, by reason of which he alleged that he had been greatly injured in the way of his business as a Medical Practitioner. The defendant pleaded that the said alleged defamatory matter was and is true in substance and in fact.

Mr. H. Williams, on the part of the plaintiff, moved to set aside the plea as too general, or, at all events, for an order for particulars of the charges intended to be imputed to him. He urged that the plea was so general that it was wholly left at large what it was intended to allege and to prove, and that it might include the matters which had come before the police-court upon the charge of rape.

Their Lordships, however, concurred that the scope of the plea was the same as the scope of the libel—which was, in effect, that the plaintiff was one of those who called themselves "Doctors" or "Physicians," which would imply that they were so by British diploma or degree; when, in point of fact, they were only so by some foreign diploma or certificate which might be of little or no value, and that his letters amounted to quackery and puffery.

The application, therefore, was refused.

## MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their Primary Examinations in Anatomy and Physiology, at a meeting of the Court of Examiners on the 16th inst., and when eligible will be admitted to the Pass Examination:—

James Stothard, P. R. Littleton, John Horsfall, W. C. Bucknill, C. E. Walker, A. C. Nadin, A. H. B. Hallowes, George Tobin, F. H. Watson, and H. F. Norris, students of St. Bartholomew's Hospital; Thomas Docking, Thomas Lettis, and F. C. Lloyd, of University College; G. E. Martindale and Ernest Fussell, of Guy's Hospital; J. S. C. Yule and Charles Barlow, of Charing-cross Hospital; J. C. White and H. J. Linton, of Westminster Hospital; Jas. Walker and J. A. Hall, of the Leeds School; S. A. Lucas and William Leonard, of Dublin; Henry Estcourt, of Manchester; Edward Clarke, of Philadelphia; John Chapman, of St. Mary's Hospital; William Draper, of Middlesex Hospital; and A. R. Gray, of Aberdeen.

The following passed on the 17th inst.:—

Alfred Roworth, John Evans, and G. A. Thomas, students of St. Bartholomew's Hospital; W. A. Cox and J. L. Hobbes, of Charing-cross Hospital; M. H. Molloy and William Nolan, of the Dublin School; James Pavey and Septimus Evans, of the London Hospital; R. H. Stevens and N. E. Schömberg, of King's College; T. E. Webb and J. R. Bosworth, of Guy's Hospital; Arthur Hensman and John Waller, of University College; H. E. Lewill and William Harris, of St. Mary's Hospital; G. W. Geldart and W. W. Spencer, of Newcastle; Charles Parr, of St. George's Hospital; and Joseph Carbery, of Calcutta.

APOTHECARIES' HALL.—Name of the gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, January 11, 1866:—

John Thompson Dickson, Logic Lodge, Clapham-park; William Fowler Birmingham.

### APPOINTMENTS.

⁂ The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

BARKER, JOHN, M.D., has been elected a Member of the Court of Examiners of the Royal College of Surgeons in Ireland.

BARRETT, JOHN J., M.D. St. And., has been elected District Surgeon to visit out-patients to the Royal South London Dispensary, St. George's-cross, S.

BRAMWELL, JOHN B., M.D. Edin., has been appointed to the Commission of the Peace for the borough of Tynemouth.

CHAFFERS, E., M.R.C.S. Eng., has been appointed Assistant-Surgeon to the North Riding Lunatic Asylum, Clifton, York.

CHARTERIS, MATTHEW, M.D. Edin., has been elected Assistant Medical Officer to the parishes of St. Giles's and St. George's, Bloomsbury.

CLARK, T., M.D., has been appointed by J. Stuart Mill, Esq., M.P., to be his Assessor in the University Court of St. Andrew's, N.B.

FUSSELL, F., M.B., M.R.C.P. Lond., has been appointed Treasurer to the Brighton Lying-in Institution.

**Griffith, G. de Gorrequer**, L.R.C.P. Lond., has been elected Physician-Accoucheur to St. Saviour's Maternity Charity.

**Gwynn, Edmund**, M.D., has been appointed Surgeon to the Holloway and Islington Dispensary.

**Highmore, William**, M.D. St. And., has been appointed one of the Medical Officers to the Yeatman Hospital, Sherborne, Dorset.

**Jones, Edmund**, M.D. St. And., has been appointed one of H.M.'s Justices of the Peace for the County of Hereford.

**Mackinlay, James G.**, L.R.C.P. Lond., has been appointed Resident Medical Officer to Charing-cross Hospital.

**Porter, George H.**, M.D., F.R.C.S.I., has been elected Surgeon to Simpson's Hospital.

**Ransom, Robert**, M.D. St. And., has been appointed Medical Officer to the Union Workhouse, Cambridge.

**Rivington, Walter**, F.R.C.S., Eng., has been appointed Surgeon to the London Dispensary, Spitalfields.

**Saunders, William S.**, M.D., has been appointed Surgeon to the B Division of the Metropolitan Fire Brigade.

**Skinner, Thomas**, M.D. St. And., has been appointed one of the Medical Officers to the Lying-in Hospital, Liverpool.

**Smith, C. J. Hardy**, M.R.C.S. Eng., has been appointed Assistant House-Surgeon to the Sheffield General Infirmary.

**Steele, Arthur B.**, M.R.C.S. Eng., has been appointed Lecturer on Midwifery and the Diseases of Women in the Liverpool Royal Infirmary School of Medicine.

**Tatham, John**, M.D. St. And., has been elected one of the honorary Medical Officers of the Royal Pimlico Dispensary.

**Williams, William H.**, M.D. Lond., has been appointed one of the Medical Officers to the Yeatman Hospital, Sherborne, Dorset.

**Woodforde, William T. G.**, M.D. Lond., has been appointed Surgeon to the C Division of the Metropolitan Fire Brigade.

## BIRTHS.

**Day.**—On January 15, at Harlow, Essex, the wife of Robert N. Day, M.R.C.S. Eng., of a daughter.

**Dukes.**—On January 13, at High House, Enfield Highway, the wife of M. Charles Dukes, M.D., of a son.

**Harris.**—On January 10, at Botley, Southampton, the wife of J. C. Harris, M.R.C.S. Eng., of a daughter.

**Istance.**—On January 10, at Risca, Monmouthshire, the wife of Richard Istance, M.R.C.S. Eng., of a daughter.

**Lithgow.**—On January 6, at Royal-terrace, Weymouth, the wife of Dr. James Lithgow, of a daughter.

**Maclure.**—On January 14, at 16, Harley-street, W., the wife of Duncan M. Maclure, L.R.C.P. Lond., of a son.

**Morgan.**—On January 11, at Bayswater, the wife of W. Taylor Morgan, M.D., of a son.

**Newman.**—On December 29, at Hanover-square, Dartmouth, the wife of Dr. A. Newman, of a daughter.

**Owen.**—On January 8, at Leatherhead, the wife of Francis Owen, M.R.C.S. Eng., of a son.

**Sands.**—On January 10, at the Elms, Foot's Cray, Kent, the wife of Dr. J. Lee Sands, Surgeon R.N., of a son.

**Skinner.**—On January 1, at Lyme Regis, Dorset, the wife of David S. Skinner, L.R.C.P. Lond., of a daughter.

**Squire.**—On January 12, at Wivenhoe, Essex, the wife of S. N. Squire, M.R.C.S. Eng., of a son.

**Vipan.**—On January 11, at Uxbridge, the wife of W. H. Vipan, M.R.C.S. Eng., of a daughter.

## MARRIAGES.

**Dods—Crabbie.**—On January 11, at 22, Royal-terrace, Edinburgh, George Dods, M.D., to Maggie, daughter of John Crabbie, Esq.

**Dunlop—Brown.**—On January 4, at Georgeville, Irvine, Robert Dunlop, M.D., to Mary, daughter of Captain James Brown.

**Hill—Ring.**—On December 30, at St. Marylebone Church, Frederick A. Hill, M.R.C.S. Eng., to Bessie, youngest daughter of Richard Ring, Esq.

**Whamond—King.**—On January 8, at Dalziel, Lanarkshire, William Whamond, M.D., to Mary Ann, eldest daughter of Thomas King, Esq.

**Woodman—Cowie.**—On January 11, at All Saints' Church, Norwood, Frederick Woodman, M.D., to Alice Emily, eldest daughter of the late Henry Cowie, Esq.

## DEATHS.

**Dauglish, John**, M.D. Edin., at Furze Bank, Great Malvern, on January 14, aged 42.

**Grogan, John**, Surgeon-Major 4th R.I. Dragoon Guards, at Brittas Castle, on January 6.

**Hatrick, William R.**, M.D. Glasg., at Hope-street, Glasgow, on December 30.

**Hulke, William**, M.R.C.S. Eng., at Lower-street, Deal, on January 12, aged 74.

**Jardine, James B.**, L.R.C.S. Edin., Staff Assistant-Surgeon Army, at Chatham, on January 10, aged 28.

**MacGregor, Sir John**, M.D., K.C.B., late Inspector-General Army Hospitals, and Hon. Physician to the Queen, at Ryde, Isle of Wight, on January 13, aged 74.

**Payne, Henry**, M.D. Edin., at Castle-gate, Nottingham, on January 7, aged 80.

**Simpson, David J.**, M.D. Edin., at 52, Queen-street, Edinburgh, on January 14, aged 24.

**Stuart, Andrew P.**, M.R.C.S. Eng., at University College Hospital, aged 22.

**Travers, James W. G.**, L.A.C., at 22, Millpond-street, Bermondsey, on January 13, aged 52.

## POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

### RESIGNATIONS.

*Buntingford Union.*—Mr. Charles Gaffney has resigned the North-East District; area, 6414; population, 1847; salary, £40 per annum.

*Cambridge Union.*—Mr. Robert Rawsom has resigned the Second District; salary, £60 per annum.

*Croydon Union.*—Dr. Hetley has resigned the Norwood District; area, 2876; population, 6658; salary, £50 per annum.

*Great Yarmouth Parish.*—Dr. John Stephenson has resigned the South District; salary, £80 per annum.

*West Derby Union.*—Mr. Charles Evers has resigned the Garston District; area, 1680; population, 4516; salary, £30 per annum.

### APPOINTMENTS.

*Braintree Union.*—Thomas Taylor, M.R.C.S.E., L.S.A., to the Bocking District; John Harrison, M.R.C.S.E., L.S.A., to the Braintree District.

*Fulham Union.*—Nicholson Avent, M.R.C.S.E., L.S.A., to the Walham-green District.

*West Bromwich Union.*—William H. Hayward, M.R.C.S.E., L.S.A., to the West Oldbury District; James Beatty, M.R.C.S.E., L.S.A., to the East Oldbury District.

*West Derby Union.*—John James Flinn, L.R.C.P. Edin., M.R.C.S.E., L.S.A., L.M., to the Workhouse.

**Sir William Fergusson, Bart.**—The past and present pupils of this distinguished Surgeon are organising a committee to receive subscriptions to present him with a testimonial of their especial regard.

**Mr. Spencer Wells** has been elected a Corresponding Member of the *Société de Médecine de Paris.* This is the oldest Medical society in France. The sittings are held in the Hotel de Ville, and have an official character.

**Mr. Benjamin Travers, F.R.C.S.**—There is no truth in the statement in some of the daily newspapers that the above gentleman has lately died.

**The Loss of the "London."**—We regret to notice that among those who perished in the *London* was Mr. J. V. Faule, the Surgeon.

**Naval Medical Supplemental Fund.**—At the quarterly meeting of the Directors of the Naval Medical Compassionate Fund, held on January 9, Dr. J. W. Johnston, Inspector-General, in the chair, the sum of £95 was distributed among the various claimants.

**Collegiate Examinations.**—It is stated that at the recent Primary, or Anatomical and Physiological, examinations for the diploma of Membership of the Royal College of Surgeons of England, when sixty-six candidates offered themselves, that rather more than a fourth of the number were referred back to their studies for three months. Of the sixty-six gentlemen no less than thirty-two had previously been rejected on this their Primary examination.

**The Floods in Devonshire.—A Surgeon Drowned.**—The storms of last week in Devonshire were most disastrous. Many melancholy casualties have occurred in addition to those which have been already reported in the papers. Mr. Basleigh, a Surgeon of Morchard Bishop, North Devon, left his house to attend to his patients on Saturday afternoon. Some hours afterwards a horse without a rider was seen in the middle of a stream which is ordinarily a mere rivulet. Search was made, but no trace of Mr. Basleigh could be discovered until the afternoon of Sunday. His body was then found. He had been drowned in his attempt to reach the house of a patient.

**Metropolitan Association of Medical Officers of Health.**—The next meeting of the Association will be held on Saturday, January 20, at half-past seven o'clock in the evening. Dr. H. B. Montgomery, Member of and Secretary to the Madras Sanitary Commission, will read a paper on "The Tendency of Religious Festivals and Pilgrimages in India to Originate and Disseminate Epidemic Disease; with Suggestions as to the Sanitary Precautions to be adopted to prevent Injury to Public Health."

**Obtaining Policies of Life Assurances by False Pretences.**—We blush to have to record that a Surgeon, one Thompson Whalley, practising at Mirfield, has during the past week been convicted on two charges of obtaining policies of life assurance by false representations. One of the cases, to which he pleaded guilty, was that of a woman whom he was attending for cancer of the rectum. He insured her life in the British Prudential Assurance Company, and when her death took place he forwarded a certificate to the Company that she had died of fever, and made a claim in the name of the deceased's mother, but without her authority, for the amount insured. He is sentenced on both charges to fifteen months' imprisonment with hard labour. Of course the Medical Council will take action in this case, and by removing

Mr. Whalley's name from the Registry relieve the Profession from the disgrace of including such a person.

Gas Purification.—Experiments are being now made at the Crystal Palace District, and other gasworks, to test the practical value of a recent discovery by Dr. Letheby, who, besides his many other engagements, is now consulting engineer to several gas companies. He has found that the waste material of the soda manufacture, and known as "soda waste," is unexpectedly effective in absorbing the sulphur compounds in crude coal gas, and especially the obstinate bisulphide of carbon. The soda waste is employed in the purifiers in layers, as much as oxide of iron is now generally employed to arrest the sulphur of sulphuretted hydrogen.—*Engineering*

The Annual Report of the Council of the Pathological Society gives a deservedly gratifying account of its prosperous condition: plenty of members, crowded meetings, interesting discussions, and a fair balance at the bankers'. One or two new regulations are brought forward for the general convenience regarding the presence of "living specimens"—*i.e.*, patients, cases previously published, incomplete cases, and microscopical specimens. The total income of the Society was £395 6s. 2d., and the total expenditure £359 7s. 3½d. The balance in hand at the commencement of the account was £87 1s. 1d. and, adding to this the excess of income over expenditure, the present balance in hand is shown to be £122 19s. 11½d. The annual income is made up of the following sums, viz.:—£39 14s. 11d. derived from the sale of *Transactions;* this item is a gratifying proof of the large demand which exists for the publications of the Society. £9 1s. 3d., dividends on £308 11s. 4d. invested in Consols; the increasing balance in hand will doubtless enable the Council to add to this investment. £28 7s. for twenty-seven entrance fees; this item again will show an increase in next year's account. Finally, £318 3s., the proceeds of 303 annual subscriptions; this number, as stated above, is the largest which the Society has ever yet attained. The items of expenditure do not call for any long comment. They include merely the usual expenses: £63 as rent for the rooms, and £229 14s. 2½d. the expense of publishing the 16th volume of the *Transactions*. This sum is greater than the expenses of the 15th volume, but the number of copies is also greater, the increased number of members having rendered it necessary to print 450 copies instead of 400.

Dr. Hearne on the Sanitary State of Southampton.—Was it nothing, at the commencement of the past year, to warn the authorities that danger was looming in the distance—"That in the same streets year after year deaths have resulted from removeable causes; that of water inches deep under the floors of the houses—the level of the sewers being above the surface of the water, although, according to their own surveyor, an ample fall to remove the same; that there are houses in the town wanting both drainage and water; that other houses have no water; and that some of the houses, according to official report, have not even the convenience for water supply, and, consequently, are unfit for habitation; that, again, other houses are dependent for water on local springs, the supply from which can never be regarded as wholesome in thickly populated districts, and that that from some of the Southampton wells has been demonstrated by examination to be unfit for use; that streets remain blocked at either end so as effectually to preclude the free circulation of air, although the cost of alteration would amount to a very trifling sum—but however great the amount it would have been money well invested for the town; that privies in a crowded district have been allowed to remain unattended to for from fifteen to twenty years, and for years after having been reported upon—possibly even to the present time?"

Vaccination and Rinderpest. — In the *Times* of Thursday, January 18, Mr. Wilbraham Tollemache, High Sheriff of Cheshire, gives the following account of the success which has hitherto attended his experiment of vaccinating cattle against Rinderpest:—"Having been requested by several stock-holders and others to make known, through the medium of the *Times*, the present condition of my ten vaccinated cows, I am sure, from the importance of the subject, you will allow me space to do so. My ten cows are up to this present time quite healthy and well. I made no difference in their treatment either before or after the operation. No medicine was given, no change of diet. Some of the cows were in milk, some were dry before calving, and one calved six days after she was vaccinated. My own family and household partook, and partake, of their butter, milk, and cream, without experiencing the slightest inconvenience. As the question of vaccination being a safeguard against Rinderpest is of vital importance in this cheese-making county, I may state that, after the most diligent inquiries, I have not been able to hear of one fatal case in this neighbourhood where the operation had been successful. Many vaccinated cows have died, but not one, as far as I can hear, where the vaccine had taken. I have lately been trying an experiment, which I am sure will possess deep interest with many of your readers. On Thursday morning last, the 11th, I had a thirteen months old Alderney heifer, which had been most successfully vaccinated, turned into a kind of loose place, nine feet square, in which was one calf very ill from unmistakable Rinderpest, and another calf which had just died from the effects of it. The dead calf was removed in about half an hour after my calf was put into the place. The sick calf died the following day. Since then two more calves ill from Rinderpest have been placed with my calf, and have since died from the disease. My calf is as healthy and sharp as ever she was, notwithstanding she has been kept for five days and five nights in a most fetid atmosphere, and coming in immediate contact with these four dying and dead calves!"

The following are the last week's Cattle Plague Returns. By comparison with those of the previous week, it will be seen that there have been 8508 attacked, 5701 deaths, 588 slaughtered, and 1223 recoveries, since December 30:—

| Census Divisions. | 1. Attacked. | | | 2. Result of reported Cases from the Commencement of the disease. | | | | |
|---|---|---|---|---|---|---|---|---|
| | Week ending January 6. | Week ending December 30. | Week ending December 23. | Attacked. | Killed. | Died. | Recovered. | Remaining. |
| 1. Metropolitan Police District . . . | 67 | 31 | 86 | 7313 | 3112 | 3317 | 305 | 579 |
| 2. South Eastern Co. . | 107 | 64 | 91 | 4682 | 1469 | 2592 | 394 | 227 |
| 3. South Midland Co. . | 786 | 981 | 786 | 7555 | 1571 | 4695 | 469 | 820 |
| 4. Eastern Counties . | 260 | 196 | 243 | 6751 | 2527 | 3294 | 421 | 509 |
| 5. South Western Co. . | 59 | 85 | 70 | 775 | 195 | 420 | 75 | 85 |
| 6. West Midland Co. . | 251 | 143 | 127 | 2188 | 449 | 1219 | 177 | 343 |
| 7. North Midland Co. . | 455 | 530 | 387 | 2941 | 467 | 1868 | 178 | 428 |
| 8. North Western Co. . | 1964 | 1823 | 1007 | 7931 | 478 | 4990 | 547 | 1916 |
| 9. Yorkshire . . . | 2028 | 1446 | 1212 | 12350 | 769 | 7592 | 1537 | 2452 |
| 10. Northern Counties . | 175 | 213 | 118 | 1777 | 532 | 835 | 184 | 226 |
| 11. Monmouthshire and Wales . . . | 819 | 206 | 405 | 2919 | 95 | 2177 | 284 | 363 |
| 12. Scotland . . . | 2649 | 1975 | 1724 | 24875 | 2855 | 14193 | 3697 | 4130 |
| | 9120 | 7693 | 6256 | 82057 | 14519 | 47192 | 8268 | 12078 |

## NOTES, QUERIES, AND REPLIES.

◆

He that questioneth much shall learn much.—*Bacon*.

Next week we shall report an important case of traumatic aneurism following perforation of the arteria innominata, which has lately occurred in the practice of Sir William Fergusson, Bart., and which we have been unavoidably obliged to postpone.

A private letter for "Physiologicus" is waiting at our office.

*Dr. Dyce Brown.*—The communication shall appear.

*Dr. W. Ogle.*—The paper is in the printer's hands, and shall appear.

*Chlorodyne.*—We have received plenty of communications on this popular medicine, which we must keep till next week.

Mr Thomas Shearman Ralph, of Melbourne, has written an able pamphlet on the Parasitic Nature of the Pleuro-pneumonia in Cattle.

The *Municipal Government of London*, by a Landowner (R. Hardwicke, 192, Piccadilly, price one shilling), is a clever pamphlet, which shall be noticed next week.

*A Hospital Surgeon.*—There are two members of the Council senior to Sir William Fergusson for a seat at the Court of Examiners, viz., Mr. Cock, of Guy's, and Mr. Solly, of St. Thomas's Hospitals.

*A Village Surgeon.*—The vaccine virus should be taken directly from the cow. Vaccination of cows from children is successful in comparatively a very small proportion of cases.

*Helminthologist.*—The preparations of Dr. Cobbold are now displayed in the Museum of the College of Surgeons, where you can see illustrations of the disease to which you refer.

*F.R.C.S.* and *A Member*, Birmingham.—There is no doubt but that, following recent precedents, the name of the delinquent will not only be removed from the College List, but also from the Register.

### ALLEGED BREACH OF MEDICAL ETIQUETTE.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Allow me to point out an accidental error in your remarks on the case between myself and Dr. Heginbotham. You say Dr. Heginbotham had permission of the parents to "open the child." Such was not the case as given (by the parents) and admitted by Dr. Heginbotham in evidence. I am, &c., A. J. W. BANKS, M.D.

Evercreech, July 15.

### POOR LAW MEDICAL REFORM.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Since the last report in your journal, I have received £7 3s. 6d., as the annexed list will show, which has not only placed the Association out of debt, but leaves a small surplus for future proceedings. To this surplus I trust the Poor Law Medical Officers, generally, will and their subscriptions, and thus enable the Association to take active proceedings during the ensuing session of Parliament.

There is a question now before the country to which I desire to call the attention of the Poor Law Medical Officers, viz., "the Rinderpest," which, should it be proved to be a malignant form of small pox, will compel the Government to consider the question of the compulsory vaccination of all calves, not to be killed as such, and thus prevent the spread or reappearance of the Rinderpest in the United Kingdom. Should such be the case, and the Poor Law Medical Officers not consider it derogatory to vaccinate these animals in their respective districts, a very material addition might be made to their at present miserable incomes, besides this, it would be the means of keeping up the supply of lymph for the human subject; if, however, they should decline to do this, I feel certain that those who are deputed to vaccinate the calf—a much more difficult operation than in the human subject—will, after a time, vaccinnate the infant, and thus a material reduction instead of an increase may be made in the incomes of Poor Law Medical Officers. I throw this out for the consideration of my brethren, that steps may be taken to insure the attainment of this object should they desire it.

R. Griffin, Weymouth, 21s.; H. T. Matthews, Horsham, 21s.; C. F. Lewis, Horsham, 5s.; W. Martin, Horsham, 10s.; R. Harrison, Kendal, 5s.; A. Cheeves, St. Germans, 5s.; H. E. Sargent, Launceston, 5s.; H. B. Goold, and W. B. Norman, Portsea Island, 10s.; W. A. Raper, Portsea Island, 5s.; J. S. Allnutt, Portsea Island, 5s.; J. E. Brine, Shaftesbury, 21s.; J. H. Swain, 10s.; W. H. R. Bennett, 10s.; J. S. Miles, 10s.

I am, &c.,

12, Royal-terrace, Weymouth, Jan. 13. RICHARD GRIFFIN.

### TO THE BENEVOLENT.

The case of Mr. Gregory, only son of the late Lieutenant-Colonel Gregory, 44th Regiment of Foot, is eminently deserving not only the sympathy, but the assistance of the Medical Profession, of which Mr. Gregory is a member.

His eyesight began to fail him while in Australia, which compelled his return to England.

The most eminent Surgeons in London—Mr. Bowman, Mr. White Cooper, Mr. Dixon, and Mr. Haynes Walton—have pronounced the disease to be atrophy of the optic nerve, causing an impairment of vision equal almost to complete blindness and quite incurable.

He is unable to read or write, and entirely incapacitated from practising his Profession, or, indeed, following any occupation. He is thus deprived of all power to contribute to the support of himself and wife.

His state of destitution has induced the following gentlemen to permit references to be made to them and to receive subscriptions with the hope that a sum may be collected to enable Mrs. Gregory to do something for the support of herself and husband.

The following gentlemen will answer any references made to them, or receive subscriptions on behalf of Mr. Gregory:—Barnard Holt, Esq., 14, Saville-row; Gilbert MackMurdo, Esq., 7, New Broad-street; Dr. Basham, 17, Chester-street, Belgrave-square; Dr. Hudson, 11, Cork-street, Regent-street.

COMMUNICATIONS have been received from—

APOTHECARIES' SOCIETY; Dr. JOHN WHITMORE; Dr. W. OGLE; Mr. F. CLOWES; Dr. DYCE BROWN; Mr. F. CROOK; Mr. R. GRIFFIN; Mr. EDWIN HEARNE; ETHNOLOGICAL SOCIETY; A SURGEON; A VILLAGE SURGEON; PHARMACEUTICAL SOCIETY; Dr. GEORGE F. DUFFEY; ROYAL MEDICAL AND CHIRURGICAL SOCIETY; Mr. G. GASKOIN; Dr. FOTHERBY; DOUBT; SCOTTISH WIDOWS' FUND; Dr. C. KIDD; ADMIRALTY, SOMERSET HOUSE; Dr. C. H. MARRIOTT; Mr. HENRY VIANT; Mr. THOMAS STOKES; Dr. A. J. BANKS; Mr. W. B. KESTEVEN; Dr. G. H. PORTER; Mr. W. TROUP; Mr. A. ARTHUR NAPPER; Dr. G. WHYTE; Professor LIONEL BEALE; Dr. C. HANDFIELD JONES; Dr. JAMES RUSSELL; Mr. E. BELLAMY; Dr. J. C. GOODING; Mr. SPENCER WELLS.

## VITAL STATISTICS OF LONDON.

*Week ending Saturday, January* 13, 1866.

### BIRTHS.

**Births of Boys, 967; Girls, 961; Total, 1928.**
**Average of 10 corresponding weeks, 1856-65, 1859·9.**

### DEATHS.

| | Males. | Females. | Total. |
|---|---|---|---|
| Deaths during the week .. .. .. | 756 | 750 | 1506 |
| Average of the ten years 1856-65 .. .. | 754·9 | 768·3 | 1523·2 |
| Average corrected to increased population.. | .. | .. | 1675 |
| Deaths of people above 90 .. .. .. | .. | .. | .. |

### DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

| | Population, 1861. | Small pox. | Measles. | Scarlatina. | Diphtheria. | Whooping-cough. | Typhus. | Diarrhœa. |
|---|---|---|---|---|---|---|---|---|
| West .. | 463,388 | 1 | 8 | 2 | 2 | 8 | 5 | 3 |
| North .. | 618,210 | 9 | 10 | 9 | 1 | 13 | 18 | 3 |
| Central .. | 378,058 | 1 | 7 | 5 | .. | 4 | 4 | 1 |
| East .. | 571,158 | 6 | 7 | 9 | 4 | 31 | 19 | .. |
| South .. | 773,175 | 4 | 9 | 7 | 1 | 16 | 26 | 5 |
| .. | 2,803,989 | 21 | 41 | 32 | 8 | 72 | 72 | 12 |

### BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, January 13, 1866, in the following large Towns:—

| Boroughs, etc. | Estimated Population in middle of the Year 1866. | Persons to an Acre. (1866.) | Births Registered during the week ending Jan. 13. | Deaths. | | Temperature of Air (Fahr.) | | | Rain Fall. | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Corrected Average Weekly Number.* | Registered during the week ending Jan. 13. | Highest during the Week. | Lowest during the Week. | Weekly Mean of the Mean Daily Values. | In Inches. | In Tons per Acre. |
| London (Metropolis) | 3067536 | 39·3 | 1928 | 1400 | 1506 | 49·6 | 23·7 | 36·9 | 2·41 | 243 |
| Bristol (City) . . | 163680 | 34·9 | 119 | 73 | ‡100 | 52·5 | 28·0 | 39·3 | 1·68 | 170 |
| Birmingham (Boro') | 335798 | 42·9 | 267 | 163 | 201 | 54·5 | 29·4 | 38·5 | 0·63 | 64 |
| Liverpool (Borough) | 484337 | 94·8 | 319 | 281 | 389 | 51·6 | 30·2 | 40·2 | 0·64 | 65 |
| Manchester (City) . | 358855 | 80·0 | 273 | 203 | ‡231 | 51·9 | 13·0 | 37·5 | 0·99 | 100 |
| Salford (Borough) . | 112904 | 21·8 | 76 | 57 | 68 | 50·9 | 18·4 | 37·4 | 0·95 | 96 |
| Sheffield (Borough) . | 218257 | 9·6 | 137 | 115 | 122 | 51·0 | 19·9 | 35·4 | 0·79 | 80 |
| Leeds (Borough) . | 228187 | 10·6 | 93 | 116 | 160 | 54·0 | 20·5 | 36·9 | 0·77 | 78 |
| Hull (Borough) . | 105233 | 29·5 | 88 | 49 | 58 | 47·0 | 19·0 | 34·1 | 0·34 | 34 |
| Nwcastl-on-Tyne, do. | 122277 | 22·9 | 89 | 65 | 68 | 45·0 | 25·0 | 34·0 | 0·22 | 22 |
| Edinburgh (City) . | 175128 | 39·6 | 112 | 84 | 88 | 47·0 | 20·0 | 32·8 | 0·80 | 81 |
| Glasgow (City) . . | 432265 | 85·4 | 332 | 252 | 271 | 48·1 | 17·9 | 32·7 | 2·08 | 210 |
| Dublin (City and some suburbs) . | 318437 | 32·7 | 162 | †156 | 161 | 54·2 | 27·5 | 39·9 | 0·67 | 68 |
| Total of 13 large Towns . . . | 6122894 | 34·4 | 3995 | 3014 | 3453 | 54·5 | 13·0 | 36·6 | 1·00 | 101 |
| | (1863) | | | | Week ending Jan. 6. | Week ending Jan. 6. | | § | | |
| Vienna (City) . . | 560000 | .. | .. | .. | 319 | .. | .. | 29·5 | .. | .. |

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·195. The reading was 29·93 in. on the morning of Sunday; it fell to 28·65 in. on Thursday, and rose to 29·83 in. on Friday.

The general direction of the wind was south-west and west.

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* The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.

† Registration did not commence in Ireland till January 1, 1864; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in that city were the same as the averages of the rates in the other towns.

‡ The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

§ The mean temperature at Greenwich during the same week was 43·2°.

## APPOINTMENTS FOR THE WEEK.

### *January* 20. *Saturday* (*this day*).

*Operations* at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free Hospital, 1½ p.m.

ROYAL INSTITUTION, 3 p.m. Prof. Westmacott, "On the Way to Observe in Fine Arts."

### 22. *Monday.*

*Operations* at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.

MEDICAL SOCIETY OF LONDON, 8½ p.m. Lettsomian Lectures—"On Certain Painful Affections of the Fifth Nerve," Lecture II., by Dr. F. E. Anstie.

### 23. *Tuesday.*

*Operations* at Guy's, 1 p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; St. Peter's Hospital for Stone, 3 p.m.

ETHNOLOGICAL SOCIETY OF LONDON, 8 p.m. Sir E. W. Belcher, "Remarks on the Andaman Islands, from the Notes of Lieut. St. John." Dr. Caddy, "Visit to the Patagonians."

ROYAL INSTITUTION, 3 p.m. Prof. Tyndall, "On Heat."

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8½ p.m. Dr. Radcliffe, "Case of Acute Uncomplicated Myocarditis." Mr. C. H. Moore, "Arterio-venous Cyst in the Popliteal Nerve; Amputation; Recovery."

### 24. *Wednesday.*

*Operations* at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.

HUNTERIAN SOCIETY (Special Council, 7 p.m.), 8 p.m. Dr. Peacock, "On Some of the Hospitals in the North of Europe, and on Hospital Construction." Mr. Couper, "A Case of Deficiency of the External Ear Remedied by Operation."

### 25. *Thursday.*

*Operations* at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.

KING'S COLLEGE MEDICAL SOCIETY, 8 p.m. Mr. Welch, "On Ovarian Cysts."

ROYAL INSTITUTION, 3 p.m. Prof. Tyndall, "On Heat."

### 26. *Friday.*

*Operations*, Westminster Ophthalmic, 1½ p.m.

ROYAL INSTITUTION, 3 p.m. S. W. Baker, Esq., "On the Sources of the Nile."

# ORIGINAL LECTURES.

## LUMLEIAN LECTURES
### ON SOME POINTS IN THE PATHOLOGY OF NERVOUS DISEASES.

By C. HANDFIELD JONES, M.B., F.R.C.P., F.R.S.,
Physician to St. Mary's Hospital and Lecturer on Medicine.

### LECTURE III.

(Continued from vol. ii., 1865, page 623.)

I PROCEED now to make some remarks on *pain*, the commonest as well as the most distressing of the symptoms to which functional nerve disorder gives rise. The purpose I have chiefly in view is to endeavour to ascertain the true character and import of this condition. One of the most eminent and respected Fellows of this College describes it as follows:—"Natural sensation," he says, "suffers offence from some cause or other, and hereupon it is altered, raised, exasperated, and so it becomes *pain;* but it is sensation still, and nothing more." The idea here conveyed is otherwise expressed by Romberg when he says, speaking of hyperæsthesia (a convertible term with him for neuralgia), "the character which these affections have in common is exalted irritability, and increased irritation of the sensitive or centripetal nerves." Mr. Paget speaks of pain as a morbid exalted sensation. It seems to me that in these descriptions, embodying, as they do, very much the notions generally entertained on the subject, the condition giving rise to pain is regarded as one of increased functional activity of the nervous tissue, increased at least in some degree, though not in a healthy and natural manner. I think it may be worth while to consider whether in the majority of neurotic pains the phenomena are not essentially indicative of depression, resulting from lowered and enfeebled vital power in the suffering tissue itself, and in the body generally. First, however, it seems to me desirable to draw a distinction between two forms of nervous pain, the types of which are very dissimilar, though they are often variously combined in intermediate instances. Hyperæsthesia, interpreting the term according to its etymology, is, I think, a real morbid state, and should not be confounded with neuralgia. The affection termed scrofulous ophthalmia, with its intense photophobia, affords one of the best instances. The retina is utterly intolerant of its natural stimulus, and this excessive irritability is evidently the essential morbid condition, and not inflammation. It is true, that as the optic is not a nerve of common sensation, we cannot show that it is liable to the different form of nerve distress which we call neuralgia, but there is no difficulty in making this distinction in other instances. Thus even in the eye photophobia appears to be sometimes dependent, as Romberg considers it generally is, on disordered action of the ciliary nerves; I have myself met with instances of the occurrence of photophobia in amaurotic individuals. Neuralgia of the eye is, however, quite a different affection, often co-exists with neuralgia of the face, and may be quite unattended with photophobia. The same distinction may be made of the nerve pains which affect the stomach. Some of them, the commonest, are typical examples of neuralgia, being attended with much sense of depression and sinking, and relieved by stimulants, as brandy and opium. In others, the phenomena are much more those of extreme sensitiveness and irritability, the epigastrium being very intolerant of pressure, the lightest ingesta immediately producing pain and often vomiting. The remedies for this latter state differ so much from those which avail in the first, that we have the clearest evidence of the great difference between the vital actions in the two cases.

The uterine neuroses present us with a third example. The affection termed "irritable uterus" can only be regarded as essentially an hyperæsthesia of the organ, especially of its cervical part; while the pangs of dysmenorrhœa are in many instances true neuralgiæ. Romberg (a) distinguishes tic douleureux from what he calls anæsthesia dolorosa of the fifth nerve, and says the important criterion by which the latter may be recognised is the insensibility of the painful surface to irritation; while in tic douleureux the parts become morbidly sensitive to the most superficial contact. The testicle and the female breast sometimes present exquisite instances of hyperæsthesia; any, even the gentlest, contact being intolerable; while many instances of true neuralgia are relieved by firm pressure and friction.

We have no certain knowledge as to the condition which determines the occurrence of hyperæsthesia rather than of neuralgia. I believe we must acquiesce in the somewhat vague statement that it is a different mode of acting in the nerve tissue itself, and is not dependent on neuritis or any discernible alteration. Hyperæmia, however, does seem in some way to be associated with hyperæsthesia, as is evidenced in those cases of neuralgia where, after the lapse of a certain time, the affected part becomes more or less red, swollen, and exquisitely tender; the neuralgia having, in fact, been converted into hyperæsthesia. Tranverse lateral division of one half of the cord in the dorsal region produces marked hyperæsthesia of the lower limb on the same side, which is referred by Brown-Séquard to paralysis of the vaso-motor nerves of this side induced by the operation. He makes the hyperæsthesia chiefly dependent on the resulting hyperæmia, the vital properties generally of the parts supplied by the dilated vessels being increased by the afflux of arterial blood. It is, however, I think, certain that hyperæmia is no necessary part of hyperæsthesia. I remember attending a lady of advanced age, who suffered, after an attack of zona, with persistent extreme hyperæsthesia of the skin of the breast and adjacent parts, quite unattended with any hyperæmia. A patient lately under my care for severe facial neuralgia had no heat or redness of the skin covering the affected part, but it was very tender. Another patient suffering in the same way obtained relief by stooping forward so as promote the flow of blood to the head. In the affection termed mastodynia, as described by Sir Astley Cooper, the local tenderness is extreme; but the colour of the skin, it is expressly said, remains unaltered, and no trace of inflammation is visible. The same is true, I believe, of most of the cases of irritable testis; Graves says(b) of a case attended with excruciating agony that there was no fever, and not the slightest appearance of local congestion or inflammation.

Hyperæsthesia, like neuralgia, may be of reflex origin. Mr. Erichsen states that this condition of the testis may be dependent on local irritation, as that produced by external piles, and may cease after these have been removed. The affection termed painful subcutaneous tubercle is often attended with most marked hyperæsthesia. Romberg says that during the paroxysm the skin is so excessively tender that the most superficial and gentlest contact increases the pain, which is not the case in the intervals. It is remarkable that the nerve disorder in these instances rarely takes a centripetal, but usually a peripheral direction. Foreign bodies or wounds of the nerves produce much the same effect as the painful tubercle. Wardrop relates a case in which the thumb, after being wounded, became constantly painful and extremely tender to the touch, with severe reflected pains extending over the whole hand, arm, neck, and even down to the back. Immediately after complete division of the nerve above the injured part, the thumb which he could not allow to be touched a minute before he could now roughly handle, and all pain left the other fingers and hand. In this case, as in others, the hyperæsthesia was unattended by any hyperæmia, and temporary relief was even afforded by copious general bleeding. The production of hyperæsthesia by such causes as have now been mentioned is surely significant as to the nature of the symptom. They can act no otherwise than in the way of deteriorating and injuring the nervous tissue.

While insisting, however, on the distinction between hyperæsthesia and neuralgia as a point of some practical importance, I would not omit to note the affinities between these two states;—both are essentially neuroses, both commonly have their origin in causes which impair the strength and tone, and heighten the mobility of the nervous system, and both are often ameliorated by means which improve general and nervous power. Of these as of many other conditions we may say—"Facies non omnibus una, nec diversa tamen."

With respect to neuralgia, there seems to me much to support the view that it is the result of depressed and not of increased nervous power; that though it must be regarded as a form of sensation, it is an impaired and deteriorated, and not in any wise an exalted, and that it betokens an approach to sensory palsy and anæsthesia rather than to a higher manifestation of functional power. One very significant and interesting feature in the ordinary instances of neuralgia is the intimate connexion between the pain and the coexisting general debility. Whatever improves the general health and strength usually amends the neuralgia, and whatever lowers it will assuredly be speedily followed by increased suffering. Even a moderate amount of bodily exertion, by the expenditure of nervous energy which it involves, will aggravate or reproduce a neuralgia which was ceasing under treatment. In one instance a male under my care, convalescent from severe facial neuralgia, found that he was rendered sleepless at night by pain in his arms if he worked at his trade of shoemaking during the day, but he had no pain if he kept at rest. Mental effort has the same effect;—a Medical man suffering with nervous exhaustion from overwork and neuralgic headache, told me that he found any amount of close thought induce actual acute pain.

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(a) Romberg, vol. i., p. 49.

(b) Graves, p. 83.

The state attendant on neuralgia is essentially one of depression, which does not appear to be merely the result of the suffering, but to be in a measure itself the root-malady. The brain is inapt for mental effort, and its functional power sometimes fails in a very marked manner. The parts affected are often quite numb; I have especially observed this when the hands and fingers were attacked. Moreover, the muscles supplied by the suffering nerves are sometimes distinctly paralysed, and there is usually more or less weakness and impaired mobility in the limb. Paresis of vaso-motor nerves sometimes accompanies that of the sensory. I well remember, when suffering some years ago with an annoying throat neuralgia, both the great depression with which it was attended and the very troublesome salivation. The latter was doubtless a secretion flux dependent on a semi-paralysis of the nerves of the salivary glands. The beneficial influence of appropriate electrical stimulants may also be cited as indicative of the quality of the morbid action, and so also may the nature of the local applications, chloroform, opium, turpentine, ammonia, etc., as well as of the internal remedies which we often employ with advantage. Now, it may be fairly argued that when the signs of nerve debility are so apparent, and have such a distinct relation to the particular symptom, this must be itself of the same essential character. When the vis nervosa generally is feeble, the brain languid, the affected nerves anæsthetic or tingling, as after pressure has been made on them, the colligated motor and adjacent vaso motor semi-paralysed, and when all these aberrations from the healthy state are corrected by a tonic and nutrient treatment, the conclusion seems inevitable that the disorder is essentially one of lowered vital action, and that we must employ such terms as irritation and the like, with the full understanding that such is really the case.

I have hitherto been speaking of non-organic neuralgia, especially that which does not depend on any material cause of irritation, but on some undiscernible primary alteration in the state of the affected tissue. What is true in this case holds good also, I believe, in the other. Pain essentially depending on some local lesion is aggravated by fatigue, mental anxiety, bad food, and the like; and is relieved by restoratives which improve the general strength. Dr. Brinton says "there are hundreds of people walking about London the diseased nerves of whose carious teeth would be speedily roused into severe neuralgia by two or three nights of sleepless watching and anxiety, or by two or three days of insufficient nourishment, or of violent and exhausting exertion of mind or body. And conversely, I am sure that a generous diet will often relieve the agony arising from sheer involvement of nerves in a cancerous deposit." Dr. Anstie, describing his personal experience of neuralgia of the vasal and frontal branches of the fifth dependent, apparently, on a tight stricture of the upper end of the nasal duct, says, "The attacks of pain are invariably caused by fatigue of body or mind, and are preceded or accompanied by pallor of the face, weak pulse, and a general sense of depression. Ammonia, hot tea, and local blistering are the most effective means of relief." The *conditions* which give rise to pain, so far as we can take cognisance of them, are such as can only affect the nervous system in an unkindly injurious manner. Carious teeth, hard cancer growths, renal and biliary calculi, stone in an inflamed bladder, a piece of lead imbedded in a nerve are, it is true, nerve-excitants; but their action we can pronounce *à priori* can be no other than depressing and exhaustive. Nerve excitants, which act beneficially, are, we know, of a very different sort. The *effects* of pain are notoriously exhausting and depressing, and may even lead to a cessation of all vital action. Dr. Latham mentions a case in which death ensued from the agonising pain of a gall-stone.(c)

Although the above evidence seems to me tolerably conclusive as regards the true nature of pain, I may refer incidentally to two or three other instances which seem to me to admit of an explanation very confirmative of the view I have taken, and which are in themselves of some interest. The usually trifling disorder of sneezing seems to afford some evidence of the paralysing influence of pain. It is quite certain that the profluvium which is poured out so suddenly and rapidly is not produced by the expiratory air blast; for we expel none such by the strongest voluntary imitation of the process. The act commences with pain, and it appears that when this attains a certain intensity it conditionates in some way paralysis of vaso motor nerves, in consequence of which the mucous membrane becomes flushed with blood and exudation takes place. The pain is a neuralgia, and as such is associated with motor paralysis, as is often observed in brachial and other neuralgias. Copious sweating is often the result of pain, doubtless from inhibitory paralysis of the arteries of the cutaneous glands. The lacrymation attendant on photophobia is an instance of the same kind; and so also is pyrosis, where the gastralgia gives rise by reflex relaxation to the watery effusion which is then rejected.(d) The pain occasioned by the descent of a renal calculus is often associated with numbness of the corresponding thigh, giving us, as it were, an interpretation of the true character of the pain.

From all the above it is tolerably evident that in the sensory department of the nervous system paresis must be of very frequent occurrence, much more than it is in the motor. A multitude of common pains occur in the way of direct primary failure of functional nervous power, but very many also are the result of reflex irritation, and therefore belong to the category of inhibitory paralysis. Some of the cases related by Sir B. Brodie read, *mutatis mutandis*, exactly like histories of reflex paralysis—*e.g.*, the man whose painful foot was cured by dilating a stricture in his urethra, and the female in whom a like pain was removed by the cure of piles. This theory referred to seems thus to derive material confirmation from a due estimate of the true nature of pain.

Hyperæsthesia at first sight appears to present much more resemblance to a state of increased functional energy than neuralgia does. On closer examination, however, it becomes pretty clear that such is not really the case. A true increase of functional energy would surely imply that the tissue was more capable of fulfilling its proper work, was able to put forth more power than it could before. The sensory nerve ought to be more discriminative, more quick at perceiving minute differences, not merely more sensitive, so much so as to be actually shrinking from the contact necessary to the exercise of its function. The organs of special sense, when trained to their highest degree of efficiency, are, we know, in a very different state to that which they present when their nerves are hyperæsthetic. There is a wide difference between the condition of the retina in the photophobic patient and in the Indian who recognises the footprints of some particular individual where the untrained eye can discern nothing at all. So also the wonderful delicacy of touch which the blind acquire is a very different quality from the hyper-sensitiveness of the hysterical. The power which a practised taster possesses to judge of flavours has nothing in common with that most refractory and distressing disorder, lingual hyperæsthesia. The fact seems to be that hyperæsthesia of a sensory nerve is a state strictly analogous to undue excitability of a motor nerve, such as exists in chorea, and in a variety of states of debility. The excitability, the mobility of a motor nervous apparatus, if excessive, is so far from being the same thing as increased functional capacity of that apparatus that the two are always developed in inverse ratio. The strong organs are tranquil in their strength, as all really strong things are; the weak, on the contrary, are prone to make a fidgetty display of imperfect action. It is just the same with the sensory organs: a certain amount of strength is necessary for the due fulfilment of their function, and from this hypersensitiveness the offspring of debility incapacitates them.

It may add to the force of the above remarks if we take some instances of hyperæsthesia, and consider the attendant circumstances. With regard to photophobia, nothing can be more evident than that the fundamental condition is in most cases one of marked debility, and that the analeptic and tonic regimen is urgently needed. Acoustic hyperæsthesia is a much rarer phenomenon. Dr. Watson mentions the case of a gentleman who was taken suddenly ill, and died in a few hours of an irregular form of cholera. When seen, he was pulseless; his skin was cold; he was evidently dying; but his intellect was entire, and his hearing was so painfully acute that he was distressed even by the whispered conversation of his attendants. Under such circumstances, an increase of functional power seems out of the question. The condition of the general health in the affection termed "irritable uterus" is certainly indicative of impaired vital power, and the local disorder is evidently inconsistent with the due function of the part. The same must be said of gastric hyperæsthesia, whether it originate primarily in the organ itself, or be of reflex origin. A patient under under my own care suffered with exceeding pain after eating, so that she went without food to escape it. Any exertion made her worse. Her pulse was very feeble. Her head she described as being in such a "very queer state" that, if left alone a short time, she felt lost. With nitrate of silver and lactic acid she benefited very much. The depression of nervous power in this case was well marked, and it is usually so in most instances of the same kind. With regard to cutaneous hyperæsthesia, it seems to me that the phenomena of itching and creeping (formicatio), which are described by Romberg as disorders of this kind, are not really and properly such. By hyperæsthesia, as we have above employed the term, we imply a condition in which the part concerned is intolerant of pressure or of any kind of excitement. Such is not at all the case in pruritus and formicatio, which invite pretty rough manipulation, and herein show more affinity to neuralgia than to hyperæsthesia. The former of these—dysæsthesiæ—it may be remarked, is by no means closely connected with a depressed state of vital energy, but rather the contrary. I have several times had occasion to observe that the subjects of lichen, though suffering considerably from the annoyance of the eruption, were in a rather vigorous state of health. A recent writer(e), speaking of the prickly heat in India, says that it prevails at that time of the year when sickness is least prevalent, and is usually associated with excellent health. True cutaneous hyperæsthesia is often observed in facial neuralgia, and is, I am sure, by no means limited, as has been asserted, to the declining period of the disorder, when vascular injection of the skin occurs. I have found it present when the surface had quite its ordinary appearance. In the graphic description which Dr. Fuller has favoured us with of his personal experience of infra-mammary pain, he remarks that the disorder first attacked him in the month of June, when he was thoroughly exhausted by incessant Professional work, and enervated by want of active out-of-door exercise. The disorder was chiefly a neuralgia, but when severe was accompanied by superficial tenderness, so acute as to be aggravated by the slightest pressure, but of much more limited extent than the pain. Improvement of health by means of country air seems to have been the chief means of procuring recovery. Here the connexion between neuralgia and hyperæsthesia, as well as their dissimilarity, is sufficiently marked; and the conditions under which both occur are plainly those of nervous exhaustion. The following instance is much to the same effect:—A lady, who is by no means subject to neuralgic affections, was convalescing very prosperously from her fifth confinement, and nursing her infant. At about the end of the second week she was attacked one day with sensations of incipient catarrh, and with considerable tenderness of the right breast. The left breast was a little painful, but much less. On the second day of this evidently influenzal disorder the tenderness of the right breast was extreme; it could hardly bear the least pressure, even its own weight was distressing; pain shot up towards the axilla and scapula. Pain was felt when the breast was not touched,—sharp, pricking, shooting, and aching; giving suck increased the pain, and put her into a bath of perspiration for a time, but the breast got easier afterwards. There was no inflammation. Quinine was given, and the suffering was at an end in five days. The influence of pain in this instance in causing vaso-motor paresis of the perspiratory glands is noteworthy. Cutaneous hyperæsthesia is a very marked feature of the earlier period of catarrhal fever, as I can testify from personal experience. I have suffered from this disorder the last two years at about the middle of July; it continues about a month, and is certainly no mere febricula, nor has it any relation to hay-fever. The symptoms are languor, mental and bodily, prostration, chilliness, complete anorexia, pharyngeal and nasal catarrh. While suffering with the chills and slight rigors of this fever, I was forcibly struck with the perverted state of the cutaneous sensibility; the cool breeze which would have been most grateful during the summer heats being now actually distressing. The peculiar co-existing prostration of mental and muscular power rendered it quite impossible to regard this hyperæsthesia in any other light than as a sensory paresis, and it was also evident that the vaso-motor nerves of the upper part of the air-passages were similarly affected.

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(c) I am glad to find that Dr. Anstie in his able work has taken the same view that I have, and developed it more completely. I have no doubt that his opinions were arrived at by independent investigation; but that I may not appear to any to be guilty of plagiarism, I will mention that in my paper on the nature, etc., of neuralgia, published in the *Lancet*, September, 1859, I took almost the very same ground that I do now.

(d) I beg to direct the reader's attention very especially to Bernard's paper (*J. de l'Anatomie und de la Physiol.*, September, 1864) "On the Influence of Paralysing Reflex Agencies."

(To be continued.)

## ORIGINAL COMMUNICATIONS.

# NOTES ON SYPHILIS, WITH SPECIAL REFERENCE TO ITS TREATMENT BY SYPHILISATION.

(Extracted from the *Norsk Magazin for Lægevidenskaben*, xix. Bind, 11 Hefte, Christiania, November, 1865.)

By WILLIAM DANIEL MOORE, M.D. Dub., M.R.I.A.,
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The following notes are extracted from a report on the Section of the Royal Hospital in Christiania for Diseases of the Skin, from October, 1863, to the end of 1864, drawn up by Hr. Owre, Physician Extraordinary to the Hospital, and published in the number of the *Norwegian Magazine of Medical Science* for November last. From the report, it appears that, in the above space of time, 511 patients—of whom 270 were males and 241 were females—were treated in the division of the Hospital just mentioned, and that of these 511 patients, almost exactly one half—viz., 257—were affected with syphilis.

Of the 257 individuals so affected, 34 presented primary symptoms alone, while 223 laboured under constitutional affections.

Of the 34, 9 (1 male and 8 females), had before been under treatment for general syphilis; the average duration of treatment for these patients was 22½ days; the other 25 (19 males and 6 females) were now for the first time in Hospital for a syphilitic affection, and the time of treatment for these was, on an average, 41 days. The cause of this difference in time is, no doubt, to be found simply in the fact that public girls, who are subjected regularly to inspection twice a-week, are taken into Hospital immediately on exhibiting ever so slight excoriations or ulcerations of a suspicious appearance on the genitals, particularly those who have recently been treated for general syphilis. All the eight women who had before laboured under constitutional syphilis were also prostitutes. They were in Hospital in the last quarter of 1863, and after that time such affections did not come under treatment, principally because public girls, as has already been stated, are no longer received into the Royal Hospital.(a)

The period of treatment for those not previously syphilitic, forty-one days, is about the same as Professor Boeck has assigned as the average time for a total of several hundred individuals treated with simple local means. (See "Recherches sur la Syphilis," pp. 57 and 58.)

The treatment of all primary sores, whether soft or hard, has been exceedingly simple, nothing else having been employed than plain external applications, as water dressing, slightly astringent solutions, and occasionally the application of lapis infernalis. Where the sore has not been easily accessible—for, example, on account of considerable phimotic swelling of the prepuce—it has been kept clean by ordinary injections with a long-pointed syringe; sometimes the prepuce has been divided to admit of the ulcer being treated, and this method is highly to be recommended, especially in simple large indurated ulcers, which might otherwise require many months for cicatrisation; laid bare after division, they in general heal very quickly. That the syphilitic sore may extend over the preputial lobes—nay, may even destroy the whole prepuce—has, indeed, occurred, but extremely rarely, and this risk can, at all events, not justify us in abstaining from a proceeding which spares the patient great pain, shortens his stay in Hospital, and must be regarded as free from danger.

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(e) *Brit. Med. Jour.*, May 28, 1864.

(a) From the preceding part of the Report, it appears that, since the commencement of 1864, sixty beds have been appropriated in the Municipal Hospital (Kommunesygehuset) to such patients.—W. D. M.

For that a portion of the prepuce, or perhaps the whole, should be lost is not any great misfortune.

Suppurating buboes occurred very rarely.

Of primary sores in unusual places we may remark :—An indurated ulcer in the umbilicus of a man, in whom the indurated ulcer on the inside of the prepuce had given rise to a phimosis like that just mentioned, and had ulcerated through the prepuce ; out of this perforating ulcer pus flowed in great masses at the time of his admission into Hospital, or two months after connexion. He could give no information as to the origin of the umbilical sore, but it must undoubtedly have arisen by self-inoculation from the sub-preputial ulcer ; it was quite characteristically indurated, penetrated rather deeply, and did not heal until after the lapse of about three months.

Labial chancres in two adult girls.

Ulcers on the mammæ in four, namely :—

1. G. M. N., aged 28, admitted on November 11, 1863, with constitutional syphilis. She had in the spring given suck to a strange diseased child with ulcers on the lips, trunk, and anus ; subsequently an ulcer was developed on the left nipple, where there is now a tolerably large, rather hard cicatrix. Later a sore (mucous tubercle) presented itself in the middle of the tongue, after which there was a distinct scar ; an affection of the throat and large mucous tubercles became developed in the course of the summer and autumn. The lymphatic glands in the left axilla, neck, and groin were swollen and indolent. At the same time her own male child, aged 15 months, was admitted with general syphilis. Her husband was healthy.

2. L. J., aged 34½, was admitted on April 1, 1864, with constitutional syphilis. Shortly before Christmas she gave suck to a child which was subsequently certainly known to be syphilitic. In the course of January she remarked a small ulcer on the right nipple, which, notwithstanding constant Medical treatment, refused to heal, but on the contrary regularly spread, so that on her admission into Hospital the right nipple was found to be considerably enlarged, uneven on the surface, ulcerated, of an intensely red colour, feeling hard throughout its whole mass and tender to the touch. The corresponding axillary glands were swollen and indolent. In addition there were secondary phenomena on the trunk and in the throat. On May 21 she was delivered of a putrid child in the eighth month.

3. S. H., aged 41, admitted on May 7, 1864, quite healthy, with her male child, aged 15 months, who had copiously secreting ulcers in the nose and mouth and on the chin, besides other secondary symptoms. On May 26 she called our attention to the fact that during the last few days an oblong ulcerated surface had been developed one-third of an inch from the base of the right nipple, which surface was covered with a thin crust, beneath which the ulcer was red, shining, and rather elevated. Subsequently there were fugitive pains in the loins, indolent glandular enlargements, particularly in the right axilla and along the posterior margin of the left sterno-cleido-mastoid muscle, with iritis of the left eye.

The child was infected by a woman labouring under secondary syphilis who sometimes took care of it.

4. A. E. L., aged 30, admitted on May 11, 1864, with her syphilitic child, exhibited on both mammæ a dry superficial ulceration, of the size of a bean, without any hardness, near the nipple. Constitutional symptoms were gradually developed, and on June 1 she was put under treatment.

The child, who had been infected many months previously by sucking a strange woman, whose child was syphilitic, had large ulcers on the lips and in the angles of the mouth.

Two little boys, the one aged 4, the other 10 years, came in with primary indurated sores on the penis ; they did not belong to the same family. As their cases have been detailed in the present volume of the *Norsk Magazin*, pp. 87, *et seq.*, I shall merely refer to them.

Before passing over to the constitutional cases, I shall mention that in 18 experiments we succeeded six times in inoculating the indurated chancre on the individual, and that in one out of five we obtained a positive result from mucous tubercles.(b)

Of the 223 constitutional cases, 212 were so-called secondary and 11 tertiary ; of these 212, 188 were new cases—partly acquired and partly hereditary syphilis—and 24 relapses. The 188 may be divided into the following six classes :—

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| 1. Treated by derivation . . . . . | 53 |
| 2. „ syphilisation . . . . . | 97 |
| 3. „ one of these methods, but supplemented by the use of iodine . | 11 |
| 4. „ without any special treatment (expectant) . . . | 7 |
| 5. To the City Hospital (improving or uncured) | 19 |
| 6. To continue the syphilisation out of Hospital | 1 |
| | 188 |

1. Derivative treatment is employed only in Dr. Hjort's clinique, and consists in the application to different parts of the body of stibiate plasters (c) of the size of a visiting card, followed, when good pustules are developed, by the use of poultices. We begin with the back (above between the scapula), then pass to the upper arms, and subsequently to the thighs, which occupies about a month or a little more in the first round. This differs somewhat in different persons ; but the longer we continue the method, the shorter is the round—in other words, the sooner does the plaster act. This is quite constant ; while the first plaster may require one or sometimes two weeks for the formation of pustules, the third may, for example, in the same place, or in its immediate neighbourhood, produce good pustules in from one to two days.(d)

But it is true that at the same time all cases of ulceration, as ulcers on the tonsils and in the cavity of the mouth, as well as mucous tubercles, etc., are treated locally with caustic and poultices.

The period of treatment for these fifty-three patients, taken together, was 5936 days ; consequently for each on an average the time amounted to 112 days with eleven drawing plasters (the longest time was 255 days with 15 plasters, the shortest was 38 days with three plasters).

This mode of treatment is by no means free from pain, and is used only for adults.

2. Syphilisation was on the whole employed in ninety-seven cases (thirty-four in Dr. Hjort's and sixty-three in Professor Boeck's clinique), with a total period of treatment of 14,898 days—that is, on an average, 153$\frac{57}{97}$ days, the longest time being 283, and the shortest 74. The proper inoculation, which is always continued until immunity is obtained—that is to say, until the time when no kind of syphilitic matter any longer takes effect—occupied 13,798 days ; that is, 142$\frac{24}{97}$ days for each ; but as all syphilitic symptoms had not invariably disappeared on the occurrence of this condition, several patients were obliged to remain in Hospital after the cessation of the inoculations, in order to have the remaining phenomena removed by caustic and baths. This occupied 1100 days, and as fifty-eight persons required this local after-treatment, it amounts to 18$\frac{54}{58}$ days for each ; but divided among all the syphilised patients (ninety-seven), it gives 11$\frac{33}{97}$ days over the average time of treatment stated in the above calculation.

As during derivation, so also during syphilisation, were caustic and astringent topical applications made to the syphilitic ulcerations and vegetations.

Syphilisation is more painful than derivation, and exhausts the patient's strength in a much greater degree, particularly during the first two months, while all these inoculation sores, some of them deep and wide, are most active. Then every movement of the body is extremely incommoded, sleep at night is disturbed, and the copious suppuration wastes the frame. But when the second or third month is well over, and the inoculations no longer produce so violent an effect, the suppuration being at the same time limited together with the artificial ulcerations, the organism often easily regains its lost tone and fulness, and the patients towards the end of the treatment generally look very thriving and happy.

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(b) Much as the dualists may laugh at the favourite mixed chancre of Rollet, the auto-inoculability of the infecting chancre cannot be argued away. While this is being written, there lies in the Hospital a case particularly instructive in this respect. A man was admitted nearly three months ago with ulcers as large as a half-skilling piece on the outside of the penis (one towards the root of the penis, the other on the prepuce, both genuine *chancres parcheminés*) ; inoculation from them was attempted, but unsuccessfully. They were stimulated with savine : the inoculations continued without result. For a fortnight nothing was done with the sores ; fresh inoculations then yielded a positive result in the patient for many days, and from the pustules so produced both he and several other generally syphilitic individuals were inoculated with positive results through many links. This patient, shortly before admission, infected two girls, who are now labouring under secondary syphilis.

(c) The "emplastrum stibiatum" of the Norwegian Pharmacopœia is prepared by accurately mixing extemporaneously one part of powdered tartar emetic with three parts of adhesive plaster melted with a gentle heat.—*Translator.*

(d) In the face of this incontestable fact, which has now been observed in hundreds of cases in this Hospital, it is, in truth, surprising to find one after the other stating that the skin by frequent irritation loses its power of reaction—for example, after stibiate plasters—is always added. Dr. Joh. Björkén, in one of his "Letters on Syphilis" in the November number of the *Hygiea* for last year, calls this artificial condition "weariness of the organism."

No particularly dangerous ulceration occurred as the result of syphilisation, and it would appear as if we have a certain limited power over such cases by beginning first on the chest and abdomen, then passing to the upper arms, and finally to the thighs. The ulcerations are never so great in this way as when we proceed in an inverted order. But wherever we begin, we must always remember to let the punctures be removed somewhat from one another (for example, an inch), particularly in the commencement, for the ulcerations are then largest; if the single inoculations are placed near together, the sores coalesce, and we then have rather deep and large ulcers. This has often been the case abroad, where syphilisation has been tried, and just for this reason forthwith given up. Such was the case, at all events, according to the testimony of an eye-witness, in Vienna with Professor Sigmund.

According to this method both adults and children were treated, and for the last without any difference, whether their syphilis was acquired or hereditary, except in a couple of cases among the latter, where the patients were evidently so weak, that it was not thought advisable to employ syphilisation with them.

In the children with inherited syphilis the symptoms disappeared under syphilisation in general tolerably readily, except in

A. L., aged 14 months, admitted into Hospital on October 9 in good condition, with a slight papulo-pustular exanthema on the trunk and thighs. The inoculation on the whole gave no particular result, which circumstance is generally observed in the papular and pustular syphilides.

December 23.—Two rather elastic swellings (gummata?) have been gradually developed on the glabella (space between the eyebrows) and somewhat farther up and to the left on the forehead.

31st.—A similar swelling on the back of the left hand, apparently proceeding from the middle metacarpal bone.

January 4, 1864.—A similar tumour appeared on the left zygomatic bone, and on the 5th another on the right.

7th.—The upper third of the right radius and the metacarpal bone of the first finger of the right hand were thickened.

March 19.—A number of small cutaneous abscesses have latterly successively formed on the nates and on the posterior surface of the lower extremities.

June 12.—A fresh eruption of papulo-pustular syphilides.

August 18.—A fresh tubercle on the right zygomatic bone externally and inferiorly.

October 23.—A swelling on the first metacarpal bone of the right hand.

December 1. — A similar protuberance superiorly on the right radius.

All these tumours extended widely, became fluctuating, were cut into, yielded pus copiously, suppurated long, presenting everywhere denuded necrosed bone, great destruction with contractions and ectropium (produced by sinking and perforation of the eyelids from the tumours on the forehead and zygomatic bones). The condition of the sufferer was miserable; there was tedious diarrhœa with excessive emaciation. There was no effect from syphilisation. And yet the little patient recovered.

In infants with hereditary syphilis the method of inoculation was employed in six cases, of which one ended fatally. As in such patients we often find this peculiarity, that we cannot propagate one and the same matter through long series of inoculations, just as in persons with the acquired form, we must frequently introduce fresh matter, which is then always taken from other individuals under similar treatment. In the following note upon these six cases will be found mentioned the age of the child upon admission, the duration of the treatment, and the number of times that inoculations with fresh matter were made:—

1. A. M. K., aged 7 weeks; 113 days; 38 fresh matters.
2. O. S., aged 2 months; 208 days; 111 matters. Admitted again on June 13 with a relapse; he remained 80 days, and was inoculated with 21 fresh matters.
3. A. O., aged 3 months; 107 days; 16 matters.
4. E. L. O., aged 3 months; 118 days; 36 matters.
5. M. E. P., aged 2½ months; died after 47 days' treatment with 12 matters.
6. P. P., aged 3 months; 97 days; 18 matters. (In the note-book it is, however, stated that the syphilitic symptoms had disappeared at the end of 40 days' stay in Hospital.)

(To be continued.)

# ON THE EARLIEST PHYSICAL SIGNS OF PNEUMONIA.

By H. FEARNSIDE, M.B. Lond.,

Member of the Royal College of Physicians of London.

Attention has been lately drawn to the subject of the earliest physical indications of pneumonia by the paper of Dr. Waters, read before the Medical and Chirurgical Society of London on the 12th ult., and by the important discussion to which it gave rise.

It so rarely occurs that an opportunity is presented of witnessing the onset of an attack of pneumonia, and of testing the signs by which it is characterised, that I watched with great interest such an example, which fell under my notice a few weeks ago. An outline of the case, so far as it bears upon the points under consideration, may not be uninteresting to the readers of the *Medical Times and Gazette*.

In the early part of November I was requested to see a young woman who was suffering from acute renal congestion,—apparently the result of exposure to the influence of the poison of scarlatina. On my first visit she had no pulmonary symptoms, and I satisfied myself, by careful examination, that the lungs and heart were in a normal state. She was directed to remain in bed, and was (very unadvisedly) placed in a cold room. In the course of a few hours she was seized with rigors, followed by a sharp pain in the lower part of the left side of her chest. She began to cough, and her breathing became embarrassed. The dyspnœa gradually increased until it amounted to orthopnœa, and the cough became incessant, but was not at first accompanied by any expectoration. I saw her on the following morning, and found her respiring 60 times to the minute, and with a small pulse of 120. On examining the condition of the lungs, it was seen that the movements of the left side of the chest were less free than those of the right side, and the stroke sound over its upper part seemed slightly impaired. On auscultation over the upper lobe of the left lung, the respiratory sounds were found exceedingly feeble,—almost annihilated, in fact; over the lower lobe they were harsh; on the right side the respiration was universally loud and puerile.

Feeling both interested and anxious respecting my patient, I visited her again in four hours, and then found that over the whole of the upper lobe of the left lung there was audible a fine, dry, crepitant râle, of the most perfect type.

The dyspnœa continued, but she had begun to expectorate a fluid largely mingled with blood.

It is needless to record the subsequent progress of the case beyond stating that the evidence of condensation of the affected lung speedily became more marked, and that, under a supporting regimen, the patient made a good, but slow recovery.

Preston.

# REPORTS OF HOSPITAL PRACTICE
# IN
# MEDICINE AND SURGERY.

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## GUY'S HOSPITAL.

### CASES OF CONTRACTED MITRAL, IN WHICH THERE WERE PRÆ-SYSTOLIC OR AURICULAR-SYSTOLIC MURMURS OVER THE LEFT SIDE OF THE HEART.

For many years it has been a question as to how far we are able, with any degree of certainty, to say that the mitral orifice is contracted or dilated. Dr. Stokes (in his standard work, page 144) says—when it is asked, can we say whether the disease of the mitral valve is a narrowing or a dilatation—"we must answer in the negative."

Dr. Walshe observes:—"We learn that a contracted mitral may be diagnosed by means of a diastolic murmur, of maximum force, heard immediately above and about the left apex, and conducted in the same direction, though less extensively, as the systolic murmur of the same seat." (See Walshe on "Diseases of the Heart," p. 104.) Moreover, it is stated that a diastolic murmur at the left apex may be produced either by the mitral valve being roughened on its auricular surface, and the orifice not at all affected, or be produced by the contraction of the left auricular ventricular orifice, with or without roughening of the surface of the mitral valves. Skoda states that when the orifice is contracted, the second sound of the heart, heard over the left base—that is, over the pulmonary artery—will be greatly intensified, whereas, when the mitral valve is simply roughened, no such intensification of the second sound will be produced.

Dr. Walshe further remarks (p. 104):—"This murmur is generally spoken of as diastolic in rhythm, but, in point of fact, it is rather post-diastolic or præ-systolic than precisely coincident with the diastole.

Dr. Gairdner, in his admirable clinical lectures, has called attention to some cases of contracted mitral, in which there was, or had been, a præ-systolic murmur over the left apex. Dr. Gairdner appears to consider that when such a murmur is present, it is by no means difficult to recognise it. The evidence below, as will be seen, confirms Dr. Gairdner's experience; and from what we ourselves have heard, we cannot but admit that we do not consider it by any means difficult to recognise such a bruit; on the contrary, once heard, it is easy again to distinguish it.

In a previous number of the *Medical Times and Gazette* we brought forward some interesting remarks on this disease by Dr. Wilks.

## A CASE OF CONTRACTED MITRAL ORIFICE, IN WHICH THERE WAS A LEFT AURICULAR SYSTOLIC BRUIT.

(Under the care of Dr. G. O. REES.)

For the following particulars we are indebted to the able report of Dr. G. Mickley:—

William C., aged 49, admitted in Guy's Hospital December 13, 1865, a pale, sallow-looking man, who states he has never been very strong; always liable to repeated colds. He says that about fifteen years ago he awoke one morning with a peculiar indescribable sensation, and found that he was incapable of moving his left arm, and that he soon lost the use of the leg on the same side. His face also was paralysed. He soon, however, recovered the use of his limbs, and now there is no remaining evidence of paralysis. He has suffered with shortness of breath for the last six or seven years, but more so the last twelve months. The last month he has had pain over the heart, and not been able to walk more than a few yards at a time without resting. He has a troublesome cough, and has spat blood the last four days. Has never had rheumatic fever.

On admission.—He is suffering with great dyspnœa, so much so that it is only with great care that he can be moved in bed. On examining his chest in front, the inspiration is puerile, and the expiration markedly prolonged; also sibilus and rhonchus all over the chest. Posteriorly, dulness on percussion over both bases; also crepitation, rhonchus, and sibilus over the upper part of the chest. The heart: The area of cardiac dulness is bounded above by the lower margin of the third rib; below, by the upper margin of the sixth rib; to the right, by the mid-sternal region; and to the left, by a vertical line half an inch to the left of the left nipple. The rhythm of the heart is very irregular, and there is heard a prolonged, running-up-to sound between the second and first sound of the heart. It is a feeble, although a harsh sound. It is more distinctly heard about two inches below and a little to the left of the nipple. It is exceedingly faintly, if at all audible in the left axilla. The first sound over the base of the heart is exceedingly feeble. No visible impulse. The liver is enlarged. No ascites or œdema of the arm or legs. Very slight œdema of the walls of the chest. Slight puffiness of the lower extremities. Urine scanty, high coloured, loaded with lithates, sp. gr. 1025, a doubtful trace of albumen. The expectoration is tenacious, sprinkled with bright red blood, also a few minute pellets of blood. It is sufficient for our purpose to state that his breathing gradually got more laboured, and he died rather suddenly December 20, 1865.

The post-mortem examination, conducted by Dr. Moxon, showed the pleuræ free from adhesions, and a quantity of fluid in the cavity of the right pleura. The lungs were very much engorged; and in both lungs there were several patches of apoplexy. The pericardium contained three and a-half ounces of yellow fluid. The left ventricle appeared normal, but the left auricle was seen to be very much dilated; its muscular walls hypertrophied, and the lining membrane of the left auricle was thickened, white, and opaque. The auricular appendages were enlarged and open. The right ventricle also much dilated. The right auricle also was considerably dilated. The mitral orifice was very much contracted—so much so, that the end of one finger could with difficulty be introduced. The great diminution of the orifice was seen to be due to the extensive thickening and induration of the fibrous tissue of the mitral orifice and at the roots of the mitral valves. On the auricular surface of the valves were some minute vegetations, which could be readily removed. The chordæ tendinæ were thickened, and the capsule of the liver was thickened. On section the liver showed the ordinary nutmeg appearance; intestines healthy; spleen very firm. Kidneys weighed 11 ozs.; the right showed on its posterior surface a transverse depression, which was seen to be due to an irregular band of fibroid tissue. The kidneys were slightly granular on their surfaces.

Dr. Rees remarked, when speaking of this case:—The conclusion I arrived at on first examining the patient was that he was suffering from a contraction of the mitral orifice. I was led to express this opinion, for it was clear to me that the second sound over the left base was greatly intensified, which led us to conclude that the pulmonary valves were unduly stretched by the increased pressure of the blood on the pulmonary artery. In fact, that there was some impediment to the flow of the blood through the lungs. Now, although the lungs were believed to be in an emphysematous condition, yet they did not appear to be so highly so as to account for this great obstruction. Further, on listening two inches below and a little to the left of the left nipple, a murmur was heard—faintly, it is true, still it could be heard with very little care. It was a rough, prolonged sound. The first sound of the heart was so exceedingly feeble that it was very difficult to say in what relation this murmur stood to the first sound of the heart. The loudly marked second sound, however, was readily heard, and immediately afterwards this rough prolonged sound. Yet this murmur was not continuous with the second sound. It appeared to occupy almost the entire ordinary period of silence, and also where the first sound ought to have been heard. It was, however, more the quality of the murmur (just such as I have heard in other cases of contracted mitral) that led me at once to express the opinion that it was an auricular systolic murmur produced by the blood passing through the narrowed auricular ventricular orifice. Nevertheless, I could not but notice that the murmur was heard in a very unusual situation; for the experience in this Hospital, at all events of late, has agreed with what is generally taught—that the situation in which such a murmur is usually heard is, in cases of contracted mitral, immediately above or immediately around the nipple. I was therefore led to ask whether the murmur might not be exocardial, and not endocardial. Our difficulty was increased owing to the fact that there was no visible impulse of the heart, nor could apex beat be felt. The sounds of the heart, also, were so extremely feeble that it was impossible to define the exact situation of the apex of the heart. Nor was percussion of much assistance; for although we were led by the site of the dulness to think the apex was carried to the left of the left nipple, and in the fifth and sixth interspace, yet the dulness was not so well marked that we could say how far the emphysematous condition of the lung interfered with the precordial dulness. Again, it is usual to hear this auricular systolic murmur immediately adjoining the nipple, because the apex of the heart is usually raised in cases of contracted mitral. Owing to the impediment in the mitral orifice, the quantity of blood entering the left ventricle is diminished, and in consequence the ventricle wastes and diminishes in size. In this case, however, if our diagnosis of the position of the apex was correct, the ventricle had not diminished in size, but rather increased. There was, however, no discoverable aortic valve disease, and no positive evidence of kidney disease, to account for the size of the ventricle; and to explain why, if this was a case of long-standing contraction of the mitral orifice, the ventricle had not diminished in size, as it usually does in such cases. I was, therefore, led to state that this murmur might prove to be of exocardial, not of endocardial, origin, and the left side of the heart be in a state of dilatation, with its walls attenuated and no valvular disease at all be present. This was rendered still further probable when we remembered the age of the patient, the presence of the emphysema, the history given of what appeared to have been an apoplectic attack, the absence of any history of rheumatic fever, the increased area of dulness, the great irregularity of the heart's beat, and the extreme feebleness of the first sound of the heart; all of which conditions are found in the cases of dilatation with attenuation of the left ventricle. The autopsy, however, made it all clear, and showed that our first opinion was correct. The apex of the heart was carried to the left, owing to the greatly dilated right side of the heart. The left ventricle, although not larger than a ventricle in a normal condition, yet it was not diminished in size, and in consequence ought to be considered as equivalent to being hypertrophied and dilated, and this due to the granular condition of the kidneys.

This case has appeared to me well worthy of attention, and has taught me in future to rely on the rhythm of the murmur alone, and it clearly shows that the position of the apex will determine the exact spot over which the murmur will be heard. Therefore, if there is a murmur pre-systolic in rhythm, the mere fact of its being heard in an unusual position should have no weight in determining that it is not due to contraction of the mitral orifice, unless the position of the apex can be clearly defined.

## A CASE OF CONTRACTED MITRAL ORIFICE IN WHICH THERE WAS AN AURICULAR SYSTOLIC AND A TRICUSPID MURMUR.

(Under the care of Dr. GULL.)

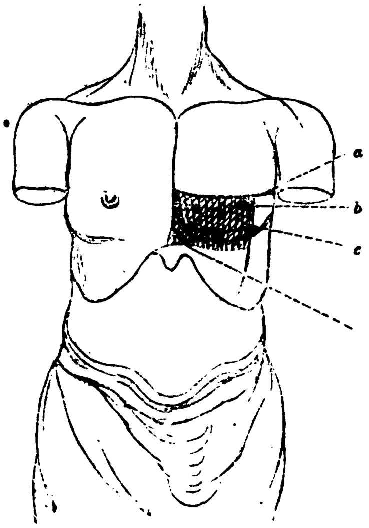
Sarah C., aged 32, married. States that she had always enjoyed very good health and considered herself strong until she was married. Her health first began to fail her during her first pregnancy. She has had six children born alive and one miscarriage. She felt weak while pregnant, but had at that time no particular illness. Five months ago, while pregnant, she noticed her feet and legs began to swell. Three months ago she was confined, and has never recovered since. She noticed that her abdomen did not diminish in size, and ever since it has gradually got larger. Her breath has been very short in exertion for some months past, but she cannot say definitely how long. She has never had rheumatic nor scarlet fever to her knowledge, and there is no reason to think she has had syphilis.

Her abdomen is very much distended with fluid; her legs and feet are not swollen. The liver can be very distinctly felt below the ribs. Her breathing is quick, and she states it has been much worse than it is now. Her face is distressed looking. No lividity, but an anxious look. Her pulse is slow, irregular, at other times regular, feeble, very compressible, but not the small pulse usually felt in mitral obstruction. The area of cardiac dulness extended from the fourth rib above, bounded on the right by the mid-sternal line, and on the left a vertical line drawn one inch outside the left nipple. Over this space there was marked dulness. The apex beat was felt half-an-inch below and one inch to the left of the nipple. The impulse was sharp and sudden, not heaving. Directly under the nipple a somewhat harsh sound was heard, between the second and first sound of the heart. The heart's action being slow it was very readily made out. The click of the second sound was heard, although feebly and immediately afterwards the rough, slow murmur continued until it reached the first sound. The murmur gave the impression as if the apex of the heart was labouring to get over a roughened spot on the pericardium. Although the murmur came immediately after the second sound, and almost filled up the entire ordinary period of silence, yet it did not occupy the entire period. On careful listening the sound was heard, then an appreciable period of silence, and thirdly the murmur. The area over which the murmur was heard was very limited. No murmur was heard in the middle of the axilla nor at the angle of the left scapula. On carrying the stethoscope from the left nipple towards the sternum, when about midway, a soft systolic bruit was heard. On tracing it still nearer to the sternum it was heard more distinctly, and the point of greatest intensity was a little to the left of the left margin of the sternum. The latter bruit was not conducted up the sternum. No murmur was heard over the base of the heart during the first two weeks of her residence in the Hospital, but the week before she died a murmur was heard over the base. The second sound over the left base was markedly intensified. The rhythm of the murmur just over the apex beat led Dr. Gull to decide that it was auricular systolic, and that taken with the much intensified second sound over the pulmonary artery showed there was contraction of the mitral orifice. The murmur over and near the sternum Dr. Gull considered to be due to tricuspid regurgitation. Although the apex was carried to the left by the distended right side, yet the apex of the heart was to some degree displaced, also by the large quantity of fluid in the abdomen.

While in the Hospital this patient became insane, and unfortunately committed suicide.

In order not to make this communication too long, it will be probably sufficient to say that the autopsy, conducted by Dr. Moxon, showed the mitral orifice very much contracted, and a good example of a so-called "button-hole" mitral; that the left auricle was greatly dilated, the right ventricle dilated also, but its walls markedly hypertrophied, the right auricle also dilated; the aortic valves showed signs of recent endocarditis.

The adjoining diagram will render the position of the murmurs still more clear.



*a.* The fourth rib. The dark, shaded portion shows the position of dulness.

*b.* The left nipple.

*c.* Apex beat, between the fourth and fifth ribs; and here a pre-systolic murmur was heard.

*d.* Here a soft systolic bruit was heard.

Dr. Gull observed: If a murmur similar to this one be heard about the left apex, and if the second sound over the pulmonary valves be intensified, there can be no doubt that the mitral orifice is contracted; but it happens now and then that no such murmur is present. Then the diagnosis is difficult. I remember a case in this Hospital in which such a murmur was present. The case was well watched, and the bruit was noticed to grow less and less distinct, until it became quite inaudible, and the most careful examination failed to discover any. The patient died, and the post-mortem examination showed the left auricle immensely dilated and also hypertrophied, and the left auricular-ventricular orifice to be a mere slit-like opening. It was contracted to an extreme degree.

A few weeks ago there was under Dr. Gull's care in the same ward a girl with imperfect mitral. The question was raised as to whether the orifice was dilated or contracted. It was certain there was no auricular-systolic or pre-systolic bruit. A systolic murmur was heard over the left apex; it was also heard in the axilla, and over the angle of the left scapula. The murmur was prolonged, and seemed to occupy the entire period of the first sound. But the period of silence was distinctly marked. It appeared to be a case of imperfect closure of the mitral orifice and regurgitation through it.

The autopsy showed that the mitral orifice was contracted, but not to an extensive degree. It allowed of the admission of the two first fingers up to the first joint, but with difficulty. The curtains of the mitral valves were much thickened and rigid, also the chordeæ tendineæ thickened and apparently shortened. It was thus clear that there were all the conditions favourable for regurgitation, while the orifice appeared not sufficiently contracted to produce a direct murmur.

On referring to Hope "On Disease of the Heart," p. 388, it will be seen that he alludes to such cases. Speaking of the diastolic mitral murmur, he says—"I have found this murmur absent unless the contraction of the valve was considerable; for the blood had still sufficient room to pass with tranquillity; and I have also found it absent when the contraction was great—when, for instance, the aperture admitted one finger only, or merely a quill, provided that the canal was preternaturally weakened by softening, by extreme dilatation of the heart, or by both."

## ST. BARTHOLOMEW'S HOSPITAL.

### SUBCUTANEOUS ULCERATION.

EXTRACT FROM A CLINICAL LECTURE BY MR. PAGET.

AMONG the frequent effects of inflammation are, the separations of adjacent layers of different tissues. Some of these deserve special notice for their practical importance. The simplest examples of this dissevering process are those in which one finds the capsule of the kidney more than usually separable, or the periosteum too easily stripping from the bone. In these cases there may be no more morbid change than that of softening of the walls of vessels, and the small quantity of connective tissue, which naturally hold together the two parts. A greater change is effected when articular cartilage can be stripped from bone; for here the separation is not possible till after the ulceration or extreme softening of one or both of the adjacent layers. In some of these cases it is observable that the disseverance of the bone and cartilage is without apparent formation of pus, or other morbid fluid. The cartilage, usually ulcerated on its under surface, can be raised from contact with the ulcerated bone, or the thin layer of granulations covering the bone, and no pus visible to the naked eye lies between them. This manner of disseverance by ulceration of bone and cartilage is generally known; it is a common result of acute inflammation of the joints. A similar process sometimes separates the subcutaneous fat from the subjacent fascia. It may fairly be called subcutaneous ulceration, to distinguish it from that with which it is mostly confounded—namely, the diffuse suppuration of the subcutaneous fat. There are truly several points of resemblance between the two processes, as there are between all instances of suppuration and ulceration; but a manifest difference is in this—that in the one the suppurative, in the other the ulcerative, process is greatly preponderant. In the diffuse suppuration, the pus forms an evident collection of fluid more or less widely separating the layers and upraising the skin; but in the ulceration, the separated layers remain in contact, or with only a little fluid between them. With these differences, others equally marked coincide in the general condition of the patients, and in the course and necessary treatment of the local disease. In the girl now under treatment, the disease appeared, when she was admitted into the Hospital on August 15 of last year, as an ill-defined patch of mottled, dusky redness, larger than one's hand, across the front of the lower part of the thigh. This patch of diseased integument was scarcely raised above the surrounding level. To the touch, it felt firm and brawny, but unequally so in different parts. It was hot, but not very painful, and at only one or two points tender upon pressure. Higher up in the outer part of the thigh were two scars, said to have been formed after similar disease there. The patient's general condition was that of mere debility, and that not extreme. She had no fever, no hectic, no rigors, and, except after a slight attack of pneumonia, she scarcely lost weight or strength. A variety of different modes of treatment were all equally useless for the remedy of this state. Complete rest, blisters, ointment of iodide of mercury, and the internal use of iron, iodide of potassium, cod-liver oil, had no sensible effect. At length, one of the places at which tenderness had been long observed was found soft as if with pus. This was opened, and in a few days later the opening was found to lead to a large space, in which the subcutaneous fat was completely separated from the fascia. The skin over this space was not upraised by any collection of fluid, and when the space was freely laid open by incision scarcely any pus flowed from it.

Within the last two years you have had opportunities of seeing three other cases of this kind under my care, and from them you may have been able to gather a general description of this disease. All the cases, you may have observed, have been in young persons of pallid complexion, with very feeble health; thin, and with very little muscular power. They might be called strumous, although they have not all the distinctive features of struma. In all of them the disease has been near the knee, where it is certainly most frequently seated, and in all the subcutaneous tissue, after feeling for a time firm and brawny, as if with inflammatory infiltration, has softened in one or more parts, and then has been widely undermined by slowly extending ulceration, with very little formation of pus. In the patient now in the Hospital the skin is much more evidently and widely diseased than in the others; in them much of it, even when undermined, has appeared nearly healthy, neither elevated, nor tense, nor reddened; but some part of it, after slowly softening and then ulcerating, or being punctured, has let way into the ulcerated subcutaneous space. In all, this space at the first laying open has yielded very little pus; in none has any slough or tuberculous matter appeared; but all the surfaces after exposure have suppurated freely, though thinly, till near their healing. In no instance has the skin itself ulcerated widely, however far the subcutaneous ulceration might extend. In all alike the only effective treatment has been such a thorough laying open of the ulcerated spaces, and of all bays and channels leading from them, as has completely exposed their surfaces, and permitted them to be dressed by packing. By this alone has the ulceration been either stayed or healed. Till this has been done the ulceration has always gone on extending subcutaneously, and its exposed surfaces have shown no signs of healing. Drainage tubes, setons, injections, compressions, and many other means have alike failed. In all the cases the ulcerated surfaces thus exposed have healed slowly, forming large thin tender scars, easily breaking down or ulcerating; but finally all have recovered. Moreover, none of these patients has had any acute constitutional disturbance, and none of the medicines given them—tonics, iodides of potassium or iron, cod-liver oil, or others of the same classes—has appeared to have any really or directly remedial influence. To those who were before in poverty the Hospital diet has seemed to do little good till the local disease has been brought towards recovery by the incisions; and after nearly complete healing the complete and firm scarring has been delayed till change of air has given renovated health.

## KING'S COLLEGE HOSPITAL.

### TRAUMATIC ANEURISM, RESULTING FROM PERFORATION OF THE INNOMINATA ARTERY—DEATH—AUTOPSY.

(Under the care of Sir WILLIAM FERGUSSON, Bart.)

*Remarks.*—The following case is one of great interest, from the great difficulty experienced in accurately diagnosing, in the first place, what vessel was the seat of aneurism originally, and, consequently, which had given way, thereby causing the effusion of blood into the surrounding parts, and secondly, of accounting satisfactorily for the aperture in the innominata artery, as seen on post-mortem examination. Spontaneous rupture of the arch at the commencement of the innominata is very improbable, and the existence of aneurism of this vessel would have been detected long before the fracture of the collar bone took place. In all probability, however, the arch was slightly dilated at the time of the accident, and the sharp inner extremity of the broken clavicle gradually made its way through its coats, which would otherwise have escaped injury had it been normal in size. The absence of the usual physical signs of aneurism of the innominata or subclavian were further confirmed by the application of the "sphygmograph," and the result of the observations made with this instrument seemed to point to the aorta as the seat of disease. Sir William Fergusson did not consider the case one for any operative measures, owing chiefly to the doubtful position of the aneurism.

Michael W., aged 43, an English sailor, fell overboard, October 1, 1864, while in a voyage to India, striking against the ship's bowsprit in his fall, and so injuring his right arm as to be unable to use it. Nothing was done to the injured limb at the time, except that the whole of the shoulder and the portion of chest adjoining it were closely enveloped in a pitch plaister, on the removal of which, by a Surgeon at Aden, about six weeks after the accident, the right collar bone was found to be fractured about two inches from the sternum. The fracture had not united; but a small pulsating tumour was now discovered to exist near the sternal end of the clavicle, about two inches above that bone. The tumour was at this time painted with iodine. On the ship's arrival at Bombay the patient was admitted into the Hospital, and he states that he heard the Surgeon there say that the tumour was an aneurism of the innominata. The tumour steadily increased in size, and on his return to England he was admitted into King's College Hospital, about twelve months after the accident.

On admission (October, 1865), a large pulsating tumour was seen to bulge forth from the upper part of the chest, in front, on the right side, the bony structures in the position of the right sterno-clavicular articulation having apparently disappeared. In the upward direction the pulsation extended to the parotid region; downwards it reached to the level of the third rib; internally it extended to the sterno-clavicular joint of the opposite side, and externally it seemed close upon the acromion process. Over the tumour generally the skin was of a light red tint, except at the spot (on the clavicle, and about two inches to the right of the sternum), where it was of a dark purplish colour; and at this point the wall of the tumour felt decidedly thinner than at any other part. There was no œdema of the neck and face, no hoarseness or other alteration of voice, no difficulty of swallowing, and but little affection of the breathing. Vision unimpaired in both eyes, the pupils were equal, there was no arcus senilis, no giddiness, noises in the ear, or, indeed, any affection of hearing. No bruit was audible over the cardiac region, and the heart sounds normal both at apex and base, but they could be distinctly heard over the tumour in the situation of the right sterno-clavicular joint, though somewhat later, as it were, than over the heart itself. The right forearm was a little œdematous, and the right pulse at the wrist slightly smaller than at the left. With regard to the state of the pulse, it ought to be mentioned that it was carefully examined by the "sphygmograph" by Dr. F. E. Anstie, who found so little difference between the pulse wave at each wrist as to lead to the inference that the subclavian artery could not be the seat of the aneurism.

After admission the tumour gradually increased in size, and showed a disposition to spread outwards and backwards towards the shoulder.

On November 17 the skin over the spot previously alluded to had a tendency to ulcerate, and about six weeks later (January 2) the tumour burst at this point, but the resulting hæmorrhage was promptly stopped by the nurse placing her finger upon the opening until the arrival of the House-Surgeon (Mr. Howells) who completed its arrest by the application of a graduated compress soaked in solution of perchloride of iron, without any marked aggravation of symptoms. The patient lived for three days longer, when a further hæmorrhage occurred from beneath the compress, and although the House-Surgeon again succeeded in preventing any great loss of blood, death took place about twenty minutes subsequently, the tumour appearing to subside under the pressure applied, and leading to the inference on the part of those around the bed that its contents had found their way into the pleural cavity. It should be stated that subsequently to the rupture of the tumour a patch of discolouration made its appearance on the point of the right shoulder (about the outer angle of the supra-spinal fossa), which induced fears lest a second opening should occur in the situation.

*Post-mortem Examination Sixty-six Hours after Death by Dr. Conway Evans.*—On examining the body after death, all appearance of swelling in the upper part of the right side of the chest had disappeared—the hollow, indeed, above the collar bone being deeper than usual. About two inches to the right of the top of the sternum was an aperture in the skin about the size of a sixpence (from which the blood had escaped during life), and through this opening could be seen the inner end of the fractured clavicle lying immediately behind and in contact with it. On laying open the aneurismal sac (after the removal of the platysma, sterno-mastoid, and other structures above the clavicle), though in great measure empty, it was found to be of considerable size, and capable of holding, when full, about two or three pints of blood. Forming a portion of the anterior wall of the sac towards its lower part was the right collar-bone (the fracture being situated about five inches from its outer walls), the fractured surface projecting somewhat on its posterior aspect into the aneurism so as to be bathed in the blood current passing over it. The right sterno-clavicular joint had entirely disappeared, and with it the inner portion of the broken collar-bone. One or two spiculæ of bone, adherent to, and embedded in, the inner surface of the sac immediately over the situation, were the only remaining vestiges of these structures. The posterior surface of the upper end of the sternum was likewise much eroded, and formed a part of the anterior wall of the aneurism, being also freely washed by the blood current. The sac itself appeared to be in great part formed by a condensation of the surrounding structures (muscle, fascia, and areolar tissue); but, in fact, also consisted of layers of fibrinous material (more or less decolourised), evidently deposited from the blood which had passed through it. Outwards and posteriorly the condensation of surrounding tissues became less and less marked, in such a manner that the sac walls became gradually lost in the neighbouring muscular structures (chiefly deltoid and trapezius) so as to lead to the inference that latterly, at all events, no distinct aneurismal sac had existed in this direction, considerable coagula of pretty recent formation having forced their way among and between the muscular structures of these parts. The outer end of the clavicle, indeed, seemed almost surrounded by these coagula, and in great measure, if not entirely, separated from the acromion process of the scapula. In its inner extremity and lower side, nearly opposite the eroded posterior surface of the upper end of the sternum, the aneurismal sac communicated with the aorta, through an opening of about the size of a sixpence (but more triangular in form) which was situate in the anterior wall of the innominata somewhat above the point at which this vessel springs from the aortic arch, the upper margin of the aperture being about seven eighths of an inch below the angle formed by the division of the innominata into subclavian and common carotid; a little below this opening the anterior wall of the aorta was firmly adherent to the posterior surface of the sternum. The right common carotid lay behind the aneurism and to its left side, the subclavian artery was situate behind and beneath it, the pneumogastric nerve also passed down behind it, but its recurrent branch wound backwards beneath the subclavian, and appeared to have escaped material compression. The left brachio-cephalic vein crossed the aortic arch in front, and must probably have been considerably pressed upon; both the superior cava and right phenic nerve, descending along its right side, did not seem to be much compressed. The right and left chambers of the heart, and also the aorta, were quite empty. The heart itself was normal in size, but the aortic arch was enormously dilated—to such an extent, indeed, that a line drawn along the base of the heart and the upper part of the arch measured upwards of 1½ in., while the transverse measurement of the aorta in front exceeded 3½ in. On the extreme left, in front, the aorta was dilated into an aneurismal pouch capable of containing a small walnut, and the walls of the artery were unusually thin in this situation; on the right side, on the contrary, the dilatation of the aorta was general; internally the aorta was somewhat puckered, and its surface was studded with numerous patches (greater or less in size) of atheromatous deposit. The cardiac valves on both sides were sound, except that those of the aorta, and also the mitral, were more opaque than natural and slightly thickened. The thoracic aorta, and indeed the common carotid and the subclavian arteries were unusually large, and this was particularly the case in respect of the last-named vessels on the right side. The lungs were pale, containing very little blood, but not collapsed, and the upper lobe of the right lung, at its highest point, was adherent at the spot which corresponded to the under surface of the aneurismal sac for a space about the size of a crown-piece. These adhesions were of recent formation, and readily broken down. The liver, spleen, and other abdominal viscera were congested, but in other respects apparently healthy.

These notes were afforded us by Dr. Conway Evans, who kindly placed them at our disposal.

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**Dr. Corrigan's Baronetcy.**—Dr. Corrigan, formerly President of the Royal College of Physicians, to which office he was repeatedly elected by his brethren, has received from Her Majesty the dignity of baronetcy. Sir Dominick Corrigan is Physician in Ordinary to the Queen in Ireland. He is the author of the pamphlet on education to which I referred in a letter a short time ago, and in which he, as a Roman Catholic, deprecated the establishment of denominational colleges and a chartered Catholic University. For the last six years the Medical Profession in this country has not been honoured by a dignity of this kind. Sir Henry Marsh, Physician in Ordinary to the Queen, died in 1860, and Sir Philip Crampton, Surgeon in Ordinary to Her Majesty, died in 1858. That branch of the Profession will no doubt expect a similar distinction, but there may be more difficulty in selecting the most worthy man to receive it among the Surgeons than among the Physicians. A morning journal remarks that "the honour thus graciously conferred on our distinguished fellow-citizen by the Queen will, we are certain, be acceptable to the country generally, not only as an acknowledgment of the eminence he has won in his Profession, but as a dignity bestowed on an Irishman who has been ever identified with the people and the advancement of their interests."—*Times' Dublin Correspondent.*

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Medical Times and Gazette.

SATURDAY, JANUARY 27.

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## THE NATURE OF THE RINDERPEST.

Vaccination of cattle is being extensively carried out, and its protective powers against Rinderpest put to the proof. Several cases have been made known, principally through Dr. Murchison, who so energetically advocates the small-pox hypothesis of cattle plague, and who loses no time in publishing accounts as they are sent in to him. Results, however, to be satisfactory need more time for their acquirement than has yet been allowed. Vaccination has already firm believers in its efficacy, but so have many other modes of treatment had which have since been proved to be of no value.

The case reported by our correspondent, Mr. Fairmann, is of the greatest interest, leading, as it does, to the conclusion that cows can take Rinderpest in all its severity a few months after suffering from cow-pox. One case of this kind tells with more weight in deciding the effects of cow-pox upon cattle plague than very many others in which animals having suffered from cow-pox escape from cattle plague. For in the former case there is direct proof that vaccination failed to protect against Rinderpest; while in the latter cases, until they become very numerous, we may fairly entertain doubts as to whether the facts that cows having had cow-pox have not taken Rinderpest are not merely coincidences, since many cattle which have not had cow-pox have also not taken cattle plague.

Nevertheless, the facts published by the High Sheriff of Cheshire in the *Times*, and others communicated by several gentlemen to Dr. Murchison, are such as to inspire us with the hope that in vaccination we may find the means, if not of preventing the spread of this distemper, at least of disarming it of its virulence.

Should it be established that previous vaccination really influences the action of the *materies morbi* of Rinderpest upon cattle, even to a prevention of the disease, an important advance will have been made in our knowledge of pathology, for we shall then have proof of how closely allied as to causes are the manifestations of different diseases. But it may be disputed whether such a relation of the two diseases will by itself justify us in regarding the two as modifications only of one disease. We feel that we ought to have proof of the kind which Mr. Hancock's case is believed to furnish—that is, of the production of the genuine cow-pox or of small-pox in other animals; otherwise, we can only assert that the one disease has had such an influence on the organism as to have altered its behaviour when exposed to the exciting causes of other diseases.

But Mr. Hancock's case is not only unsupported by any other case, but cases which militate against the belief that cattle plague virus can produce cow-pox or small-pox in man or sheep may be said to be numerous. Repeatedly have persons been inoculated with this virus, either by accident or design, but in no case have specific spmptoms followed. And more than this, one gentleman, well known for his investigations of Rinderpest, has, after having again and again purposely inoculated himself with the matter of the disease without result, had himself vaccinated with full success; thus showing the fitness of his system to take on the vaccine disease, and the incapability of the virus of cattle plague to produce it. And, again, as regards sheep, these animals take Rinderpest from cattle, but do not modify it so as to exhibit the symptoms of ovine small-pox, but return the disease to other oxen unchanged in form or virulence.

Further, concerning Mr. Hancock's case, we have to contemplate a startling, though not impossible conclusion, if the system of this gentleman has really manifested cow-pox in consequence of inoculation with Rinderpest matter. This conclusion is *that the small-pox (Rinderpest) virus of the bovine species acts upon the system of man just as the small-pox virus of the human species acts upon the system of the ox.* For if we inoculate a cow with the human small-pox matter she has cow-pox, and gives, in return, cow-pox, and not human small-pox, to a human being inoculated with the lymph of her disease. And, on the other hand, if we inoculate a man with bovine small-pox (Rinderpest) matter, he has also "cow-pox," and gives cow-pox to cattle in return if they are inoculated with the lymph of his disease; so that the vaccine disease is producible in two ways—namely, in the cow by inoculation with the virus of human small-pox, and in man by inoculation with the virus of bovine small-pox (cattle plague). In the latter case, cow-pox deserves to be called by a name indicating that it is the human modification of cattle plague. Such a conclusion is far too remarkable to be accepted without much further evidence. Yet when we have refused to believe that the Rinderpest matter produced cow-pox in Mr. Hancock, we are almost obliged to admit that the cow he was inoculated from had cow-pox and cattle plague simultaneously, and so far, therefore, the non-protective power of the former against the latter disease. Bearing on this point is the case reported by Dr. Vaughan, of Crewe. On the third day after being vaccinated by him a cow took Rinderpest, and yet the cow-pox ran its course, only that its progress was retarded.

One argument against the probability of cattle plague producing in man the disease which human small-pox produces in oxen is furnished by the behaviour of the sheep to the ox in respect to cattle plague and small-pox. The sheep has small-pox disease, yet cannot communicate it to the ox, but only to its own species. On the other hand, the ox communicates its supposed small-pox (Rinderpest) to the sheep, and takes it again from the sheep unchanged in nature; so that between these animals there is no common expression by symptoms of the reputed small-pox of the one when transmitted to the other such as there must be in cow-pox between man and the cow, if cattle plague caused cow-pox in Mr. Hancock. The ox will not take ovine small-pox, and the sheep, though it takes bovine small-pox (Rinderpest), does not modify the character of the disease.

Concerning the character of the affection of the skin, we believe that the assertion that it is identical with that of small-pox is almost given up. Even Dr. Murchison himself has admitted that there is "an absence of well-developed pus corpuscles," and an absence "in most cases of a distinct vesicle preceding the pustular stage." These assertions have greater import when we find Dr. Sanderson still persisting most firmly in his denial of the existence, so far as he can discover, of "patches of roseola, pustules, or petechiæ." He states that the crusts, which are by far the most common appearances presented, appear at an early period, and are only formed of sebaceous secretion; that hyperæmia, which communicates a red colour to the skin when it is thin and transparent, forms the so-called roseola; and that the papules never yield any liquid juice or serum, are never surrounded by an areola, never assume a vesicular form, and have not the most distant resemblance to the papules of small-pox.

We see, also, that Dr. Bristowe states that he has no hesitation in asserting that the eruption, though resembling superficially that of small-pox, is essentially different from the eruption of small-pox, as that eruption has hitherto been known to him by observation and by reading, and is essentially different, too, from the eruption of vaccinia. He agrees generally with the description of it which Dr. Sanderson has given. He has never yet seen a vesicle; he has never yet seen a pustule; he has never yet seen that destruction of the surface of the skin which in small-pox leads to pitting. He inclines decidedly to the belief that cattle plague is distinct from small-pox, though he is “very far indeed” from asserting that it is so.

We are disposed to think, therefore, that should cattle plague be proved eventually to be a form of small-pox, it will not be correct to say that its anatomical characters indicated that such was the case.

## “A WRETCH OF A CORONER.”

The office of Coroner is one of those anomalies which can exist nowhere save in England. An officer appointed to protect the interests of the Crown, including therein the lives of all the Queen's subjects, and yet elected by popular suffrage, perfectly independent as a judge, and having a fixed salary, so that there is no inducement to anything like an excessive or officious discharge of his duties for the sake of the fees, is, if a decent and conscientious man, able to afford a vast amount of protection to the most helpless of the helpless classes. In this country, where no system exists of inspection or verification of the fact and cause of death, where anybody may register anybody as dead, and where no certificate is necessary from a regularly qualified Practitioner, there is many a murder, or case of murderous neglect, brought to light by the Coroner's agency, and it is reasonable to believe that many a crime is prevented by the fear of an inquest. Still more, the power of making inquiry into causes of death may drag to light many a scandalous instance of neglect, although it may be that no human laws have yet branded such cases with the name of crime.

Now, it so happens that Dr. Lankester held an inquest last week on the case of a boy who died of typhus fever in St. Marylebone under circumstances detailed in the following evidence of the parochial Surgeon:—

> “The last three weeks I have had twenty-five cases of typhus and typhoid fever in the neighbourhood of Providence-place, which contains twenty-four houses and 198 inhabitants. There are three rooms to each house—one below and two above. I believe the cause of the spread of the fever is from the inhabitants drinking the water from a tank placed in the centre of the yard, and close to which is a sink where they empty their slops and excreta of the children and other persons. The tank is a square one, and the water which fills it is obtained from a pump, and from the West Middlesex Water Company. I should think that the water is impregnated with a portion of the refuse daily thrown around the tank, and that water would therefore become a fruitful source of disease, and capable of communicating fever to any person drinking the water. The excess of the water filters itself back into the well, and, in doing so, it mixes with the excreta and other noxious matters surrounding the surface, thereby impregnating the well with all sorts of poisonous matters, and it is the great cause of the spread of disease in that neighbourhood whenever the epidemic breaks out. Before this present epidemic of fever, Providence-place was comparatively a healthy place. The room in which deceased died would contain about 1000 cubic feet of air; but it was about one of the smallest rooms in Providence-place. Four other persons slept in the same room.”

It appeared by evidence subsequently given by Dr. Whitmore, and various officials of the Marylebone Vestry, that so soon as the state of things was brought to the knowledge of the local authority they issued notices, caused the houses to be cleansed, the tank to be emptied (which had not been done for fourteen years), and new drains and pavement to be laid down. But this inquest will not be without its fruits. The coroner intimated that if the landlords who owned the property did not obey the orders of the Vestry and of the Medical Officer of Health, and another death occurred through neglect of adopting necessary sanitary measures, such landlords were liable to be indicted for manslaughter. He also took the opportunity of asking whether it were true that the Vestry discouraged their Medical officers in their efforts to improve the healthiness of the dwellings of the poor, and received the most satisfactory answers in the negative.

Now, an inquiry such as this could harm no one and must do good. It tended to protect the poor labouring man, urged the small house proprietor to keep his premises clean, encouraged the Medical officers to do their duty, and gave an opportunity to one of the Vestries of showing the groundlessness *now* of an accusation which their conduct in times gone by may have invested with a certain degree of probability. Of course, such inquiries are troublesome, and make enemies of small ratepayers; and we must give Dr. Lankester this bit of serious advice—viz., that if he hopes ever to become M.P. for a metropolitan borough he had better not be too active as coroner. Still, we should have thought that every reasonable person who is not an owner of “weekly property” would have applauded Dr. Lankester, and bid him go on and hold more such inquests.

Not so, however. One member of the neighbouring Vestry of St. Pancras actually is reported to have said in that august assembly that “*the wretch of a coroner for Middlesex*” sought by all means in his power to bring Vestries into contempt. Now, we have seen lately somewhere a list of the avocations of the Vestrymen of St. Pancras, which are some of them humble enough. What think you then, reader, is the station in life of the member who was not ashamed to speak thus in a public assembly? Is he a butcher? cabman? publican? Do you give it up? Then he is a Doctor of Medicine, and his name is Collins.

## THE STARTING POINT OF CHOLERA.

It is unnecessary for us to do more than call attention to the admirable paper by Dr. Montgomery which appears in our columns this week. It is seldom that we have read a paper more full of facts and more sound in its inferences. A perusal of this paper will clear away all the scepticism sometimes professed as to the real noxiousness of those agents which sanitary people affirm to be the common generators of pestilence. Here, in this climate, no doubt, scattered instances arise from time to time which serve the purpose of the sceptic. Some undrained places may go on for years without fever. Some cases of typhoid or cholera may be found, of which the exciting causes are not clear. Hence, argues the sceptic, filth is not a poison; disease comes from accidental or irresistible causes, and preventive medicine is a myth. The remedy for this state of mind is to study the subject on the large scale, and Dr. Montgomery's paper will furnish the material for such study.

## THE WEEK.

### ANOTHER MEDICAL BARONET.

Dr. Corrigan, of Dublin, has been selected by Her Majesty's advisers as the Irish representative of Medicine to be honoured with the dignity of baronet. We are sure that the selection will give satisfaction to the Profession in the sister island and throughout the kingdom. Dr. Corrigan is known as a Physician of the highest social standing, great Medical and scientific acquirements, and as possessing the entire confidence of his

Professional brethren. He has been several times elected to the Presidency of the King's and Queen's College of Physicians, and is the representative of the Queen's University of Ireland in the General Medical Council. We heartily congratulate the Profession in Ireland on an event which is a fitting recognition of their public worth and services.

We trust, however, that the creations of the last few weeks are but the first drops of a more plenteous fall of similar distinctions on members of the Medical Profession. Those selected for the honour have all been right worthy recipients, but there are Professional names in each of the three kingdoms which will present themselves immediately to the minds of our readers as having deserved hereditary distinction equally with those hitherto chosen. No such honour has as yet descended upon a Fellow of the Royal College of Physicians of London. The present Government appears to wish to acknowledge the claims of Medical science on public reward. But it is surely an anomaly that the first Medical Corporation in the kingdom should be passed over in a distribution of State honours.

### THE CASE OF THE WOMAN WINSOR.

We are very glad to see that it is not likely there will be a miscarriage of justice in the case of the woman Winsor, who, it will be remembered, was convicted on the clearest evidence of pursuing infanticide as a profession. If capital punishment is to be inflicted for murder in any case, we believe that this one of Winsor would justify it. Whether she undergo the last penalty of the law or no, the confirmation of the legality of her second trial and of the sentence then pronounced insures that she will be henceforward dead to society. The circumstances of the discharge of the jury on her first trial, the postponement of the second to the next assizes, the admission of her accomplice as evidence against her, whilst they cannot in the least influence the question of her guilt, yet, involving as they do some nice points of law, may be made a ground for appeal to the Royal mercy to commute her sentence. But as far as she is concerned, the lapse of time between her first and second trials, and that gained by the issuing of a writ of error, affords no real ground for commutation, for it has been practically a respite from death for many months, and may be supposed to have benefited the prisoner. The only plea, it appears to us, for the interference of the Home Secretary is suggested by the questionable admission of her accomplice Harris to give evidence against her at her second trial, Harris having been charged with the same crime, and having been jointly indicted with her at the first trial, and then neither acquitted nor found guilty. It was argued with some force by the prisoner's counsel that the fear of impending punishment, and the temptation to try to obtain immunity for herself, might have influenced Harris to give false testimony against the prisoner. But the guilt of the latter was independently proved, and it does not appear that, in her evidence, Harris made any attempt to exculpate herself at the expense of Winsor.

### FROM ABROAD.—THE PARIS FACULTY OF MEDICINE—THE CATTLE PLAGUE—AN EXPLANATION OF BOLD ENGLISH SURGERY.

Matters do not seem to be working very smoothly with the Paris Faculty of Medicine. The students' row, which the martinet stupidity on the part of the authorities produced, has been effectually put down by the aid of the police, and the more popular Dean, Tardieu, has been replaced by M. Würtz, Professor of Medical Chemistry, supposed to be a more pliable personage. But that arch enemy to the quietude and comfortable existence of all corporate bodies, reform, is knocking for admission at the door of this pleasant monopoly; and a commission has been appointed having for its object the consideration of what remodelling will render the present Faculty better able to meet the wants of the period. Great dissatisfaction has long existed at the monopoly of teaching it is in the possession of, and the little scope there exists for the employment and development of rising talent. Something analogous to the *privat docentes* of the German Universities, or the extra-academical teachers of the Edinburgh University is evidently wanted; but any such innovation has hitherto been, and probably will continue for some time yet to be successfully resisted by the present holders of power. In the meantime, the prolonged retention of their posts by Professors (however eminent these may have been in their day) safely guarded from the stimulus of competition is unjust to those entering the Profession, entitled to the benefits of its newest teachings, and detrimental to the progress of Medical science. The separation of the examining from the teaching bodies is another reform much desired, but somewhat difficult of accomplishment.

M. Auzias-Turenne, in a communication to the Academy of Medicine, observes that the cattle disease named by Guersent in 1815, and in our own day by Bouley and Leblanc, contagious typhus of horned cattle, was as long ago as 1776 designated by Vicq d'Azyr as the *peste varioleuse;* while the fact of its occasional extension to other animals—as dogs, cats, pigs, and fowls, has been testified to by the same writer as well as by others. Attempts at prophylactic inoculation were also made under the auspices of Vicq d'Azyr, Haller, Camper, etc.; and recently M. Auzias-Turenne has discovered a pamphlet by a M. Billard, of Vesoul, without date, but supposed to be published about 1820, in which this preventive inoculation is said to have been performed with great success by Professor Salchow, of Maldorf, in Holstein. Minute directions are given for the application of the virus by means of a seton, and its preservative power is said to have been complete. M. Reynal observed that in Russia, while the trials of vaccination had failed, the inoculation of the virus itself had been more successful, and is the prophylactic usually resorted to.

The gravity with which a Frenchman can launch forth a preposterous assertion, especially when this is in self-glorification, is something astounding. Here is one of the last specimens we have met with. M. Desgranges, addressing the Lyons Academy of Science and Belles Lettres the other day upon "Public Assistance in France and England," thus explains the bolder character of English as compared with French Surgery:—

"We Frenchmen appreciate as of equal value every human being, to whatever rank of society he may belong, whatever may be the place he occupies in the social scale, and whatever may have been his services. As Surgeons, we watch over with equal solicitude the infirm pauper destined to inactivity after his cure as the workman whom our care may restore to-morrow to his labours. In England this is not exactly the case, for there, amidst that devouring activity, that feverish passion for the useful, the human being is regarded for little more than what he will bring in. Thus, when disease has rendered him unproductive, his right is not recognised of refusing to submit to the boldest enterprises proposed by art in order to restore to him his social value as an instrument of labour. Can we, then, feel astonished that this mode of viewing the matter, in which is displayed the national character of our neighbours, favours these bold adventures which have borne far and wide the scientific renown of their Surgery?"

"Listening to this judicious and philanthropic interpretation," says the reporter of the *Gazette Médicale de Lyon,* "puts me in mind of an anecdote of Bérard, which is quite in point. In 1835, when he succeeded the old Lallement as Surgeon of the Salpetrière, he was burning with ardent operative zeal, for the gratification of which that Infirmary hardly furnished the material. He therefore set about in search for cases of operation, and amidst the four or five thousand pensioners there was no want of cases of complicated cataract, pannus, prolapsus uteri, and vesico-vaginal fistula. But none of these desired to be cured; it was their infirmities which had gained them admission into the *hospice* and kept them there, and their infirmities they wished to keep. Neither entreaties, promises, exhortations, nor insinuations prevailed against the resistance of these obstinate incurables. In this extremity, the Anglo-Saxon spirit inspired Bérard with a strategem which he believed for an instant would prove successful. Despairing of being able to persuade his patients, he had recourse to the Hospital administration, and plainly put the question—Is a pretended incurable, who I affirm I can cure by operation, at liberty to refuse to submit to that operation? The administration hesitated not an instant, furnishing, thirty years in advance, a striking confirmation of the principles which M. Desgranges has so eloquently termed the characteristics of French Public Assistance. It refused to sanction this *compelle intrare* the operating theatre of Salpetrière, and Bérard did not insist on a proposition, of which it only required a short period for his generous soul to recognise the harshness."

## REVIEWS.

*Saint Bartholomew's Hospital Reports.* Vol. I. Longman. 1865. Pp. 327.

The members of St. Bartholomew's have made an admirable beginning. From the first page to the last will this volume be read with interest; and in order to show the Profession what sort of volume it is, and what they may expect who propose subscribing to the series now commenced, we propose to accord to it a full review, noticing more or less every paper that it contains. We believe that in doing this we shall be meeting the wishes of our readers halfway, while the task will be as agreeable to us as profitable to them. The contributions, then, are as follow:—

1. *Cases of Chronic Pyæmia.* By James Paget, F.R.S.—Six cases are recorded. The first succeeded ligature of the subclavian artery, and death occurred on the sixty-fifth day; the second after lithotomy, and the patient recovered. Then comes a case following acute necrosis of the os calcis; the symptoms here extended over three years. It is in this connexion that Mr. Paget tells us that he has observed the duration of the pyæmia most extended. The least severe cases have been those associated with disease of the urinary ograns or catheterism, and he narrates cases that recovered, one after catheterism and one after lithotrity. His sixth case followed a small puncture made into some inflamed inguinal glands. He thus sums up his conclusions:—"It is not rare to meet with examples of disease presenting the essential characters of pyæmia, but much slower in progress and much less severe and perilous than those from which pyæmia is usually described. These cases are frequent enough to justify the general use of the names 'chronic' or 'relapsing' pyæmia. They are more rare among the instances of pyæmia following wounds than among those occurring in disease. The local evidences of chronic are, more often than those of acute pyæmia, seated exclusively or chiefly in different parts of the same tissues; they are more frequent in the trunk and limbs than in internal organs, and when seated in the veins are most frequently found towards the close of the disease. The nearest affinities of chronic pyæmia are with rheumatism, through gonorrhœal and urethral rheumatism; with simple or single abscess formation after fever; with hectic fever; yet with very scarce exceptions the diagnosis from all these is in practice clear. The prognosis in chronic pyæmia may usually be very favourable. . . . The usual treatment of chronic pyæmia may be with good food, patient nursing, a moderate use of stimulants and tonics, and an abundance of fresh air."—P. 12.

2. *On the Diagnosis of Systolic Endocardial Murmurs, whose Point of Greatest Intensity is at, or near, the Left Apex of the Heart.* By James Andrew, M.D.—The murmurs principally treated of are the ventriculo-auricular (regurgitant) and the ventricular—*i.e.*, produced within the ventricle (onward). Dr. Andrew dwells especially upon the diagnostic value of murmurs heard posteriorly near the inferior angle of the scapula as indicating the regurgitant lesion. His conclusions are,—"1. That of systolic murmurs, audible at or near the apex, a large number, 34 per cent., do not indicate mitral regurgitation, or for the most part any very serious lesion. 2. That the decision as to the regurgitant or non-regurgitant character of a murmur rests principally upon its presence or absence posteriorly. 3. That intensification of the second sound in the pulmonary artery as a gauge of the obstruction of the blood stream on the left side of the heart is of great value, but that in estimating it there are certain precautions to be taken. 4. That the occurrence of a non-regurgitant systolic murmur may be explained by changes on the inner surface of the ventricle, or by dilatation of its cavity leading to undue tension of the chordæ tendineæ."

3. *Brief Notes of the Surgical Practice of the Hospital.* By Geo. W. Callender and Alfred Willett.—These notes relate to ordinary cases of disease of bones and joints, injuries of them, cases of cancerous disease, etc.

4. *Hypertrophy and Prolapse of the Tongue occurring during Convalescence after Scarlatina; Removal of the Protruding Portion with the Ecraseur and Scissors, with ultimately a good Result.* By Bowater J. Vernon.—Two operations were necessary in this case, since the stump exhibited a tendency to resume excessive growth. The deeper parts of the portion removed seemed composed of coarse bundles of muscular fibres. After the second operation (with scissors) there was still the tendency to excessive growth observed, but it consisted only of an apparently purposeless development of epithelium, which was shed and reproduced.

5. *Practical Observations upon Tumours of the Pelvis and Neighbouring Parts, Complicating Pregnancy, and Impeding Labour, with Illustrative Cases.* By Robert Greenhalgh, M.D.—The nature of the cases recorded, and the results, are as follows:—"One case of thrombus of the labium and vagina; four cases of tumours of the ovaries; four cases of tumours of the uterus; one case of tumour of the rectum; one case of tumour of the kidney; four cases of extra-uterine fœtation. Eight of the patients reached the full period of uterine gestation; in the remaining seven, pregnancy terminated at some period between three and seven and a-half months of gestation. In four cases labour set in spontaneously; in two cases labour was induced artificially; four patients were delivered by the natural efforts at the full period, one at the third month; in fourteen cases the labours lasted for periods varying from five to thirty hours. Of the fourteen children, eleven presented with the head, one by the feet, one by the arm, and another by the breech. Twelve were males, four females. Turning was had recourse to in four cases, but was completed only in three, the fourth being subsequently terminated by the Cæsarian operation. Two were delivered by the forceps. Five of the mothers and eight of the children were lost; of the former, three died from exhaustion, and two from hæmorrhage."—P. 93. The remainder of the paper is occupied by a consideration of the changes occurring in the form of the abdomen in healthy pregnancy, and some general remarks upon morbid growths in and about the abdomen and pelvis.

6. *Restoration of the Lower Jaw after its Entire Removal.* By Thomas Smith.—The title of this paper does not fully explain its character. It is a record of a case where a necrosed lower jaw was removed, prior to which the foundation of a new one had been laid by the efforts of nature. The opinion of the author is that the soft tissues furnished the material out of which the new bone was constructed, and that the periosteum took no part in the process. We may be pardoned for doubting the accuracy of the author's conclusion.

7. *On the Local Effects of Blood-Poisoning in Relation to Embolism.* By William Savory, F.R.S.—This paper consists of a record of experiments consisting in the injection of various matters into the veins, and, either after spontaneous death or after killing of the animals, of the appearances presented by the lungs. The matters injected were disintegrated fibrin and oxide of zinc suspended in distilled water, a filtered putrid infusion of muscular flesh, filtered putrid liquor amnii, olive oil, fresh pus, the thin fluid filtered from fresh pus, and fluid filtered from putrid pus. The result of the experiments is thus stated by the author:—"That spots and patches of congestion and stagnation, with perhaps ecchymosis in the lungs and other organs, may be produced by the injection into the veins of minute particles of solid matter suspended in water, which can undergo in the blood no decomposition or induce any chemical change, and consequently can only act mechanically; of putrid fluids which have been previously carefully filtered, and so deprived of any solid particles; of pus. That in either case the local effects are the same. The most critical examination fails to detect any distinction in the engorged portions of tissue produced by these different means, except that when solid particles which undergo no change are employed they may be discovered in the midst. The action of fresh pus in producing these effects is mechanical. Either its cells or the clots which it may form in the blood become impacted in the capillaries. When putrid it no doubt acts in both modes. Pus, then, has no peculiar or specific action when present in the blood. If putrid, it will act like putrid matters generally

do; or its globules may, under certain circumstances, like other foreign particles, become arrested in and block up the capillaries, producing effects already described. In these experiments abscesses were not more readily induced by the injection of pus than of simple fluids or even of solid particles. The chemical relation of pus to the production of pyæmia appears to be this:—Suppuration is a common occurrence either on the surface of wounds or ulcers or in internal parts. Pus, as pus, cannot be absorbed—that is, its solid particles, its corpuscles, cannot enter the circulation except through some lesion of the bloodvessels. Pus may pass into the circulation through an orifice in a vein; this occurrence, however, must be extremely rare. But the fluid part of pus may be absorbed. If this be not putrid no mischief will supervene. Even if healthy pus should by some rare chance find its way into the circulation, no secondary abscesses would perhaps be, under ordinary circumstances, produced. . . . But pus may become putrid, more especially if exposed to air in a wound, and the putrid fluid may be absorbed, and this, like any other putrid fluid, will produce the effects to which the term pyæmia is applied."—P. 134. Why, considering the frequency with which wounds are bathed in fœtid fluids, is not pyæmia more common than it is? Mr. Savory's answer is, that the membranes with which they are in contact may deny passage to some such fluids, and that when they do pass through them they may be eliminated so fast as to equal the rate of absorption, and thus no sufficient accumulation of poisonous matter occurs in the blood. The paper is an important one.

8. *Two Cases of Poisoning by Mercuric Methide.* By George N. Edwards, M.D.—They occurred in the persons of two of the laboratory assistants, and similar, though less severe, symptoms were felt by all working in the laboratory at the time and inhaling the poisonous vapour. Mercuric methide, $HgMe_2$, may be regarded as the analogue of corrosive sublimate, $HgCl_2$, in the methyle series of salts.

9. *Cases in which Large Arteries were Tied during the year* 1864. By Alfred Willett.—"All vessels of less magnitude than the brachial and all amputation ligatures are omitted. The cases are arranged in two groups, the first including those in which the operation was performed for disease of the vascular system, one only being for disease other than aneurism; the second comprising those in which the operation was necessitated to suppress hæmorrhage." Altogether ten cases are recorded.

10. *The Minute Structure of the Human Kidney.* By Reginald Southey, M.B.—Dr. Southey considers "the tortuous or glandular tubes proper as signified by their structure, contents, and intimate annexation with blood supply, to be that portion of the tubes in which the separation of the more solid constituents of the urine and its colouring matter takes place; but we regard the Malpighian bodies themselves neither as the especial seat of water filtration, as assumed by Bowman, nor as that of urea secretion, as Dr. Isaacs, of New York, has from his experiments surmised; but rather, as their position and structure appoint them, as blood regulators." This paper deserves careful study.

11. *Remarks on the Operation of Excision of the Knee-Joint.* By Holmes Coote.—He says at the conclusion of his paper,—"The result of my own experience in the treatment of knee-joint disease, especially in the young, is adverse to the operation of resection. I feel more confidence in the treatment by long-continued rest and the application of those principles comprehended by the term Orthopædic Surgery. And this opinion seems in consonance with the feeling of the upper classes, among the children of whom I have not yet heard of one instance of the performance of 'resection.' When the disease is so far advanced as imminently to threaten life, amputation is the preferable operation. To this rule the exceptions are, I believe, very few."—P. 196.

12. *Report of a case of Icthyosis, with Congenital Malformation of the Aorta.* By William Church, M.B.—"The chief points of interest in the foregoing case appear to be,—First, the evidence afforded by it of a correlation of growth existing between the derma and the teeth; secondly, the proof that some cases, at all events, of icthyosis spuria or sauriderma are due to an alteration and hypertrophy of the papillæ of the corium and their epithelium, and not to desiccation and altered sebaceous substance, as stated by Mr. Erasmus Wilson; thirdly, the limitation of the disease to the left side of the body; lastly, the absence of any cyanosis or marked cardiac symptom, notwithstanding the patency of the foramen ovale and the malformation of the aorta."—P. 200.

13. *On Tumours Containing Fluid Blood.* By. W. Morrant Baker.—Those only are considered in this paper in which the blood is variously altered and not spontaneously coagulable. The following propositions are severally discussed:—"1. That although the coagulation of blood extravasated in the cellular tissue, or in cysts or hæmatoceles, is probably delayed, yet it does occur after a longer or shorter interval more or less completely. 2. That in many cases the whole of the blood does not escape at once or within a short time, but that the hæmorrhage continues for a considerable period, although the loss of blood is only small—too small to allow the disintegration and absorption of that which has already escaped to proceed at a quicker rate than does the effusion of fresh blood. 3. That the fluid obtained from these tumours is, in many cases at least, not simply uncoagulated blood, but a mixture of serum (derived, probably, not only from extravasated blood, but secreted also by surrounding parts) with blood cells, diffused colouring matter of cells, and disintegrated fibrin. 4. That besides the constant but small effusion of blood, there is a constant absorption, though not sufficient to keep pace, or do more than keep pace, with the effusion."—P. 206.

14. *Observations upon some Points in the Anatomy of the Supra-renal Capsules.* By Dyce Duckworth, M.D.—The following are the matters treated of in the several sections of this paper:—1. The naked eye appearances of the supra-renal capsules, as modified by age and other apparently normal circumstances. 2. The appearances presented on section. 3. Nature of the expressed juice of the cortex. 4. Arrangement and nature of the cortical columns. 5. Structure of the accessory supra-renal capsules. 6. The relation between the cortical and medullary portions of the supra-renal capsules. 7. Nature of the expressed juice of the medulla. 8. The medullary matrix and its contents. The paper is illustrated by well-executed coloured plates.

15. *Cases recently under Treatment.* By Thomas Wormald.

16. *Cases from the Wards.* By Robert Martin, M.D.

The above two papers contain some interesting records.

17. *Case of Acute Necrosis of the Tibia.* Death from Pyæmia. By W. I. Savory, F.R.S. This is a sort of addendum to Mr. Savory's paper above noticed.

18. *Note on Hippuric Acid.* By W. Odling, M.B. A paper of purely chemical interest.

*Fractures Injuring Joints. Fractures interfering with the Movements at the Wrist and with those of Pronation and Supination.* By George W. Callender.—The object of the paper seems to be to show that while the unfavourable results of such cases "are frequently referred, in some measure at least, to the treatment which has been adopted," yet "it will not be difficult to show that a great number of these hurts must have a comparatively unfavourable issue, however good the management which is bestowed upon them. Still, there remain many cases in which the recovery is not so good as it might have been if only the original injury had been accurately determined, and the right plan of treating it properly carried out."

20. *The Hospital Registration.* By George N. Edwards, M.D. A short paper descriptive of the registration arrangements in operation at St. Bartholomew's.

Altogether, we congratulate the staff of the Hospital on the success of their first endeavour thus to utilise for the whole Profession the experience of this noble foundation.

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PROFESSOR HUXLEY, F.R.S.—This gentleman will commence his course of lectures in the theatre of the Royal College of Surgeons on Friday, the 2nd proximo, and will deliver twenty-four lectures on the Structure and Classification of the Mammalia, in continuation of his course of last year, and will be followed by Professor Hancock, who will deliver six lectures on the Anatomy and Surgery of the Foot. The lectures will be delivered on Mondays, Wednesdays, and Fridays, at 4 o'clock.

DR. MAPOTHER, Medical Officer of Health for the City of Dublin, Dr. Tucker, medical officer, Sligo, Dr. Foot, lecturer on anatomy, Trinity College, Dublin, Dr. Hayes, lecturer on anatomy, of the Catholic University, Dublin, were appointed by the lord-lieutenant to proceed to London to inquire into the nature and treatment of the Rinderpest. This is a step in the right direction in Ireland to consult medical science on this formidable pestilence. It affords an argument in favour of the necessity for a special State minister and department of public health.

## GENERAL CORRESPONDENCE.

### THE PRELIMINARY SCIENTIFIC EXAMINATION AT THE UNIVERSITY OF LONDON.

Letter from Dr. Ebenezer Watson.

[To the Editor of the Medical Times and Gazette.]

Sir,—Your last number for 1865 (December 30) contains three articles which are deeply interesting to most members of our Profession, and certainly to all teachers of Medicine. I refer to your own editorial article "Pity for Poor Students," the circular from the University of London, and Professor Beale's letter on Medical education.

With much in all of these papers I heartily concur. I highly appreciate the efforts of the University of London to elevate the standard of preliminary education in candidates for Medical degrees; but I also agree very warmly with you in thinking that this laudable desire has been carried too far in the present instance. It seems to me that a little "pity for poor students" would open the eyes of the University authorities to the fact that even a moderate proficiency in all of three sciences so extensive as Botany, Zoology, and Chemistry ought hardly to be expected from young men entering on the study Medicine. We do not find that even men devoted to the pursuit of science for its own sake, excepting in a few rare cases, have aptitude for all these different branches of knowledge. I dare say among the examiners themselves instances of this may be found; for the most eminent botanist may have little knowledge of chemistry or zoology, and, *vice versa*, the chemist or zoologist may not be much skilled in botany. Why should it be different with students? Would it not be better to give them the choice of one or other of these sciences as subjects of preliminary examination, which, in fact, is done at most licensing boards?

Perhaps with the mere University regulation, however, the general Profession have little to do; yet with the subject of the preliminary qualifications of entrants upon Medical studies we all have a deep interest, and those who have experience in teaching may be allowed to express their opinions frankly and freely, in order that improvement may follow, perhaps by the interference of the General Medical Council. Hence it is that I trouble you with this letter.

Like Professor Beale, I have some knowledge of the difficulty of grounding students in the elements of general anatomy and physiology, and I certainly have always found that those who most readily understood and most profitably retained what I brought before them were the youngest students, fresh from their early education with minds made ready for, but not yet encumbered by, the minutiæ of scientific truth. A good ordinary education, as it is now to be had in every well-organised academy, including some knowledge of Latin and Greek, is all that, in my opinion, should be required from students entering on their Medical curriculum, and I do think that requirements such as those of the London University are very injudicious, and must be felt to be an insuperable bar to the entrance upon their studies by the majority of young aspirants to the Medical Profession. I hope, however, that this will not be the case with those who were unfortunate at the recent examination; for I do believe that many of the forty-three rejected students would have made, and I hope will yet make, even more satisfactory progress in Medical studies than their more fortunate compeers on the occasion referred to.

There is another point in regard to which I wish to express a very decided opinion in accordance with that of Professor Beale—viz., that it is impossible for any student to profit by Hospital attendance without a knowledge of physiology. This must be obvious to any one who takes the trouble of thinking on the subject for a few minutes; and yet it would seem from Professor Beale's letter that students, even in England, rarely have the necessary knowledge of that science before commencing their Hospital studies. With us in Scotland they never have, or can have; for they are not required by any Scotch Licensing Board, or by the Royal College of Surgeons of England, if educated in Scotland, to have more than one course of fifty lectures on physiology instead of the two required from students educated in England; and this course of physiology they almost invariably attend during their second winter session, at which time they begin to attend the Hospital. It follows, therefore, that during that winter session, or the greater part of it, they cannot benefit from the Hospital attendance; and we all know that if students are not getting benefit in such circumstances they are growing in the worst of habits—habits either of ill-timed frivolity or of vague, objectless walking of the wards.

I agree with Professor Beale that it is time some remedy were devised for this defect in the arrangements of the curriculum, and perhaps that remedy will be found in a modification of the first-half examination. For I think with him that it would be advisable to have three Professional examinations—one at the end of the first year upon the elements of anatomy, chemistry, and physiology, without passing which no student should be allowed to enter the Hospital; the second, at the end of the second or third year, on more advanced anatomy and physiology, with materia medica and Surgery; and the third, at the end of the fourth year, upon practice of physic, Medical jurisprudence, and midwifery.

This would imply an equalisation of requirement as to attendance on physiology in England and Scotland; for I do not see why students should be exempted from an attendance here which is enacted in England, and I am sure that every one who knows the difficulty and importance of the study of physiology will agree that the English arrangement is better than the Scotch; that, in fact, the student ought to be kept to the study of physiology for the first two years of his curriculum. I am also quite confident that the Scotch students themselves would consider this as no hardship, while they all regard the preliminary requirements, even though much less stringent than those of the London University, as somewhat oppressive, and perhaps unnecessarily severe. They can all of them be persuaded of the necessity for a thorough understanding of the principles of their Profession; but many of them have no taste for literature, in the highest sense of that word, or even for the cultivation of general science; and, while it may seem very desirable that the members of a learned Profession should be all learned, yet no sensible man can refuse to acknowledge that the pecuniary emoluments and the social circumstances of many Medical Practitioners are little suited to the possession of such acquirements, and but little in accordance with the mental refinement which they are calculated to produce.

I am, &c.

Glasgow, January 5. Ebenezer Watson.

### EPSOM COLLEGE.

Letter from Mr. John Propert.

[To the Editor of the Medical Times and Gazette.]

Sir,—I hasten to announce to my Professional brethren, through your widely circulating journal, that our much esteemed friend, Sir William Fergusson Bart., has most kindly consented to devote his first public exertions in advocating the cause of those, who, alas! have not been as fortunate in life as himself, by taking the chair at the fourteenth anniversary festival of the Royal Medical Benevolent College, on Thursday, April 26 next, at Willis's Rooms; when I hope—nay, confidently anticipate—that every member of our noble Profession will—who can—gladly and immediately enrol his name as a steward, to support our much respected friend on that interesting occasion.

The first list of stewards will very shortly be published.

I am, &c.

John Propert, Treasurer.

New Cavendish-street, January 23.

### CENSURE BY A CORONER'S JURY.

Letter from Mr. F. Harry Hume.

[To the Editor of the Medical Times and Gazette.]

Sir, —A few days ago I heard quite accidently from a friend that there was an account in the *Islington Gazette* of an inquest held by Dr. Lankester, at which, with the verdict returned, was coupled a vote of censure against myself.

I could scarcely believe it to be true, never having been informed of the occurrence calling for an inquest, or that my presence would be necessary in order that I might give an explanation.

The facts of the case are these:—On Sunday, the 7th inst., at nine o'clock a.m., my servant informed me that a woman wished me to go immediately to see a person who was dangerously ill. I sent back word that they must go to the Workhouse to obtain an order or must pay for attendance.

My excuse for asking payment is this: I must have found a substitute, who would have been obliged to supply medicine, the Workhouse Dispensary not being opened until midday, and then only for an hour.

The woman returned in about twenty minutes, and stated that she had applied for an order, but was refused, and told at the same time to inform me that I must go to the case. Now, it so happened that I could not do so, as I had several cases to attend which I had promised to see first thing in the morning, they being very urgent. When I returned home from seeing them, I received a message to go immediately to Holloway to attend a midwifery case, at which I was detained for the rest of the day. No further message had been brought from the case in question when I arrived home in the evening. Supposing that I was in fault, will you suffer me to ask what is the propriety of censuring a man in his absence, and without sending for him to give an explanation? This is more surprising when a Medical Coroner presided at the inquest. I naturally wrote, asking for an explanation, in the following letter:—

"8, Angell-terrace, Islington, N., January 17, 1866.

"Dr. Lankester,—Sir, I am surprised to see the report of a case of a sudden death in a local newspaper in which my name is introduced, I having had no notice of the occurrence or of any inquiry which would necessitate my bringing forward evidence to clear my character.

"Moreover, I had never heard, excepting through my servant, of the very existence of the case, I having been hard at work during the day.

"I must beg for an explanation as to how the jury arrived at the vote of censure, and why I was not made acquainted with the case. "Yours, very truly,

"F. Harry Hume, M.R.C.S.

"Dr. Lankester."

To which I received the following reply:—

"January 18, 1866.

"Sir,—I am directed by the Coroner, Dr. Lankester, to acknowledge the receipt of your note of yesterday, and to say you can have a copy of the depositions taken at the inquest referred to by paying the customary charge for the same of 10s. 6d. "I am, Sir, your obedient servant,

"F. H. Hume, Esq. "J. H. Murrey."

I leave this with you and your readers, and inquire if this is the treatment which the Medical Profession is to expect from the hands of a Coroner.

I am, &c. F. Harry Hume, M.R.C.S.

8, Angell-terrace, Islington, N.

[We have received this letter since writing the leading article in to-day's *Medical Times and Gazette*. We should be glad to have a copy of the verdict returned by the jury, together with the exact terms of the censure of which our correspondent complains. Certainly, to condemn a man unheard is contrary to the principles of English justice. We think there must be some mistake in the newspaper report. It is but just to Dr. Lankester, meanwhile, to direct attention to his tone at an inquest held on a man who had died at St. Mary's Hospital under the effects of chloroform. He distinctly protected the Medical men from an imputation of want of care.—Ed.]

## THE ACUPRESSURE CONTROVERSY.

[To the Editor of the Medical Times and Gazette.]

Sir,—It appears from his communication in your last that Dr. John Brown wishes his Professional brethren to understand that he does not disapprove of Mr. Syme's (so-called) "public execution" of Sir J. Y. Simpson's pamphlet on Acupressure; although the motive of such a disclaimer, addressed to any body of gentlemen, is not very obvious. Dr. Brown regrets "his (Mr. Syme's) taking such a step" only because it "was liable to misrepresentation." I venture to bid him make himself easy on this score,—the "step" admits of but one construction; and not all the ingenuity of principal and second in the affair combined can give it any other than a very ugly aspect. Dr. Brown's attempt to justify it as "the deliberate reply to an imputation on his (Mr. Syme's) fidelity as a teacher, and not as an expression of dissent from the proposed substitution of needles for ligatures" is simply absurd, and can mislead nobody. As a bit of special pleading, it may take rank with the defence in a certain trial for assault in which it was admitted that the panel struck the blow, but alleged that he did it merely in a parliamentary sense! But for the after-boasting of Mr. Syme, with this "evidence as a witness," the scene in the operating theatre of the Edinburgh Infirmary might have passed as a transient ebullition of wrath on the part of the self-constituted High Priest against the invader of those sacred mysteries the "Surgical principles," deserving ridicule rather than grave reprehension, and destined soon to be forgotten; but a studied indignity,—as the sequel shows this to have been,—offered "with the most perfect coolness" (Dr. Brown assures us) by an operating Surgeon of note to Sir J. Y. Simpson, has, unfortunately for the doer, the elements of perpetuity of remembrance in it:—

"Is it not as if this mouth
Should tear this hand for lifting food to 't?"

In the practice of not a few Hospital Surgeons, and teachers of Surgery,—to say nothing of the obscure provincials with their "penny trumpets," all playing the same tune,—acupressure has approved itself most emphatically the reverse of "useless and injurious;" and the evidence in its favour of competent judges, who have employed it, is daily accumulating. Who, then, is Mr. Syme, that his condemnatory *dictum*, wholly unsupported, as it is, by personal experience, should be set against the approving depositions of such a cloud of witnesses, many of them his equals in authority, even if his judgment on the point were a mature and dispassionate one?

I think, however, the time has arrived when Sir J. Y. Simpson may safely leave this, his latest great invention, to recommend itself, and an opponent like Mr. Syme to his own devices.

I am, &c.

January 16, 1866. A Surgeon

## REPORTS OF SOCIETIES.

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## METROPOLITAN ASSOCIATION
## OF
## MEDICAL OFFICERS OF HEALTH.

Saturday, January 20.

Dr. Druitt, President, in the Chair.

At this meeting the following paper, by Dr. H. B. Montgomery, Member of the Sanitary Commission of Madras, etc., etc., was read:—

### ON THE ORIGIN AND PROPAGATION OF CHOLERA IN INDIA BY MEANS OF RELIGIOUS FESTIVALS AND PILGRIMAGES.

To grapple successfully with epidemic disease, we must prevent its primary development, and in doing this we shall more easily attain success than in endeavouring to limit its extension. There has, hitherto, been too much attention given to the cure rather than the prevention of epidemic disease; but now, under the awakening sense of the value of hygiene, we may hope that we will henceforward have our attention directed to the laws of its propagation. I shall in the following paper discuss the possibility of checking those periodical ravages which are effected by epidemics, more especially in intertropical latitudes. I desire here, however, to guard against an error which might possibly arise from the title prefixed to this communication, and may briefly explain that it is intended to show not that special and exceptional laws regarding the origination of epidemic disease are in force in India, but rather that certain fixed causes of epidemic disease exist all over the world, and that in India we are able to identify cause and effect: while the teachings of our experience may not be quite without value in other countries.

The argument, in fact, is one from the "particular" to the "general"; and the application of any conclusions at which we may arrive regarding causation or prevention must be modified only by considerations of local peculiarities, as to the habits of the people, or the character of the disease. I should, however, notwithstanding the interesting nature of the inquiries upon which I am engaged, have hesitated to bring this subject before the Society if it did not possess a direct and practical bearing upon public health in this country. At a time when epidemic disease of a most formidable character is threatening us, it may be worthy of inquiry whether or not there is evidence to connect the late epidemic of cholera in France, and even its appearance in England (as the ultimate scene of its contagious propagation), with its previous appearance among pilgrims and religious devotees resorting to Mecca.

The task of tracing out evidence on this point is, I believe, now engaging the attention of a member of this Society, and the following observations were in the first instance prepared for his information:—The first point for consideration—and really that upon which the whole question depends—is as to the actual facts regarding the liability or otherwise of large collections of people to cause the primary appearance of epidemic disease. It may here be well to state that the epidemics most usually witnessed in India are cholera, small pox, and fevers of a contagious character, or of that class which is attributed to malarious influence. (By the term malaria, I would, however, imply in its fullest acceptation the effluvia or noxious emanations arising from decayed animal or vegetable matter.) Now, all the diseases named are generally accepted as contagious, and any influence which will tend to their production will equally aid their extension. If, then, it can be shown that the influences most potent to originate and disseminate contagious disease are present in the case of large collections of natives in India, and, next, if further experience places beyond doubt the occurrence of diseases coincident with the presence of these concurrent causes—if, moreover, disease of an epidemic character can be traced back from various points of its development to one common centre of production, then the argument which points to this as the real place for action and prevention becomes irresistible.

Although fevers, whether exanthematous or otherwise, may, and doubtless are frequently, propagated by collections of people assembled in great numbers, and although they are justly recognised as fruitful sources of disease and death among the population of India, it is perhaps better, for closeness of argument and clearness of investigation, to limit our present inquiry to the one topic of cholera. I propose this course because the contagious character of variola, typhus, &c., is almost an admitted fact, and also because the period of incubation of these diseases is less fixed than that of cholera, and consequently greater difficulty exists in tracing the former to their true and immediate origin. In all contagious affections illustrations of deferred propagation of disease may occur, as by clothing contaminated by unhealthy or morbid secretions; but these must be regarded as exceptional, and, while they are admirable and conclusive evidences of contagion, they somewhat tend to erroneous conclusions regarding the date of origination of these forms of disease.

In our endeavour, then, to account for the frequency with which cholera is witnessed during or subsequent to festivals, or among bodies of pilgrims, it is desirable that we should appreciate the predisposing and immediate causes which tend to produce it. These may be classed as follows:

(1) Undue exposure to the vicissitudes of climate, and the occurrence of certain atmospheric phenomena, including frequently absence of ozone.

(2) Physical fatigue and nervous depression from prolonged travelling, mental apprehension, sorrow, or fear, more especially of this disease.

(3) Undue abstinence or deprivation of food, or the presence of injurious properties in it.

(4) Excess in eating, drinking, and licentiousness.

(5) Vitiated atmosphere from miasmata.

(6) Direct exposure to the contagion of the disease.

As regards the first of these causes, I may observe that the most unhealthy seasons in India are those before the commencement, and at the close, of the rains. These, technically called the monsoons, rapidly chill the air, and predispose to fevers and bowel complaint (due probably in great part to checked or arrested cutaneous exudation) at their onset; while their termination, marked as it is by the subsidence of swollen floods and the renewed exposure of decaying and wet animal and vegetable matter to the influence of a tropical sun, tends to the origination of all diseases whose existence is referable to miasma.

As regards atmospheric phenomena, I may direct attention to the first appearance of true Asiatic cholera in 1817. This year was from its commencement uncommonly moist, and the annual rains began in Bengal some three weeks before the usual time. The delta of the Ganges was soon flooded so as to become one vast sheet of water, and the rains exceeded the average of ordinary years by some 33 per cent. Jessore, the station from which the disease originated, was especially exposed to these injurious influences, lying as it did in a dense jungle, and surrounded with stagnant water. The disease in its mitigated form was not, however, absent from other parts of Bengal, and more especially from Calcutta, which was then, and is now in some places, one of the dirtiest cities in the world. How far true Asiatic cholera owed its presence in Calcutta to dissemination of the original disease from Jessore or not is now a matter of historic doubt. But it is beyond all question that with appalling rapidity the disease spread through the different cities of Bengal, passed up towards the source of the Ganges, and extended its ravages to the west of the Jumna. The territories of Oude and Rohilcund, lying on an elevated tract of land, would, however, not appear to have suffered in the first instance, though they did subsequently. Within two or three months of the first appearance of the disease it was brought to the camp of the Marquis of Hastings, which was then moving slowly through the low and unhealthy district of Bundelcund. A reign of terror followed the appearance of this new foe, and the army became temporarily "demoralised." The epidemic only lasted eight days, but during that time 8,000 native followers and 764 of the troops died. The sudden disappearance of the malady allowed the progress of the army, and the health of both officers and men became rapidly re-established. Similarly in many other parts of India atmospheric phenomena seem to have borne an active part in the organisation of epidemic disease. But the consideration of this subject is beyond the limits of the present inquiry.

Of the second cause predisposing to cholera—namely, physical fatigue and nervous depression—I need only now add that experience has conclusively shown that individuals proceeding on long journeys or after their conclusion are markedly subject to be attacked. The admirable report of Dr. Lorimer, formerly Secretary to the Medical Board at Madras, has conclusively shown, from well-framed and reliable statistics, that the probability of cholera may be estimated as being in the direct ratio of the number of men composing, and the distance to be travelled by, bodies of troops marching.

Of the effects of mental or nervous depression it is needless to speak, as it is a recognised source of danger to all persons liable to the influence of this epidemic.

3rd. Undue abstinence, during which the absorbent system is unusually active and the nervous system labours under the hypersensibility induced by depressed vital power, will tend to predispose to either the origination or development of the disease, and this more particularly if any of the food used is of an improper description, either as directly producing intestinal irritation or as wanting in nutrition.

To the importance of this latter source of cholera too much attention cannot be given. My own personal experience has taught me that certain articles of diet have certainly been the immediate and exciting cause of cholera, capable of proving fatal itself and of being propagated. Certain vegetables (more especially of the natural orders of Cruciferæ and Cucurbitaceæ) cause many of the symptoms of the disease, and apparently are capable of originating the disease, or at least of developing it where the seeds of it have been latent. Water melons are conspicuous among these articles of diet, and are consumed by natives in enormous quantities, more particularly when they are travelling, and during the hot season, when pilgrimages are, for agricultural and personal considerations, usually made; and the first appearance of cholera is by some referred to the diseased rice used by troops.

4th. Equally if not more injurious than insufficient or improper food is excess, and this is frequently exhibited in the use of alcoholic and narcotic stimulants, and extreme venery to an amount that would be hardly credited among European nations, but which is common enough among natives, particularly at festivals.

5th. Of the evil effects of overcrowding in houses and of the influence of miasma, in the extended sense in which I have accepted it, it is not necessary to say much; but the imagination of an English mind could never depict the extent to which causes for miasma are allowed to exist in native towns, and there seems little reason to doubt that the evil effluvia arising from decomposing animal and vegetable matter is as deadly a poison as any more material one within our knowledge. Mere humanity itself can, as we know, poison the surrounding air; and not only so, but the effluvia thus arising may act as truly as a blood poison as any distinct and special morbific element. Just one hundred years ago the few survivors of the Black Hole in Calcutta suffered from consecutive fever almost without exception, and if time allowed I could multiply illustrations of the ill effects of crowding in barracks, Hospitals, and other houses. In these cases cholera is not of necessity produced *per se*, but a fruitful ground is prepared where its seeds will germinate and bear their evil fruit with awful productiveness.

6th. Lastly, among the immediate and direct causes of individual seizures of cholera stands the exposure to its poison. To avoid an imperfect, and consequently unsatisfactory, consideration of the question of contagion, I shall merely assert this cause, without assigning for doing so any especial reasons.

The foregoing brief summary of causes, generally recognised as affecting all classes in India, and, among them, predisposing to the development and the propagation of cholera, would scarcely need any augmentation had it been intended as a sketch of the conditions surrounding or affecting pilgrims on the march, or during the celebration of their festivals. They are subject, not to one of these influences only, but to four out of the six of necessity, and frequently to the other two—namely, the first and last. In fact, all the evil conditions noted must belong to the undertaking upon which they are engaged, and these very conditions, be it remembered, are all co-existent, or follow close upon one another.

A brief sketch of the mode of travelling adopted by the various classes of native travellers is needful to the comprehension of the physical and mental condition in which they have to make their prolonged journey. Either on foot walking almost incredible distances under a burning sun, or closely packed in a stifling cart which is crammed to suffocation by human beings, and from which every breath of air is as carefully excluded as it is possible to do, they struggle along indifferent roads, or no roads at all, slowly dragged by miserable, half-starved, and all over-worked bullocks. Their food, indifferent in quality at the best, is cooked under the shade of a tree, or under the cart in which they travel, and after it they drink pernicious arrack, or fermenting toddy, or tank or well-water scarcely less pernicious. At night they sleep in the foul conveyance in which they have travelled, or lie exposed on the ground to be chilled by dews or damp, or subject to the influence of the land wind. If they stop at a native town, they crowd into the closely-packed bazaars, and sleep, perhaps, in some filthy choutry, or travellers' rest-house,—seldom little more than a shed enclosed on two or three sides—and they lie packed as close as they can, with, perhaps, a thermometer at 70 to 80 degrees at the lowest.

Can it be wondered that they are unhealthy? Can we feel surprise, if they do manage to reach the goal they seek, that when they mingle with others influenced by similar injurious surroundings, and meeting in a densely-crowded native town, without conservancy, with water defiled by cattle and the washing of carts and clothes, and the bathing of crowds of human beings, they fall victims to miasma? Would not the wonder be if they escaped from disease?

That they do not—that thousands annually perish—is undoubted; but this is not the sole evil, although even its magnitude is appalling. In preference, however, to theorising, let us examine a few well-marked examples of the direct origination of cholera at religious festivals, and of the subsequent development of the same disease as the result of pilgrimages. In order to avoid a needless repetition of facts well known in India, but the details of which are not easily attainable in this country, I will confine my observations to the effects of the causes under consideration as influencing the vast population of the city of Madras, and others as affecting large sections of the army of the same presidency while marching in a distant part of it. These illustrations of immediate and remote effects are equally important.

Situated at a distance of forty-five miles from Madras, and on the western boundary of the collectorate of Chingleput, is a native town called Conjeveram. "It is large, pretty, and regularly built; the streets are broad, and planted with cocoanut trees, and a small stream runs along its western side. The soil is clayey from decomposition of felspar, which abounds in the granite, and proves very fertile; the river and surrounding tanks are favourable to cultivation. The inhabitants are chiefly ryots" (cultivators of the soil) "and weavers. Many Brahmins reside here, and the large Pagoda or Temple at Conjeveram is greatly famed in heathen mythology. It is one of the strongholds of Hindooism in Southern India."

Here, then, we have an example of a sacred shrine, which in some respects is favourably influenced for the existence and maintenance of public health. Many of the inhabitants, more especially those attached to the temples and also the leading cloth merchants of the place, are wealthy. It occupies a somewhat secluded position, and the mode of construction of the town, with a view to the passage of large processions along its leading streets, is favourable to ventilation. The occupations of the people are healthful, much of the weaving (which might seem an unhealthy occupation) is carried on out of doors, and the general health of the people is satisfactory. The festival is comparatively of short duration, and held in the month of May, which is a hot weather month, and not unhealthy, in this part of India. Yet with all its advantages the annual feast at Conjeveram is almost as regularly the means of introducing cholera into Madras. Scarcely a year up to 1863 passed without an outburst of cholera during, or immediately subsequent to, the festival, and its appearance in Madras a few days subsequently was directly traced, in many instances, to the visitors returned from Conjeveram.

A better marked example of the deadly effect of these festivals could scarcely be found. On the one hand we have a town naturally tolerably salubrious, with a population independent and healthfully employed, and yet we find that cholera appears with the aggregation of strangers, even although the majority of them have come a comparatively short distance, and their stay is limited.

The causes likely to predispose these people to disease have been already detailed as they influence even individuals, but to these others and equally suggestive ones were added as affecting the mass when aggregated together. Up to the festival of 1863 no provision of any kind of an hygienic nature was made. No places of public convenience were erected, and an indiscriminate collection of men, women, and children, bullocks, horses, and cattle of all kinds, crowded and defiled the public streets. Pigs, the natural scavengers of an Indian town, devoured the foul and decomposing excreta festering under a tropical sun, and were subsequently slaughtered to supply pork to Madras. Mad revelry by day and night, when the tumult rendered sleeping a matter of difficulty even to a native, excited to a preternatural degree the religious zeal of the Hindoo, and excess and debauchery prostrated his energies and made him an easy prey to disease. The effluvia arising from decomposing excreta polluted the air, and in this foul atmosphere the inhabitants of the town had to live, with an additional supplement of some 200,000 strangers who attended the feast. The carts in which they came to the feast—if they were of the better classes—became saturated with the poisonous atmosphere. The clothes of the poorer,—tainted by prolonged wear, and the various contaminations likely to arise during an orgie of days,—wrapped round the wearied limbs of these miserable devotees, and sent them back to Madras, each of them perhaps a nidus for future epidemic disease. Exhausted, weary of excitement, with all the sustaining hope of religious zeal to support them gone, they hastened back to the Presidency town—itself notorious for indifferent conservancy,—and the life of every European, East Indian, and native in that great city was perilled. How these adverse conditions have been partially mitigated, with the happiest effect, by the efforts and on the advice of the Commission to which I have the honour to belong, I will shortly detail.

In contrast to the foregoing facts regarding the condition of a town, itself the scene of a religious festival, we will next turn to an example of the effects left behind by bands of pilgrims traversing the land. Some of these come from Bhopaul, the territory of Bundelcund, and the provinces of Central India, collecting from distant stations in bands more or less numerous, but sometimes amounting to thousands. Many of these, poor, ill-fed, and diseased, start on their weary journey of some 1500 to 2000 miles in length. Passing by Nagpore, and occasionally by Hyderabad and Bellary, the miserable caravan wends its way through the Ceded Districts, and Kurnool, Cuddapah, Salem, and Trichinopoly come in their route, which, for obvious reasons, is that of the grand trunk roads of Southern India. Visiting the sacred shrines of Trichinopoly, weary and exhausted, they still pass on, and visiting Saringum at length their hearts are gladdened and their courage is revived by the longed-for sight of the sacred island of Ramieseweram, from which they feast their eyes upon the distant site of the mythical Lunka, the holy or resplendent island of Indian song and story—the Ceylon of modern writers. At Ramieseweram they visit the sacred spots commemorated in the great epic poem of the Ramayanam. Visits to the island Ramieseweram and bathing in the sacred water where the two seas mingle are supposed to free from sin and give a passport to immortality.

I allude to this belief because it, in part, explains the strong motive that impels the resort of these pilgrim, who, so long as their religion lasts, will continue to flock to Ramieseweram, and to be a constant source of disease if stringent measures are not adopted to check the evils they give rise to.

To reach the shrine of their devotion, many thousands start each year from the distant regions of Upper and Central India.

Ten years ago the population of the island was under 5000, and no less than 130,000 pilgrims annually arrived to worship. To this a goodly addition must be made if we would account for all who originally started on the journey. The hearts of many have failed them; the money of others has fallen short; possibly at some native village where they halted disease has sprung up and checked the adventurous travellers; and thousands of graves unseen, because unmarked, exist on these trunk roads of the travels of these votaries of religion.

But perilous as has been the route to reach the sacred land, the dangers of it are, perhaps, less urgent than those of the return. When their ceremonies have been performed in due course, and when the strong feelings of religious enthusiasm have been gratified, they soon take their staff in hand, or yoke the travel-worn cattle, and turn their faces homeward once again. Now it is that disease asserts her illimitable power. No longer upborne by excitement, the object of their lives now fully attained, wearied, poor, and with no hope to cheer them on their way, they start on their return journey. How many of their companions may have fallen by the way—how many are never to see their homes again,—who can tell? On the return journey, all the influences, physical and moral, which endangered them are multiplied in number and intensified in power. They seek on their return the camping ground before defiled by themselves. They listlessly occupy the same vehicles which brought them all this long journey; they are depressed at the dread that spoilation of their property at home may have occurred, and they are in a strange country, speaking an almost unknown tongue. Forced marches knock up both man and beast, and foot-sore, down-hearted, and ill-fed, they fall an easy, unresisting prey to epidemic disease.

But it would scarcely be just that all our sympathies should go with the people of India as sufferers for the faith they possess, if I failed to remark that more worldly objects than those noticed are equally cogent to compel long and dangerous journeys. The great fair of Biginugger (more commonly called Humpi) collects annually thousands of native traders, and, like that of Hurdwar, at the issue of the Ganges from the Himalayas, is equally with Conjeveram and Ramieseweram a source of injury to public health; and from these centres cholera almost always accompanies the homeward-bound trader. Serious, however, and lamentable as are the results of festivals and pilgrimages to those who are personally concerned in them, there are other and far more important consequences likely to follow them. The gradual dispersion of the religionists, while it is favourable to their own freedom from the eventually depressing effects of the assemblies in which they have taken part, is also, unfortunately, the immediate means of propagating disease if it has seized them. The villages in their route are visited, and, as free intercourse with the villagers, and easy access to the crowded and unhealthy bazaars, are inevitable and cannot be controlled, the extension of disease results.

Hence the public thoroughfares become dangerous, and troops or private travellers are exposed to risk. We have but to recall the numberless instances of cholera imported into moving camps, or attacking private individuals, to recognise the facility with which passers-by are soon found to succumb under this contagion. In both instances supplies have to be obtained from villagers, and even the slight amount of intercourse thus arising may implicate the safety of those *en route*.

But in addition to this explanation of seizures of cholera among troops, and independent of the predisposing causes which travelling itself originates, it is no fancied conclusion to infer that if troops pass near, or rest upon, tainted encamping ground, they may become the victims of disease. Of this latter point a sad proof was given within the limits of the Madras Presidency, or, at least, as affecting some of its troops. On the breaking up of the Saugor division in 1860, many of the regiments, returning to their own stations, crossed the route of the pilgrims who had gone to, and returned from, the Island of Ramieseweram, and in numerous instances they were attacked with cholera. This was no rare coincidence, but occurred with such precision that it must be deemed a natural effect of an undoubted cause.

Again, in the previous year, Inspector-General Macpherson records, a detachment of 74th Highlanders were attacked with cholera from passing within 100 yards of the camp of the 35th Regiment M.N.I. when suffering under an epidemic of that disease.

The former gallant regiment were brought down to Madras to embark for England in 1864, and being most improperly encamped on ground defiled by previous occupation for weeks of 78th Foot, were attacked with cholera, and a good number of deaths ensued. Now in the latter instance the first occupants of the encamping ground had not suffered from this disease.

In all these instances the troops were in high health—those from Central India had passed through a glorious campaign. They had won a large amount of booty, but had not an opportunity of spreading it, and they were under the Professional charge of Medical officers of experience, thoroughly competent to adopt any possible measure to guard the lives and health of the men in their charge. Nothing that skill could do or money could ensure was left undone, and yet they fell victims to an atmosphere, and probably camping grounds, tainted by religious pilgrims. The case of the 74th at Madras was a proof of the innate power of malaria to generate epidemic disease, and in this instance the disease was brought from the camp (six miles distant from Madras), and it rapidly took root, and spread in a densely-populated portion of the city, remarkable for its want of ventilation and conservancy. Analogous to the experience of the detachment of 74th Highlanders, who contracted cholera near Bellary from an affected camp, by which it passed but where it did not halt, was that of a wing of the 43rd Regiment of Europeans, who, passing through a village near Palmanair—one of a number of small native villages skirting the frontier border of the Mysore table-land, and some 2000 feet above the level of the sea—were seized with cholera and brought into Madras dying by scores, some of whose dead bodies lay among the living for miles of their miserable railway journey. If it were necessary to multiply proofs of the ill effects of native encampments and of native habits of travelling, I could easily from my own experience show that there is no more fruitful source of epidemic disease than is here to be found.

The city of Madras abounds in cart-stands, where native travellers' vehicles are encamped—places uncared for apparently by any one, and they are for the whole year round the nuclei of epidemic disease. The large up-country railway stations—as, for example, Coimbatore and Salem—are found to prove perfect nests of cholera, the virulence of which is maintained by an almost total absence of conservancy.

No language that I could use would be too strong to deprecate the wanton risk to human life which is needlessly allowed to cause such dire results; and no exertions should be spared to save the life and protect the health of the general population of India from influences the evil effects of which are, to a degree, inevitable. A review of the observations I have made will point out some remedial measures of importance, and the good effect of which is not merely hypothetical. I think I shall be in a position to prove that very simple measures may suffice to ward off much of the danger now threatening pilgrims and those who attend religious festivals, and that if attention is once directed to the subject, it may be possible, by timely warning, to enable the commanding and Medical officers of troops on the march to guard their men against the injuries of contagion.

We shall first consider, then, the steps to be adopted at the festival itself. Here, in accordance with the rest of this paper, I will confine myself within topics of which I am personally cognisant.

I have before spoken of the Grand Feast of Conjeveram, and of the injurious results so often consequent on it. These were brought to my notice personally (not officially) about a week before the feast of 1864 by a most intelligent Medical subordinate, since appointed a sub-Assistant-Surgeon. Mr. Kinsley solicited that the matter might be submitted to the Sanitary Commission, but time did not allow that it could be considered by them in regular routine in sufficient time to promote the necessary action before the commencement of the festival. The Hon. Mr. Ellis, the President of the Commission, however, took immediate steps in the matter, and by his active exertions, and in consequence of urgent letters written by me to officials, we were able to accomplish something.

Cattle were as far as possible removed from the strict limits of the town. Public places of convenience were erected, and their contents removed twice a-day. The main streets were swept and watered, and supplies of good water were made available near places of public resort for the use of the native visitors.

As regards the result of these measures, I prefer to quote from an official report kindly furnished to me by Captain Cloete, Superintendent of Police, who was present during the festival, and who had the most ample means of information at his disposal. He says:—

"In 1862 and 1863, at this festival the effluvia arising from the hedges and ditches on the side of the main street was so offensive as to make it quite sickening to walk in the streets in the morning. In 1864 I walked from Kisna Cunchi to Siva Cunchi, a distance of about two miles, at daylight, and experienced no more disagreeable smell than is to be experienced in the bazaar on ordinary occasions. The contrast to the previous years was most marked. In 1862 and 1863 human excrement was to be seen in the main streets at every step; this year I saw none at all. Not one case of cholera occurred during the festival; but it seldom or ever happens that cholera does not break out either in Conjeveram itself or among the people returning from the festival, or in Madras after this feast. I have not heard of one case in which the seeds of the disease are traceable have been sown in Conjeveram. It, and the adjacent villages have been singularly free of cholera since the festival, and, to the best of my belief, Madras has been unusually so."

In this conviction Captain Cloete was perfectly correct, and, humanly speaking, Madras was spared from an epidemic by the very simple and inexpensive arrangements proposed by the President of the Madras Sanitary Commission, and acted upon by Mr. Kinsley and the Tasildhar of Conjeveram, who were, by Mr. Ellis's exertions and authority, supplied with funds and the requisite carts and scavengers. Here I may note that, of the particular caste or race of people who alone will sweep the roads and remove human excrement, not one is to be found in Conjeveram, and we had to send them from Madras, a distance of forty-five miles.

One of the natural consequences of this utter absence of the sweeper caste (analogous to scavengers in London) is, that accumulations of rubbish, house refuse, and excreta remain piled in the yards attached to the private houses, even of the wealthier classes. Thus, although I have spoken of this town as being in some respects favourably circumstanced, as compared to other Indian towns, it must be held as requiring—eminently on account of the access to it annually of such a multitude of people—those improvements in conservancy which can alone be relied on as likely to conduce to an improved sanitary condition. Mr. Kinsley, to whom I have before alluded, furnished a very interesting account of the measures adopted during the festival, and thus concludes his report:—

"In concluding these brief remarks, it may be mentioned that during the ten days of the festival the town remained free of cholera, and no cases occurred during the year. The whole of Southern India, it is true, remained singularly exempted from the epidemic during the past year, but this fact cannot be made to detract from the ability and efficiency of the sanitary measures put into force at Conjeveram, during the annual festival, for it is doubtful whether many of the towns were placed under the same favourable circumstances for starting an epidemic, as this usually is, during the May festival—and it is impossible now to speculate as to what the results would have been on the dense masses congregated here, had these measures been neglected. Tradition testifies to the fact that ever since cholera was first known in India it has never failed to make havoc amongst the Hindoo population present here during the grand festival of May. So notoriously was this the case that, it is said, people from distant places, before starting out to come here for the feast, always took a more than usually solemn leave of their friends in anticipation of their never returning; and the result justified these anticipations in hundreds of cases."

Similar precautions were adopted in 1865, and with an equally favourable result, although the year was notoriously unhealthy. But I need scarcely say that what happened so often before, and is so likely to happen again, should be prevented, if prevention be possible.

I have endeavoured to demonstrate that, from various causes, pilgrims and the visitors to native festivals and fairs are especially liable to suffer from epidemic disease, and that with a full knowledge of the frequent fatality attending these journeys they still undertake them, and will doubtless continue to do so until their idolatry has been eradicated.

It is also undoubtedly necessary that native and European troops must, for many years, continue to traverse the country on change of station, or for political exigencies or the purposes of war, and that during their march they are liable to be the victims of disease, either directly acquired from tainted encamping grounds or from contact with infected villagers; and no exertion should be spared to save them from the risk of a disease often more deadly than the most gallant enemy. It is equally plain that, although in 1864 and 1865 the simple means adopted at Conjeveram were followed by a most gratifying condition of public health, yet something more is required. We must devise some means to protect the religionist on his journey, more especially on his return home, and prevent those bands of pilgrims or traders from carrying with them the seeds of disease along the public thoroughfares.

To do this is hopeless, unless two conditions are fulfilled. 1stly, the careful conservancy of the places of chief resort; and, 2nd, a careful supervision of the travellers *en route*.

I have shown that they go from one end to the other of the presidency of Madras, and that they pass by, and frequently touch at some of the important stations for European troops, and where an European population is gradually springing up in the civilians' lines; and to any of these they may bring disease.

At present, sanitation in India is more a theory than a science, and, like most other theories, has few supporters, and many most serious opponents, even among the classes whom education and experience should render the most capable to appreciate hygiene, its teachings and its object. We have to combat the prejudices of a people with whom the habits of the past are accepted as the precepts for the present, who resent innovation with open hostility, or impede it with passive opposition, and who are naturally utterly devoid of habils of cleanliness or—I may almost add—of decency; who will, if allowed, resort to the public thoroughfares for the purposes of nature, and who will construct cloacæ under the rooms where they live and cook by day and sleep by night. A people they are who are listless and wanting in energy to shake off disease, and who are especially liable to all the nervous influences that render disease fatal. Can we wonder, then, that disease stalks through the land, and hurries thousands to the grave annually, and that their pilgrimages, intended by them as passports to eternity, frequently prove so, though, perhaps, in a more material manner than they anticipated, or wished for?

I think not; nor can we, seeing how others suffer, and how our army may be paralysed and the best interests of our rule in India be perilled, any longer leave this matter to be simply a topic of inquiry and report, rather than the subject of active interference.

The Commission to which I belong has not been inactive in this matter, and has promulgated a scheme which would do all that is needful, and almost all that is possible, at a cost absurdly small as compared with the advantages hoped to be attained. Under the provisions of it, officers of public health would be appointed at all military stations and civil towns. Conservancy establishments would be instituted, and regular statistics of births and deaths collected. The importance of these as indications of the condition of public health among the urban and rural population cannot be overstated. Among the more prominent officials of the scheme would be officers of experience, who would be the media of transmission of the district returns, and whose attention would be by them directed to any place, whether a village or an encamping ground, or a public road, where epidemic disease might be present, and advice regarding, or caution against, access to such places would be afforded to travellers or bodies of troops.

In case of disease prevalent on trunk-roads, the rules advocated by the late Commander-in-Chief, in India, Sir Hugh Rose, should be observed; and when bodies of travellers are attacked with disease, they should alter their course, and travel at right angles to the prevailing winds.

The conservancy of native towns would be directly supervised by the local health officer, and intimation of disease among travellers would be systematically conveyed to this officer by his immediate superior. The latter officer should, in my opinion, be authorised to direct the route of all bodies of people traversing his district; and he should similarly, in concert with the military authorities, suggest the route to be observed by troops of all kinds.

The conservancy of encamping grounds well situated, protected from undue exposure either to sun or water, should be promoted, and sites, well removed from public thoroughfares, should be established for cholera and fever camps, not only along the general line of the high roads of traffic, but within moderate distance of the more important towns.

An analysis of the drinking water of all wells and tanks likely to be resorted to by pilgrims, or troops, should be made, and the necessary instructions given to prevent the defilement of these by cattle.

Public health officers should also, I think, be authorised to enforce the observance by pilgrims of those rules regarding encamping which experience shows to be salutary. The separation of carts occupied as means of carriage by day and sleeping places at night, the removal to a distance of all cattle employed by travellers, and the construction of sewage pits close to, but to leeward of, all encampments.

The expenses attendant on these arrangements need not be great, and could be in many cases defrayed by the travellers themselves.

Public health officers should, I am of opinion, be authorised, through their establishment, to enforce the periodical washing of all carts used by traveller, and the cleanliness of the clothing of all persons component parts of such large assemblies of people.

They should also be empowered to cause the division, into two or more sections, of parties so numerous as to be likely to have disease engendered among them, for the proclivity to disease of bodies of men is now conclusively shown to be in the direct ratio of these numbers.

Care should be taken that ground once used for encampment should not be again so employed until it has been exposed to the full action of one monsoon, and ground formerly the scene of epidemic disease should be as far as possible thereafter avoided.

I believe that by the adoption of some such measures as these, and by these alone, can the origination and propagation of epidemic diseases be prevented; and I bring the matter to the notice of this Society in the hope that the experience of some of those present may be able to suggest other and more efficient means of protecting public health.

For any such suggestions, I may add, I shall myself feel grateful, and it is of importance to me, as in some degree representing, however humbly, a new department in the organisation of the Madras Executive, that all the expedients that science can suggest, or experience can prove the value of, should be freely discussed by us this evening.

I confess that I, for one, do not shrink from the task of making the attempt to check disease, if I can only commence the task with a full conviction that the principles of action are well founded, and likely to conduce to a favourable result.

In India we are lamentably behind the age in sanitation. In this, as in everything, we can only follow England; but we look to the example of such societies as this to teach us, and I think I may promise that we will endeavour to be willing and patient students.

Our object is, at all events, a noble one. We hope to gain increased security—or, to speak more suitably, less risk to human life—and in this one common aspiration of humanity we are prepared for some failure, much discouragement, and opposition, but the pain of these will be well endured if they eventuate in time in the ensurement of success.

## THE PATHOLOGICAL SOCIETY.

Tuesday, December 19.

Dr. Peacock, President.

(Continued from page 78.)

Mr. Hutchinson exhibited a specimen of

### DWARFING OF THE RADIUS AND ULNA AFTER INJURY TO THE CARPAL EPIPHYSIS OF THE RADIUS.

It had been removed from an adult woman who had died in consequence of an accident about twenty years after the injury to her wrist. She stated that she had dislocated her wrist at about the age of eight. The whole forearm and hand were smaller than those of the opposite limb, but the chief dwarfing was that of the radius itself. This bone was a full inch shorter than the ulna, and the carpus was drawn upwards, so that the semilunar and cuneiform bones were in apposition with the radial border of the ulna. There was considerable distortion during life, the styloid process of the ulna projecting. The radius was very small in all its proportions, and just in front of its carpal extremity there was a remarkable hollow. Its carpal end was very short. The head of the radius showed one side bevelled off. Mr. Hutchinson suggested that probably the original injury had been only to the carpal extremity, and that the condition last mentioned was probably secondary and due to attrition. The history which the woman gave of an accident in childhood made it probable that detachment of the carpal epiphysis had been the injury to which the dwarfing was due.

Mr. Hutchinson also showed a

### CAST OF A COMPLETE DISLOCATION AT THE KNEE-JOINT.

The tibia was thrown forwards in front of the femur, and there was three-quarters of inch of shortening. (This case has already been mentioned in the *Medical Times and Gazette* for December 9, 1865, page 629.)

Mr. Holmes did not recognise in the radius the characters of separation of the epiphysis. The injury to the bone appeared to him to be above that position, and suggested rather the idea of fracture. It reminded him, indeed, of one of Mr. Curling's cases of fracture through the medullary canal, which he believed might, perhaps, lead to shortening of the bone.

To Mr. Wm. Adams' mind the idea suggested by the specimen was rather that of congenital dislocation of the head of the radius. This part alone of the bone seemed abnormal.

Mr. Callender remarked that there were very few well authenticated cases as yet bearing upon the question of the effect of separation of the epiphysis upon the growth of bone. It would be very desirable to have a further examination.

Mr. Heath said it had been discussed both in America and in Paris whether in injuries to the forearm in children, in which the hand was forced back and impairment of growth followed, the seat of the mischief was the lower or upper end of the bone. The majority seemed to incline to the latter. The present specimen was, therefore, of the greater interest.

Mr. Hutchinson willingly accepted the Committee, but could not expect much light to be thrown upon the nature of the injury after the lapse of twenty years. The elbow joint was perfect and in perfect use. There was no malformation of humerus. The apparent wearing away of the head of the radius was not seen till after dissection. He only inferred the separation of the epiphysis from the history and its known effect in arresting growth of bones.

Mr. Callender and Mr. Wm. Adams were appointed a Committee.

Mr. Nunn exhibited drawings

### ILLUSTRATIVE OF THE PROCESS OF SYPHILISATION.

Fig. 1 showed the results of a series of inoculations with pus from the chancre of a patient with an indolent bubo in a case of constitutional syphilis in its earliest stage, the patient having taken no mercury, nor having been submitted to any other treatment. The sores produced by the artificial inoculation diminished progressively in size, from that of a threepenny piece to that of a millet seed. Fig. 2 was taken from a complicated case, the patient having been treated in April last for constitutional symptoms with mercurials; the constitutional symptoms had returned. The results of the artificial inoculation were all but negative, very small vesico-pustules only being produced, with some surrounding redness. Simultaneously with the inoculation, the ointment of protoiodide of mercury was being applied to some painful sores about the anus. The sores healed, and the pustules produced by the inoculations also scabbed over, leaving but, as was shown in the drawing, only the slightest indications of their situation. The date of the inoculation in the first-named case was November 15, of the second, November 17; the date at which the drawings were made, December 4. Mr. Nunn stated that he brought the drawings forward with a view of possibly removing prejudices that, he believed, did exist with regard to the process of syphilisation,—prejudices which he thought might prevent a just appreciation of the merits of the system. He abstained from expressing any opinion on the merits of syphilisation, as he did not consider the place fitting,—investigations, as was well known, being still carried on, the results of which would in due time be placed before the Profession. The drawings showed that the local effects of the artificial inoculation on the plan of Professor Boëck (to whose kindness Mr. Nunn wished to say he owed much) were not severe nor especially repulsive.

Mr. Nunn next showed drawings of two cases of

### CONTRACTING CANCER OF THE FEMALE BREAST.

Mr. Nunn said that practically cancers of the breast might be arranged into two classes, the one comprising cancers that, inflaming, sloughed, the other, cancers that, atrophying, contracted. In giving a prognosis in cases of cancer of the breast, according to some statistics, one might on the average say that a cancer left alone would end fatally within a little less than three years, that a cancer operated on would not end fatally until a little more than four years had passed. The drawings shown were taken in 1862 from two patients of the Middlesex Hospital. *Case* 1.—E. T., admitted in 1859 with contracting cancer involving the nipple and region of the areola. The disease had commenced in 1850, and the patient did not die until June, 1864. *Case* 2.—E. H., admitted June, 1862, with contracting cancer of the lower lobes of the right breast. The disease commenced 1861. The patient died June, 1865, with acute effusion into the right pleural cavity and with secondary deposits in the lung. The disease in the breast gave but little inconvenience, and the death of the patient might almost be said to be not due to the cancer, although doubtless the existence of the cancerous "*boutons*" on the pleural surface of the lung determined the occurrence of the pleuritis.

Dr. Ogle exhibited three specimens of

### TÆNIA REMOVED BY MALE FERN.

One of the worms was the tænia canellata, and its head had become decolourised by the spirit.

Dr. Ogle also showed a portion of the

### ARACHNOID CONTAINING CYSTS,

from each hemisphere of a lunatic who had been under the care of Dr. Boyd. The lunatic was 49 years of age, and epileptic. The membrane was thickened and contained cysts full of a fluid like that found in the cysts of the choroid plexus. This condition was considered by Dr. Ogle to be a rare one. Dr. Ogle had not had time to examine this specimen minutely, but had rather expected to find that the cysts were formed from dilatation of veins in which calcareous matter had been deposited of the nature of phlebolithes.

Dr. Ogle showed also

### DRESSINGS FROM WOUNDS OF A DROPSICAL LEG.

A middle-aged woman suffered from Bright's disease, and ulcers of considerable size formed on the legs, from which the escape of fluid greatly relieved the dropsy. Three weeks before death, however, this fluid began to produce a stain of a beautiful carmine colour, indelible by washing; and this continued for several days. The colour suggested a production of murexid, from changed urate of ammonia; but the chemical tests did not quite accord with this view. Dr. Ogle had been able to hear of two similar cases only—one was related to him by one of the nurses of St. George's Hospital, the other by Dr. Hawksley. Dr. Bence Jones had told Dr. Ogle that he had seen traces of a similar colour in the sweat from the forehead and axillæ in one case.

At a previous meeting, Mr. Ernest Hart showed the parts involved in an

### ENCEPHALOID TUMOUR OF THE ORBIT.

The chief interest in this preparation lay in the considerable increase in length of the optic nerve, associated with the downward pressure of the eyeball, and its expulsion from the cavity of the orbit. There was no derangement of the visual power until a day or two before death, when the cornea became affected by exposure to the air. There was actual growth of the nerve. The tumour had been painless. Cancer was here coincident with scrofulosis, and the apparent symptoms of scrofulosis had attracted the attention of the Surgeon long before there was any reason to suspect that a cancerous tumour was developing itself. The patient was under the care of Mr. J. B. Walker, of Clifton-gardens, with whom Mr. Hart had seen the patient during life, and to whom he owed the opportunity of making the post-mortem examination. Mr. Hart gave further details of a second case of cancer of the eyeball, which contrasted with this instructively. When the child, a patient of Dr. Fyfe, of Brompton, was first seen, a small tumour was detected by the ophthalmoscope springing from the edges of the optic disc; but as the history was one of sudden loss of sight from a blow, the parents refused to allow the eyeball to be excised, and another Surgeon undertook to cure it by leeching and mercury. Subsequently the tumour grew; excision was performed when no longer useful; the pain became almost immediately afterwards intense; and the patient died. In addition to the clinical interest of the contrasted histories, Mr. Hart called attention to the different histological characters of the two tumours. Both were pathologically classed as encephaloid; but the encephaloid in the one case springing from the nerve tissue displayed an abundant cell growth, which might be expected; while in the first-named case, which sprang from the dura mater, there was but little of the characteristic cellular element, and an abundance of old fibres and small non-nucleated granules.

## MEDICAL NEWS.

Royal College of Surgeons of England.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College, at a meeting of the Court of Examiners on the 23rd inst. :—

Ridgway Robert Syers Christian Codner Lloyd, Bury St. Edmunds, Jas. Haslam, Reading, Berks, George John Muriel, Ely, Algernon Ewen, L.S.A., Long Sutton, and Frederic Edward Manby, L.S.A., East Rudham, Norfolk, students of Guy's Hospital; Frederic Evans Chambers, Camden-town, Charles Thomas Ennals, St. Neots, and Henry Lissmore Shaw, South Mimms, of the Middlesex Hospital; John Waller Melson, B.A. Univ. of Lond., and L.S.A. Birmingham, and Edward Bousfield, Mansfield, Notts, of the Birmingham School; John Lea Molyneux, Wigan, and John Wickham Legg, L.S.A., Alverstoke, Hants, of University College; Frederick Earle, Edgeware, Middlesex, and Napoleon Bisdee Major, L.S.A., Hungerford, of St. Mary's Hospital; Herbert Wood, L.S.A., Ashton-under-Lyne, of the Manchester School; Edward Horne, L.S.A., Isleworth, of the Charing-cross Hospital; Antonio Lorenzo Chiappini, M.D. Edin., Cape of Good Hope, of King's College; George Edgelow, Kensington-square, of St. George's Hospital; and William Henry Plaister, Bristol.

The following gentlemen were admitted members on the 24th inst. :—

John Henry Simpson, Fore-street, William Henry Ellis, Willingham Cambs, Arthur Jackson, Sheffield, George Christopher Tayler, Trowbridge, John Chamberlin Eaton, Ancaster, and William Alexander Slater Royds, Bedford, students of St. Bartholomew's Hospital; Thomas Percival, Geo. Ackroyd, John Bywater Ward, and William John Mountain, all of Leeds, Henry Cecil Smith Bayswater, William Evatt Wright, L.S.A., Brixton, and Frederick Everard Hunt, Shortlands, Kent, of Guy's Hospital; Richard Hewetson, Bayswater, and Paris Bradshawe, of King's College; John Lawrence, Clifton, and Arthur John Farr, Newport, Monmouthshire, of the Bristol School; William Nolan, M.B. Trin. Coll. Dub., Athbay, Frederick John Wadd, M.B. Univ. of Aberd., Kilburn, of St. Thomas' Hospital; Herbert Ridley, Newcastle, Joseph McCarogher McWilliams, Omagh, and James Inglis Ransford, Sydenham, St. George's Hospital.

Apothecaries' Hall.—Name of the gentleman who passed his Examination in the Science and Practice of Medicine, and received a Certificate to Practise, on Thursday, January 18, 1866 :—

Benjamin Chaston Gowing, Lowestoft.

### APPOINTMENTS.

⁂ The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Anderson, Alexander D. M.D-, Edin., has been nominated a Director of the Glasgow Royal Lunatic Asylum.

Barlow, Mr. J., has been elected Dispenser to the Salop Infirmary.

Canton, Alfred G., M.R.C.S. Eng., has been appointed Assistant-Dental-Surgeon to the Dental Hospital of London, Soho-square.

Clarke, Joseph, L.K.Q.C.P.I., has been appointed Surgeon to the Constabulary, Bacheborough, Co. Cavan.

Fussell, Edward F., M.B., M.R.C.P. Lond., has been appointed Physician to the Brighton Dispensary.

Hoffmeister, William, M.D., has been elected one of the Surgeons to the Cowes Dispensary.

Hopkinson, W. L., M.D., has been appointed Consulting Physician to the Stamford and Rutland Infirmary.

Lyon, William, M.D. Glasg., has been nominated a Director of the Glasgow Royal Lunatic Asylum.

Newman, William, M.D. Lond., has been appointed Surgeon to the Stamford and Rutland Infirmary.

Oxley, C. F., L.R.C.P. Edin., has been appointed Resident House Physician to the Westminster Hospital.

Pagan, John, M.D. Edin., has been re-elected a Director of the Glasgow Royal Lunatic Asylum.

Redwood, T. H., L.R.C.P. Lond., has been appointed Senior Assistant-Surgeon to the Rhymney Iron Works, Monmouthshire.

Roberts, Frederick T., M.B. Lond., has been appointed Lecturer on Comparative Anatomy and Zoology at the Liverpool Royal Infirmary School of Medicine.

Shore, O. Bohun, M.D. Edin., has been appointed Physician to the Stamford and Rutland Infirmary.

Winterbotham, W. L., M.B., to be Assistant-Surgeon Second Administrative Battalion Somersetshire Rifle Volunteers.

### BIRTHS.

Bethune.—On January 5, Mansion House-road, Grange, Edinburgh, the wife of N. Bethune, M.D., of a daughter.

Brown.—On January 18, at Eastwood, Notts, the wife of Edward A. Brown, M.D., of a daughter.

Campbell.—On January 14, at 104, Lansdowne-road, Kensington-park, W., the wife of Dr. A. Campbell, late of Darjeeling, of a daughter.

Duncan.—On January 22, at 83, Gower-street, the wife of Dr. A. Duncan, of a son.

Freeman.—On January 18, at Bracknell Lodge, Hartley-row, Hants, the wife of Thomas A. Freeman, M.R.C.S. Eng., of a son.

Hackett.—On December 17, at Berbice, British Guiana, the wife of J. S. Hackett, M.D., of a son.

Marshall.—On January 23, at Mitcham, Surrey, the wife of Edward Marshall, M.R.C.S. Eng., of a daughter.

Smith.—On December 14, at Ootacamund, Madras, the wife of Colvin Smith, M.D., of a son.

Soper.—On January 13, at Stockwell, the wife of William Soper, M.R.C.S. Eng., of a daughter.

Tuke.—On January 10, at Charlotte-square, Edinburgh, the wife of J. B. Tuke, M.D., of a son.

Waggett.—On January 18, at 4, Stanley-terrace, Kensington-park-gardens, the wife of Dr. Waggett, of a son.

Watson.—On January 11, at Calder-bank, Midcalder, the wife of W. Watson, M.D., of a son.

### MARRIAGES.

Bell—Sparkes.—On January 22, at Christchurch, Clapham, James V. Bell, M.D., F.R.C.S., to Susannah Charlotte, youngest daughter of the late E. M. Sparkes, Esq.

Watson—Mair.—On January 23, at St. George's, Bloomsbury, W. Spencer Watson, F.R.C.S. Eng., to Georgiana Mary Jane, eldest daughter of G. J. J. Mair, Esq.

### DEATHS.

Bailey, William, at Gurtadda House, Co. Limerick, on December 31, formerly Surgeon, R.N.

Chailly, Honoré M., one of the most celebrated of the Paris accoucheurs and author of the best Obstetrical Manual, has just died after a prolonged illness.

Clarkson, Ebenezer, M.D. Edin., at Selkirk, N.B., on January 9.

Dalgairns, Dr. William, late of the Bombay Army, at Woodcot, Dollar, on January 18, aged 79.

Dunne, James R., F.R.C.S.I., of Moymore, Co. Clare, at Mountjoy-square, Dublin, on January 4.

Hall, Sir John, M.D., K.C.B., Inspector-General of Hospitals, at Pisa, Italy, on January 17, aged 72.

Macintyre, Peter, M.D. Edin., at 56, Canning-street, Liverpool, on January 19, aged 69.

Wright, George E., M.D. Edin., R.N., at Sierra Leone, on December 24, aged 24, Assistant-Surgeon H.M.S. *Rattlesnake*.

## POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

### RESIGNATIONS.

*Chesterfield Union.*—The Bolsover District is vacant; area 10,366; population 2402; salary £20 per annum.

*Dewsbury Union.*—Mr. Thompson Whalley has resigned the Mirfield District; area 3548; population 9263; salary £30 per annum.

*Haslingden Union.*—The Edenfield District is vacant; area 5259; population 4723; salary £12 10s. per annum.

*Leominster Union.*—Dr. J. Davies has resigned the office of Medical Officer for the First District; area 36,641; population 10,740 and the Workhouse; salary £200 per annum.

*Neath Union.*—Mr. James French has resigned the First Central District; population 12,935; salary £65 per annum. Also the Workhouse; salary £30 per annnm.

*Stoke-upon-Trent Parish.*—Mr. Goddard has resigned the Longton District; area 1369; population 16,742; salary £35 per annum.

*Watford Union.*—Mr. Henry Lewis has resigned the Rickmansworth District; salary £85 per annum.

*Witney Union.*—The Eynsham District is vacant; area 16,618; population 5237; salary £113 per annum.

### APPOINTMENTS.

*Blandford Union.*—Edward Monro Spooner, M.R.C.S.E., L.S.A., to the Second District and the Workhouse.

*Worksop Union.*—William Latimer, M.R.C.S. Edin., to the Auston District.

We are happy to learn that Mr. Henry Thompson has been appointed "Surgeon Extraordinary" to His Majesty Leopold II., the King of the Belgians.

Mr. Charles Sharp, Librarian and Assistant-Secretary of the Pharmaceutical Society, and co-editor of the "Year Book of Pharmacy," has been elected Secretary of the Liverpool Institute and of Queen's College, Liverpool, in the room of Mr. Astrup Cariss.

The Middlesex Hospital.—The munificent sum of £20,000 was presented yesterday to the above institution, through the hands of Mr. Michael Smith, the Chairman of the Weekly Board, who stated that it came from an anonymous donor.

Epsom College.—It will be seen from a letter from the indefatigable founder of the Epsom College, which we publish in another column, that Sir William Fergusson has consented to preside at the next anniversary dinner of the College. We hope a very large attendance of Medical men will bear witness to the estimation in which the first Medical charity is held, and to show respect to the great Surgeon whom Her Majesty has so recently singled out for honour.

Cholera in Paris.—From the final report of the sanitary department of the Préfecture de Police, it appears that the total number of deaths from the recent epidemic amounted to 6383.

Academie des Sciences.—M. Charles Robin has just been elected a Member of the Section of Anatomy and Zoology, receiving 34 votes, M. Lacaze-Duthiers, the rival candidate, receiving 21.

Fiske Fund Prize Questions.—The trustees of the Fiske Fund announce as the subjects for the Prizes for 1866: 1. "Vaccination: why does it ever fail to give perfect protection?" 2. "Pyæmia: its causes, pathology, and treatment." For the best dissertations on either subject 100 dollars will be given. The dissertations to be forwarded with mottoes free of expense before May 1, 1866, to Dr. Arnold, Secretary of the Trustees, Providence, U.S.

Spurious Vaccine.—An anonymous correspondent of the *Times* states that a mixture of collodion with croton oil or tartar emetic is being manufactured for supply to the agriculturists as vaccine lymph.

Death of Sir John Hall.—Sir John Hall, M.D., K.C.B., Inspector-General of Hospitals, died at Pisa, Italy, on January 17, aged 72. Sir John Hall served the campaign of 1815 in Flanders; served the campaign of 1847 in Kaffraria, as head of the Medical Department under Sir George Berkeley, and was thanked in general orders (medal). In 1858 he accompanied Sir Harry Smith across the Orange River, as principal Medical officer of the force employed against the emigrant Boers; was present at the battle of Boem Plaatz, and specially mentioned in Sir Harry's despatch for services on the field, and subsequently thanked in general orders. Was principal Medical officer of the army in Kaffraria, under Sir Harry Smith, during the campaign of 1851, and thanked in general orders on his being ordered to India. Served as principal Medical officer of the Eastern Army from June 18, 1854, to July 5, 1856, without being absent from duty for a single day; was present at the affairs of Bulganac and Mackenzie's Farm, battles of Alma (mentioned in dispatches), Balaklava, Inkerman, and Tchernaya, capture of Balaklava, siege and fall of Sebastopol, taking of the Rifle Pits and Quarries, assault of the Redan on June 18 (medal with four clasps, K.C.B., officer of the Legion of Honour, third class of the Medjidie, and Turkish medal).

Death from Chloroform.—A patient died last week at St. Mary's Hospital from the inhalation of chloroform. As so often happens, the operation for which chloroform was given was comparatively a slight one—the removal of an ingrowing toenail. It was proved that the Surgeon who administered the chloroform had had ample experience in the operation, having given it in above 400 cases. Nevertheless, the jury wished to add a sentence to their verdict, to the effect that chloroform should only be administered by the senior members of Hospital staffs. But Dr. Lankester interposed by saying that it would be difficult to obtain a gentleman of greater experience in the administration of chloroform than the Surgeon who had given it in this case. Unfortunately it was not quite clear that the patient's consent to the anæsthetic had been obtained before its administration.

A Caution.—At the Thames Police-court on January 18, Mr. Healey, a Medical Practitioner, of No. 2, Devon's-road, Bromley, applied to Mr. Partridge under the following circumstances:—The applicant said a few days since a lady and gentleman, who gave the name of English, entered his house in a state of great alarm. The woman had just been taken in labour, and they craved his assistance. The lady was put to bed, and in a short time she gave birth to a female child. She remained in his house for a week. Last Saturday the lady went out for the first time since her accouchement, and said she was going to Bow to make some purchases. She had never returned, and the child had been left with him. He had received only 10s. for his Professional attendance, and 5s. for a week's rent. He had been to the relieving officer at Bow, and he had directed him to come to this court. He had no idea who the mother and father of the child were. Mr. Partridge said he could not interfere in the case at all. The maintenance of the child must fall on the parish where it was born. If a full description of the parties was given to the relieving officer, it was very probable they would be traced and punished. He would advise Mr. Healey to be very careful how he acted in relation to strange ladies calling at his house in future.

**Discovery of Stone Coffins.**—Several weeks ago some human bones were found in a sandhill about a mile from Torphichen, Linlithgowshire. On Saturday last the hill was examined by Professor Duns, New College, Edinburgh, Mr. J. R. Martin, of Bridge-house, and a couple of workmen. A partial examination showed that many cists are probably contained in the mound. One had very recently been exposed in the course of carting away sand for building purposes. Another was opened on Saturday, and found to contain a human skeleton. Dr. Duns took possession of the skull found in each. The character of the crania gives the chief interest to the discovery. They have evidently belonged to full grown individuals; yet both are comparatively small. The bones of the eyebrows are largely developed, and those of the forehead sharply recede. The cists had been placed at the depth of about two and a-half feet from the surface. The bodies must have had the legs bent up at the knees, as in both cases the bones of the feet were found near those of the hands, lying beneath the thigh bones. The sandhill in which these cists were discovered is about 100 yards from one of the stones which mark the boundary of the ancient "refuge" connected with the "commandery" of the Knights of St. John at Torphichen.—*Scotsman.*

**Vaccine Virus from France and Italy.**—Dr. Brent, of Woodbury, Devonshire, believing that vaccination would be of benefit in arresting the progress of the cattle plague, during the past month had various animals in his herd vaccinated with the ordinary lymph from the human species, and in every instance it failed. He thereupon addressed a letter to the Vaccine Establishment in London, requesting a fresh supply of the vaccine matter for the purpose, and received as answer the intimation that the quantity of lymph for disposal was "barely sufficient to answer all demands for the legitimate purposes of the establishment." Dr. Brent, therefore, applied to her Majesty's Minister for Foreign Affairs, and suggested that in Italy the cattle are periodically vaccinated, and that it would be an easy and simple way of getting it through his department. The reply was as follows:—

"Foreign Office, January 13.

"Sir,—I am directed by the Earl of Clarendon to acknowledge the receipt of your letter of the 8th inst. on the question of vaccination as applicable to the cattle disease, and requesting that steps might be taken with the object of procuring from Italy a supply of pure vaccine matter for further experiments in the vaccination of cattle in this country.

"I am to state to you that Lord Clarendon considered it desirable to communicate on this subject with the Council Office, and that his Lordship has received a letter from that department, stating that the Lord President of the Council attaches great importance to this subject and to the expediency of further experiments in the vaccination of cattle being carried out in this country, and, in accordance with the President's suggestion, her Majesty's representative at Paris as well as at Florence has been instructed to endeavour to obtain a supply of pure vaccine matter for such experiments.

"I am, Sir, your most obedient humble servant,

"G. Hammond.

"R. Brent, Esq., M.D., Woodbury, near Exeter."

The excellent ladies who superintend the *Mater Misericordiæ* Hospital, Dublin, have started the scheme of a monster lottery for the benefit of the institution. The tickets are so low—viz., sixpence each—that none of our readers ought to resist the temptation, more especially our younger readers; for the fortunate possessors of the prizes offered will be able incontinently to marry and set up housekeeping. The first prize is a light sociable landau (newly built), and a pair of splendid horses, with silver-mounted harness to suit; value £200. Second prize, a boudoir "Alexandra" piano, sweet-toned and highly finished. Third prize, a beautiful oil painting, view of the banks of "Allan Water;" a rare work of art, now on view at Mr. Lesage's, 40, Lower Sackville-street. Fourth prize, a suite of drawing-room furniture, in Italian walnut, richly upholstered in green damask and silk cord, consisting of couch, table, two easy chairs, and six small chairs; value twenty guineas. Fifth prize, a mauve-coloured Irish poplin dress, same as worn by the Princess of Wales. Sixth prize, a lady's diamond ring, of great value and brilliancy. Seventh prize, a valuable short-horned Durham cow; value £20. Eighth prize, a complete dinner service in ancient china; value £40. Ninth prize, a rich velvet carpet, with border to match, for a room 20 ft. by 17 ft. Tenth prize, a valuable gold watch, by Donegan; now on view at his establishment, 32, Dame-street. Eleventh prize, a Limerick lace shawl, suitable for a bride. Twelfth prize, a Killarney arbutus davenport, beautifully inlaid with views of Irish scenery; exhibited at Mr. Egan's stand in the International Exhibition. Also 456 additional prizes, varying in value from 5s. to £10. Tickets, sixpence each. The drawing, which will be on the plan of the Art Union, will take place on February 7, and the winning numbers will be published in the *Irish Times, Freeman's Journal*, and *Evening Post* of February 9; London, Manchester, and Glasgow papers of February 10. A list of the winning numbers will be forwarded on February 9 to those who will make a request for same when returning the duplicates. All the prizes, with the exception of the landau and horses, will be delivered to the winners, carriage free, immediately after the drawing takes place. Apply to the Sisters of Mercy, Mater Misericordiæ Hospital, Eccles-street, Dublin, on or before February 2, 1866.

**The Late Sir John M'Gregor, M.D., K.C.B.**—Sir John M'Gregor was the second son of the late Mr. Duncan Macandrew, of Culross, county Perth, N.B., by Mary, daughter of Mr. John M'Dermott, of Perth. He was born October 20, 1791, and educated at the University of Edinburgh. Entered the medical department of the army 1809; served in the expedition to Walcheren 1809, and was present at the taking of that island and the forts of Terbeer and Ramakins; present at the siege of Flushing, and served with part of the army in South Beveland, General the Earl of Chatham commanding; served in the Peninsula under his Grace the Duke of Wellington from 1811 to 1813, and was present at the siege of Badajos, and in all the cavalry actions against the French in Lord Hill's advance to Merida, and the retreat from Burgos, as well as in various other operations of the second division of the army in Spain and Portugal; was appointed surgeon to his Royal Highness the Duke of Sussex, February 1, 1819; served in the Presidencies of Madras and Bombay, twice in Bengal and the island of Ceylon; was present at the capture of Fort Minora and the surrender of the town of Kurrachee in Lower Scinde; was senior medical officer of the army sent to the relief of the forces employed against the fort of Kujjuck, Upper Scinde, February 21, 22, and 23, 1841; present during the investment of Kandahar, end of 1841, beginning of 1842; senior medical officer of the force sent under Brigadier Wymer for the relief of Kelat-i-Ghilzie, May 1 to June 7, 1842; present during the second Afghanistan campaign, 1842, and with the army on its return to the British provinces, through the Khoord, Cabool, and Khyber Passes, August 1 to December, 1843, and was present at the following actions fought during the foregoing period:—The battle of Kallee Shuck, January 12, 1842; present at the actions of Runga Ruck, Pangwaria, and Zilla Ostracy, March 7, 8, 9, and 10, 1842; present at the battle of Baba Walla, March 25, 1842; battle of Gowine, August 30, 1842; at the capture of Ghuznee and the storming of the heights of Bellool, September 5 and 6; present at the affairs of Bene Bedam and Mydam, September 14 and 15; present during the attack on the rear guard from Skoorab to Gundamuck (Khoord Cabool Pass), October 19; affair with the rear guard from Lundekama to Ali Musjid (Khyber Pass), November 4 and 5, 1842; was principal medical officer with the Kandahar field force during the whole of these operations under the command of Major-General Sir W. Nott; present and acted as principal medical officer of Queen's troops at the battle of Maharajpore, in the dominions of Scindia, December 29, 1843, General Lord Viscount Gough commanding; served a second time in the island of Ceylon, and was senior medical officer in the Kandian provinces during the rebellion in 1848. Was three years principal medical officer in Hongkong, China, 1850 to 1853; three years as deputy inspector-general and principal medical officer at Madras, 1853 to 1856; one year and two months as inspector-general in Bengal, and travelled during the latter period in the performance of his duties 4,462 miles. Served in the north-west provinces of India during the mutiny of the native Bengal army. Was present at the siege of Delhi, and at the storming and capture of the city on September 14, 1857. Sent as principal medical officer with the army proceeding to Lucknow under the command of Sir C. Campbell, and was present at the capture of the city in March, 1858. Recommended for promotion by Lieutenant-Colonel Hibbert, commanding the 40th, and Major-General Sir W. Nott, for services performed as chief medical officer of the Kandahar field force in Beloochistan, Scinde, and Afghanistan. Recommended for promotion by his Excellency the Commander-in-Chief in India for services performed at the battle of Maharajpore, but was the only officer at the head of a department in Sir W. Nott's army not promoted on its return to India. As before stated, he entered the medical department as Hospital assistant June 27, 1809; became Assistant-Surgeon February 15, 1810; Regimental Surgeon April 30, 1822; Staff Surgeon July 7, 1846; Deputy Inspector-General, 1853; Inspector-General, 1856. Sir John was made an honorary Physician to Her Majesty in August, 1859, and was, in recognition of his eminent Professional services, created a Knight Commander of the Bath in the same year. In August, 1863, he assumed the name of M'Gregor instead of his patronymic, the family being descended from the M'Gregors of Rora, the name having been changed after the rebellion in Scotland in 1745. He died at Corstorphine Lodge, Ryde, Isle of Wight, on January 13, 1866, at the age of 74. He was buried at the cemetery in that place.

The following are the last week's Cattle Plague Returns. By comparison with those of the previous week, it will be seen that there have been 12,199 attacked, 8199 deaths, 876 slaughtered, and 1740 recoveries, since January 6 :—

| Census Divisions. | 1. Attacked. | | | 2. Result of reported Cases from the Commencement of the disease. | | | | |
|---|---|---|---|---|---|---|---|---|
| | Week ending January 13. | Week ending January 6. | Week ending December 30. | Attacked. | Killed. | Died. | Recovered. | Remaining. |
| 1. Metropolitan Police District . . . | 38 | 67 | 31 | 7395 | 3126 | 3364 | 312 | 593 |
| 2. South Eastern Co. . | 30 | 107 | 64 | 4730 | 1475 | 2639 | 407 | 209 |
| 3. South Midland Co. . | 681 | 786 | 1381 | 8397 | 1646 | 5405 | 547 | 799 |
| 4. Eastern Counties . | 265 | 260 | 196 | 7155 | 2660 | 3457 | 465 | 573 |
| 5. South Western Co. . | 40 | 59 | 85 | 902 | 237 | 476 | 90 | 99 |
| 6. West Midland Co. . | 264 | 251 | 143 | 2489 | 459 | 1419 | 212 | 399 |
| 7. North Midland Co. . | 565 | 455 | 530 | 3631 | 493 | 2377 | 265 | 496 |
| 8. North Western Co. . | 2465 | 1964 | 1823 | 11612 | 531 | 7690 | 775 | 2616 |
| 9. Yorkshire . . . | 1508 | 2028 | 1446 | 14200 | 825 | 8803 | 1961 | 2611 |
| 10. Northern Counties . | 216 | 175 | 213 | 2019 | 543 | 949 | 208 | 319 |
| 11. Monmouthshire and Wales . . . | 661 | 319 | 206 | 3831 | 96 | 2822 | 357 | 556 |
| 12. Scotland . . . | 2510 | 2649 | 1975 | 27895 | 3304 | 15990 | 4409 | 4192 |
| | 9243 | 9120 | 8093 | 94256 | 15395 | 55391 | 10008 | 13462 |

## THE
## CATTLE PLAGUE COMMISSIONERS ON VACCINATING AGAINST RINDERPEST.

The Commissioners, whilst asserting that the efficacy of vaccination is not yet proved, have issued the following memorandum as to the performance and results of the operation for the guidance of persons who may wish to make the experiment :—

### I.—Mode of Performing the Operation.

The vaccination of the cow with the lymph naturally and casually developed on the species is, in general, a successful operation, but unfortunately such lymph is rarely procurable.

The retro-vaccination of the cow with humanised lymph is a different affair, and to insure but a moderate amount of success, when indiscriminately performed, needs more attention to many particulars than is generally supposed.

In the first place it is necessary to shelter the animal from cold and wet.

In the next place it is desirable to employ recent liquid lymph, conveyed in capillary tubes, or contained in well-developed vesicles on a child's arm.

It is important also to select certain regions for the operation.

Those regions are the most eligible which possess the thinnest skin, are void of hair, not likely to be subjected to friction, and yet afford facility of access in operating and inspecting.

In the milch cow the back part of the udder, the thin lax skin on each side of the vulva, or in close proximity to its cutaneous margins, are parts most eligible. In the dry cow and in the female calf the teats and udder will be available, although the parts above mentioned are more convenient of access. In the male the perinœum and the scrotum afford the best sites. But in individuals difficult to manage the inside of the ear, or some part of the neck, or behind the shoulder, denuded of hair, and possessing some of the above-named requisites, may be chosen.

The modes of operating, like those on man, vary, each having its advocates and advantages :—

First —By incision.

Secondly.—By puncture.

Thirdly.—By scratching or abrading the cutaneous surface.

1. Incision has advantages as regards celerity of execution and facility of introducing the infecting, as well as abstracting the resulting, lymph. It may be effected by a small scalpel or short bistoury, or, still better, by the Danish vaccinnator.(a)

The incision should be made from half to three-quarters of an inch in length into the skin, just deep enough to make the edges of the wound slightly to gape. Wait till the oozing of blood has ceased, then supply the lymph into and upon the edges of the incision. The Danish vaccinator resembles a small "Valentine's knife," or the steel pen usually found in a pocket case of mathematical instruments—only this has a cutting edge. The instrument being well charged by applying its point to the liquid lymph discharged from the capillary tube, or oozing from the punctured vesicle on the child's arm, is made to penetrate the skin to the requisite depth, not drawing much blood. The lymph by this means is deposited at the time of making the incision. With a little practice, half-a-dozen incisions are quickly made and charged.

2. *Puncture.*—This is best suited to the practice of inserting the end of a doubly-charged vaccine point, which may be broken off from the shaft, and allowed to remain in the puncture for a quarter of an hour.

3. *Scratching.*—This is tedious, but in thin skins is often advantageous for the application of lymph preserved in large or small ivory points. The lymph, previously moistened, is rubbed off the point into the scratched surface. From four to six clusters of scratches should be made. These, if executed by a large modification of Weir's vaccinator, are done with much more celerity than with a single-pointed instrument.

### II.—Results of the Operation.

About the fourth or fifth day after the operation a slight redness and elevation, with some hardness and heat, may be discerned. These phenomena gradually, but not uniformly, increase till the sixth or seventh day, when a small central crust fills the incision and plugs the punctures.

On the scratched surface the exuded and dry lymph occupies the furrows, or more or less overspreads the abraded surface.

The vesicles now become more and more elevated and extended till the tenth or eleventh day, when they flatten and rapidly decline, more or less covered with a thick blackish-brown crust.

Unless the skin be thin and very fair, no areola is visible, but the margin of the vesicle is felt hard and tense. When the areola is visible on a fair skin it is often not more than three or four lines in width.

Although the vesicle assumes the form usual in man, as determined by the mode of operating, its margin is, from the thickness of the skin of the animal, solid, and if punctured will yield only blood. Lymph can be procured rarely before the ninth or tenth day, and then only by removing carefully the central crust, and waiting patiently for its exudation through the original puncture.

Vesicles raised by very slight punctures or superficial abrasions of the cutis resembles more closely those on man and yield lymph earlier, but they are liable to earlier rupture or abrasion, and yield but a scanty supply of turbid lymph.

It not unfrequently happens that the stage of progressive papulation is indistinctly marked or apparently arrested, so as to lead to the apprehension of failure, when suddenly the characteristic form of the vesicle appears, and it advances to maturity.

It is not rare, however, to find among several papulæ some of them arrested in their progress, and prove abortive. When this event befalls the major part or the whole of the punctures or incisions, a repetition of the operations in the same site may nevertheless succeed.

During the progress of the disease scarcely any constitutional symptoms are observed; sometimes an acceleration of the pulse may be detected.

The retro-vaccine lymph obtained from these operations, little as it is, should be used as far as possible for other vaccinations.

## RUSSIAN CONCLUSIONS ON CATTLE PLAGUE.

The following despatch has been received at the Foreign Office from Her Majesty's Consul-General at Odessa :—

Odessa, January 8, 1866.

My Lord,—The following important information respecting the cattle plague has been kindly supplied to me in answer to a series of questions I addressed to Prince Manoukbey, and the principal landowners and cattle breeders of Bessarabia. As it differs materially from the information transmitted to your Lordship from the province of Kherson in my despatch dated November 24, 1865, and as I can depend on the facts stated being in every particular the result of actual experience, I lose no time in submitting them to your Lordship's attention :—

1. The Bessarabian cattle owners and breeders state that the plague during the last few years has been permanent in Russia. It exists sometimes in one district, sometimes in another, of that vast country. Up to the present nothing is known with certainty either of the true cause of the disease, or of the proper means of treatment for its cure. On one point only there exists no doubt—it is certainly contagious.

2. No remedies which have been yet tried, neither fumigation, friction, bleeding, nor medicine, have met with enough success to warrant their recommendation. From time to time a few beasts recover, and each person attributes their cure to the remedy he has employed, but general experience has not confirmed such assertions in any case.

3. One opinion only appears to merit serious attention, and is now under anxious consideration. That opinion is in favour of vaccination, which the Imperial Government has undertaken to introduce throughout the infected districts by competent Veterinary Surgeons employed for that purpose. Time only can decide whether vaccination will afford a sure protection from the disease; but at present it seems to promise more satisfactorily than anything else which has been tried.

4. Effective means may be taken to restrain the plague from spreading. For this purpose it is advisable, as soon as it is found to exist in an

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(a) An instrument in general use in Denmark, procurable at a small expense in London.

district, that all communication with other places should be strictly prohibited.

5. Dead animals should be buried as soon as possible, and in no case should it be allowed to skin them previously for their hides. They should be buried in the state they die.

6. Great care should be taken not to suffer diseased beasts to drink out of the same troughs as healthy cows.

7. Healthy cattle should be separated at once from the diseased, and immediately any beast falls sick among them the healthy cattle should be taken away and transferred to other pasturage. By these means large herds have been entirely saved.

8. These facts are indisputable. But there is still to be mentioned a probable theory as to the origin of the malady.

9. It is to be observed that the disease rages more violently in the south of Russia than in the north; that it generally breaks out in autumn, and not during the great frosts. Therefore it seems clear that cold is not only far from being the first cause of it, but has not even any influence over it. It is well remembered that before the year 1846 (when free trade in corn began with England), and when Odessa exported much less grain to foreign countries than now, this disease was very rare; but it appeared always after every campaign in the wars with Turkey. Now, these wars occasioned a great deal of cartage for the commissariat of the army. The waggons used by the commissariat were drawn by bullocks, who were thus forced to make long journeys during the great heats of summer across arid steppes, where no pasture or wholesome water could be found, the plague soon seized them, and they rotted and died in great numbers.

The same cause will continue to operate in a greater or less degree until the establishment of railways puts an end to the transport of merchandise for long distances by oxen. Until then it is more than probable Russia will be always devastated by this terrible malady.

Oxen are principally employed on the hardest service during three or four weeks of the hottest part of the year, during which they have no other food than the withered herbs they can crop by the roadside.

Every year more than a million waggons, each drawn by two oxen, coming from different parts of the country, arrive at Odessa alone. As they draw nearer and nearer to their journey's end their food grows more and more scanty and worse in quality, so that they are reduced for several days following to feed upon the meagre roots of grass, which they swallow mixed with dust, and quench their thirst with the muddy liquid which remains of the stagnant water left in ponds and puddles by the roadside.

10. This seems to be really the sole cause of this terrible disease, and the waggons returning to their several homes spread it throughout the country.

11. On examining an ox attacked by the plague, it will be found that it first becomes dull and spiritless; it ceases to ruminate, it eats with difficulty, and its sufferings manifest themselves by a violent diarrhœa. This is a proof that the disease lies in the digestive organs, and probably springs from improper nourishment.

The opinion of French Doctors that this sickness may be caught by men from diseased cattle is not warranted by experience in Bessarabia, no case having been ever known to have occurred there.

The plague does not appear either to be caught by sheep, who have a disease of their own also contagious, but which differs very much from the cattle plague among oxen, and it may be remarked that these two diseases very seldom exist at the same time and place.

I have, &c.
E. C. Grenville Murray.

The Right Hon. the Earl of Clarendon; K.G.

## NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Dr. Radford's letter has been received. The great pressure on our columns has hitherto prevented its appearance.

*Inquirer.*—The treatment of disease by compressed air is described in a pamphlet on Bronchitic and Peptic Asthma, by Dr. W. McLeod, of Ben Rhydding.

*A Night in a Casual Ward.*—It is said that Lord Eustace Cecil is the hero of this adventure, and author of the account of it.

*A. B.*—The vaccination question shall have all attention. We are aware, meanwhile, of the activity of some persons in "getting up" evidence in support of the small-pox theory, and of the kind of terrorism established in some bucolic circles against any Medical men who presume to doubt.

*The First British Writer on Syphilisation.*—In reference to a passage that occurred in our obituary notice of Dr. David Simpson, we are reminded by a correspondent that Dr. Simpson was not the first who introduced the subject of syphilisation to the Profession in Great Britain, a paper entitled "Syphilisation in Norway," by Dr. Lauder Lindsay, having appeared in the *Edinburgh Medical Journal* for November, 1857.

*Dr. Trayer.*—Some allowance must be made in the case of sudden and unexpected demands on a public office. The Privy Council have announced that they are endeavouring to obtain original vaccine in France and Italy. In the meanwhile, we recommend our correspondent to apply to Mr. Badcock, of Brighton, or to Mr. F. Crook, Vine Cottage, Forest-hill.

*Vaccinating a Blistered Surface.*—A correspondent of the *Times*, signing himself R. E., and dating from Sloane-street, recommends the following mode of vaccinationg, and thinks it applicable both to babies and cows:—

"For many years past I have ceased to use the lancet in vaccinating, and I proceed in the following way:—I touch the arm with a minute drop of a fluid in common use in our Profession, called 'Liquor vesicatorius:' this is allowed to dry, and in a few hours a little bead-like blister, the size of a pin's head, appears on the spot. With a very fine-pointed penknife this little blister is then cut, the drop of serum wiped away, and the ivory point, charged with fresh vaccine lymph, is slipped under the thin skin. After lying there for a minute it is withdrawn and the layer of cuticle pressed gently back. The result is an almost unvarying success. It is only by a rare exception that this mode fails of communicating the virus, and mothers (and probably the baby, if it could express itself) are generally thankful to escape the dreaded lancet."

*The Vaccination of Cattle.*—Mr. Griffin, of Weymouth, has written a letter to the Privy Council, in which he recommends the general vaccination of cattle throughout the country. He suggests that "it should be made compulsory that all calves should be vaccinated before they are three months old—a time sufficient to allow all those not intended to grow up to be killed as calves. In order to facilitate this measure and do away with any objection by the owner to vaccination on the plea of expense, let similar arrangements be carried out as are now in force for vaccinating the human subject, and the parish or union will then have to defray the expense. It is now, I believe, a parochial charge, and if the district Medical officers of unions, parishes, and incorporations would consent to become the vaccinators, then you will at once have a staff in England and Wales of over three thousand Medical officers fully competent, with a few general instructions, to carry out the plan. A similar course might be ordered for Ireland and Scotland." He also recommends that the fee for vaccinating animals and certifying should be larger than in the case of children, inasmuch as the operation involves more labour.

*Erratum.*—In Mr. Spencer Wells's 72nd Hospital case of ovariotomy, published at page 63 of our last number, *for* "four tappings," *read* "seven tappings." Dr. Brabant tapped the patient four times after her discharge from the Hospital, and before her readmission.

### The Griffin Testimonial Fund.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The following subscription has been further received on behalf of the above fund:—Heynes Hardwicke, Esq., Hempnall, 5s. Amount previously announced, £132 14s. 3d. Received at *Lancet* Office, £9 9s.

I am, &c.,
Robt. Fowler, M.D., Treasurer and Hon. Sec.
145, Bishopsgate Without, January 24, 1866.

### Inoculating Animals with Variolous Matter.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I am informed that a gentleman in this immediate vicinity is having all his cattle inoculated with and from the small-pox, which is in the neighbourhood, but not close. Is this right? Does the act against human inoculation apply to cattle?

I am, &c.,
Bagshot, Surrey, Jan. 23. J. H. Blount.

*** It is illegal to inoculate a human being with small.pox, but we doubt whether the act extends to animals. The experiment should be performed with the greatest precaution.

### Recurrent Swelling of the Tongue.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—A patient of mine, but not at the time under my care, has recently suffered from sudden swelling of the tongue, which the friends feared would cause suffocation. There was at the same time a general appearance of urticaria. There have been other, but slighter, attacks.

This may give a hint to your correspondent for the treatment of his case.

Reading, January 23. I am, &c. B. A.

### Influence of Climate, &c., on the Horse.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Will you enable me to obtain information, through your column of "Notes and Queries," as to the correctness of the following statement, which I recently met with in Mr. Macdonald's "Hints on Farming and Estate Management." At page 409 of the edition just issued, he says:—"The diminutive Shetland pony when transported to England loses this peculiarity of form in the course of a few generations, and approaches the native horse in bulk and general characteristics. The noble Arabian degenerates in England, and the English dray-horse, noted for its heavy limbs, if carried to Arabia, acquires in time the symmetry, grace, and speed of the native."

The latter statement is certainly a startling one, and I, for one, should be glad, in the interests of veterinary ethnology, to hear of facts which may substantiate it.

I am, &c. Inquirer.

### Treatment of Rinderpest by Sulphites.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—It should be plainly stated, for the information of those who are inclined to make trial of the sulphites in the cattle plague, that it has never been the pretension of Dr. Polli that morbid products are neutralised or in any degree lessened in their toxic effects on the system by the agency of these chemicals. The sulphites paralyse and arrest the fermentative act and thus check the growth and accumulation of morbid matters in the blood, but it is only through the great emunctories that the morbid products already formed may be got rid of, unless we have faith in other medicines which may, if we choose, be simultaneously employed. Less modified is the view Dr. Polli takes of their efficacy in prophylactic treatment; that the employment of the sulphites is not unfavourable to nutrition is proved by sufficient experience. They are opposed to any primary deviation from the normal processes—by way of fermentation, at least—and in this point of view a full trial of them is recommended. From their slower action, the hypo-salts are to be preferred in prophylaxis; and if there is any fear as to disturbance of digestion, they may be administered as much as possible apart from the food.

I would not hazard an opinion as to the pathological character of cattle plague, yet I may say, in comparing it with small-pox, that I think there is an error in regarding the cutaneous eruption as the most essential feature of variola. In days of inoculation for small-pox I believe the fever was always considered to be the main point, and provided it occurred at the right time, the amount or even the presence of the eruption was not considered to be of the first consequence, and the immunity was as complete.

Skin manifestations, moreover, are wont to vary much, no less from individual susceptibility than from diversity of seat or structure, of which instances may be quoted in the dark varieties of mankind, who present peculiarities under the infliction of small-pox which are not witnessed among Europeans. I am, &c.,

3, Westbourne-park, January 17. G. Gaskoin.

### Army Medical Department.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I trust you will permit me to warn the Profession of a danger which may possibly have escaped notice; it is this: There is to be an examination of candidates for the Medical department of the Army on March 19, and if a sufficient number can then be obtained to fill the vacancies which exist, we may justly fear—judging from past experience—that the labours of the Committee which has recently been sitting will bring forth no fruit. We know that advantages are conferred on Medical officers merely when necessity compels the authorities to do something to procure candidates; therefore, if vacancies can be filled up without the concession of the privileges and advantages which the sanguine anticipate, then may we assuredly bid adieu to all hope of improvement.

Various rumours are afloat regarding the recommendations which the Committee will make, many of which are doubtless much exaggerated by the sanguine, and by persons who desire to recruit the department by means of empty promises; and it will be advisable to forewarn gentlemen of the evils which may be expected to ensue if they are unwise enough to enter the service until the improvements which have been asked for are actually conceded and in operation. Do not let us place any faith in promises; and let it also be remembered that there is a wide difference between the recommendations of a Committee and the issue of regulations giving effect to such "recommendations." Let us also remember how well the department was recruited after the issue of the Warrant of 1858, and how soon after the advantages then conferred were withdrawn.

We cannot too strongly urge young Surgeons to be cautious, and not to respond too eagerly to the invitation for March 19. I am, &c.,

Doubt.

### Poor-law Medical Reform.

Mr. Griffin requests us to state he has received the following subscriptions towards the funds of the Association:—

Davison, J., Boston, 5s.; Johnson, O., Newark, 5s.; McMaster, J., Portsea Island, 5s.; Frank, P., M.D., late 80th Reg., Mentone, 60s.; Bury, G., Whetstone, 10s.; Hands, B., Edmonton, 10s.; Brett, A. T., Watford, 10s.; Terry, H., jun., Hardingstone, 5s.; Dudley, E., Hardingstone. 5s.; Percival, W., Northampton, 5s.; Bryan, J. M., Northampton, 5s.; Willis, J. H., Tavistock, 5s. Mr. Prowse, of Amersham, has received the following:—Brent, R., St. Thomas, 20s.; Kelly, H. Uxbridge, 10s.; Dickenson, T., Chelsea, 21s.; Herswill, R., St. Germans, 5s.; Wrench, E. M., Bakewell, 5s; Brooks, H., Bridgewater, 16s.; Burton, J., Walsall, 20s.; Buckley, N. Rochdale, 20s.; Wilson, W., Chesterfield, 42s.; Wright and Allen, Basford, 5s.; Hemborough, J., Caistor, 10s.; Buckell, E., Winchester, 10s.; Griffith, W. R., Hinckley, 10s. 6d.; E. G., 10s.; Bell, Dr., Cockermouth, 10s.; Bryden, R., Tiverton, 5s.; Claremont, C. E., St. Pancras, 10s.

COMMUNICATIONS have been received from—

Western Medical and Surgical Society of London; B. A.; Dr. Harry Leach; Dr. J. H. Blount; Mr. John Propert; Mr. R. Griffin; Dr. Fearnside; Phœnix; Dr. W. L. Lindsay; Dr. J. J. Trayer; Mr. N. Walsh; A Surgeon; Dr. T. Radford; Mr. R. Douglas Powell; Dr. C. Macnamara; Apothecaries' Society; Dr. D. Mackintosh; Dr. F. T. Roberts; Mr. F. H. Hume; Mr. C. Sharp; Royal Institution; Dr. Robert Fowler; Dr. Tilbury Fox; Dr. Ballard; Dr. W. D. Moore; Mr. J. Hutchinson; Dr. Hughlings Jackson; Mr. E. Bellamy; Mr. F. H. Marsh; Mr. J. Chatto.

## VITAL STATISTICS OF LONDON.

***Week ending Saturday, January 20, 1866.***

### BIRTHS.

Births of Boys, 1149; Girls, 1097; Total, 2246.
Average of 10 corresponding weeks, 1856-65, 1892·4.

### DEATHS.

| | Males. | Females. | Total. |
|---|---|---|---|
| Deaths during the week .. .. .. | 768 | 801 | 1569 |
| Average of the ten years 1856-65 .. .. | 735·3 | 756·4 | 1491·7 |
| Average corrected to increased population.. | .. | .. | 1641 |
| Deaths of people above 90 .. .. .. | .. | .. | .. |

### DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

| | Population, 1861. | Small pox. | Measles. | Scarlatina. | Diphtheria. | Whooping-cough. | Typhus. | Diarrhœa. |
|---|---|---|---|---|---|---|---|---|
| West .. | 463,388 | 2 | 8 | 5 | 1 | 5 | 9 | 1 |
| North .. | 618,210 | 4 | 13 | 7 | 2 | 17 | 25 | 2 |
| Central .. | 378,058 | 1 | 3 | 4 | 2 | 10 | 7 | 2 |
| East .. | 571,158 | 7 | 7 | 13 | 2 | 24 | 13 | 2 |
| South .. | 773,175 | 2 | 7 | 9 | 4 | 22 | 15 | 4 |
| Total .. | 2,803,989 | 16 | 38 | 38 | 11 | 78 | 69 | 11 |

### METEOROLOGY.

*From Observations at the Greenwich Observatory.*

| | |
|---|---|
| Mean height of barometer .. .. .. .. .. .. | 29·740 in. |
| Mean temperature .. .. .. .. .. .. | 46·9 |
| Highest point of thermometer .. .. .. .. .. | 53·2 |
| Lowest point of thermometer .. .. .. .. .. | 39·1 |
| Mean dew-point temperature .. .. .. .. .. | 42·3 |
| General direction of wind .. .. .. .. .. .. | SW, WSW, W. |
| Whole amount of rain in the week .. .. .. .. | 0·62 in. |

### BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, January 20, 1866, in the following large Towns:—

| Boroughs, etc. | Estimated Population in middle of the Year 1866. | Persons to an Acre. (1866.) | Births Registered during the week ending Jan. 20. | Deaths. | | Temperature of Air (Fahr.) | | | Rain Fall. | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Corrected Average Weekly Number.* | Registered during the week ending Jan. 20. | Highest during the Week. | Lowest during the Week. | Weekly Mean of the Mean Daily Values. | In Inches. | In Tons per Acre. |
| London (Metropolis) | 3067536 | 39·3 | 2246 | 1400 | 1569 | 53·2 | 39·1 | 46·9 | 0·62 | 63 |
| Bristol (City) . . | 163680 | 34·9 | 116 | 73 | ‡97 | 53·4 | 40·9 | 46·9 | 0·70 | 71 |
| Birmingham (Boro') | 335798 | 42·9 | 288 | 164 | 186 | 53·4 | 39·4 | 47·1 | 0·48 | 48 |
| Liverpool (Borough) | 484337 | 94·8 | 401 | 281 | 410 | 54·1 | 41·1 | 46·9 | 0·47 | 47 |
| Manchester (City) . | 358855 | 80·0 | 260 | 203 | ‡286 | 55·0 | 36·0 | 46·0 | 0·66 | 67 |
| Salford (Borough) . | 112904 | 21·8 | 90 | 57 | 72 | 54·7 | 37·1 | 46·3 | 0·64 | 65 |
| Sheffield (Borough) . | 218257 | 9·6 | 162 | 115 | 122 | 52·5 | 36·5 | 45·1 | 0·72 | 73 |
| Leeds (Borough) . | 228187 | 10·6 | 147 | 116 | 147 | 57·0 | 37·8 | 46·2 | 0·50 | 51 |
| Hull (Borough) . | 105233 | 29·5 | 81 | 49 | 52 | 52·0 | 32·0 | 43·0 | 0·16 | 16 |
| Nwcastl-on-Tyne, do. | 122277 | 22·9 | 106 | 65 | 96 | 53·0 | 32·1 | 44·1 | 0·06 | 6 |
| Edinburgh (City) . | 175128 | 39·6 | 118 | 84 | 93 | .. | .. | .. | .. | .. |
| Glasgow (City). . | 432265 | 85·4 | 363 | 252 | 273 | .. | .. | .. | .. | .. |
| Dublin (City and some suburbs) . | 318437 | 32·7 | 190 | †156 | 187 | 55·2 | 38·3 | 47·2 | 0·59 | 60 |
| Total of 13 large Towns . . . | 6122894 | 34·4 | 4562 | 3014 | 3590 | 57·0 | 32·0 | 46·3 | 0·51 | 52 |
| | | | | | Week ending Jan. 13. | Week ending Jan. 13. | | | | |
| Vienna (City) . . | (1863)<br>560000 | .. | .. | .. | 373 | .. | .. | §<br>31·8 | .. | .. |

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·740 in. The barometric pressure fell to 29·53 in. on Tuesday, rose to 30·09 in. on Wednesday, and fell to 29·43 in. on Saturday. The general direction of the wind was south-west.

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* The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.

† Registration did not commence in Ireland till January 1, 1864; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in that city were the same as the averages of the rates in the other towns.

‡ The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

§ The mean temperature at Greenwich during the same week was 43·2°.

## APPOINTMENTS FOR THE WEEK.

### *January* 27. *Saturday* (*this day*).

*Operations* at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free Hospital, 1½ p.m.

Royal Institution, 3 p.m. Prof. Westmacott, "On Art Education."

### 29. *Monday.*

*Operations* at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.

Medical Society of London, 8½ p.m. Lettsomian Lectures—"On Certain Painful Affections of the Fifth Nerve," Lecture III., by Dr. F. E. Anstie.

### 30. *Tuesday.*

*Operations* at Guy's, 1 p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; St. Peter's Hospital for Stone, 3 p.m.

Royal Institution, 3 p.m. Prof. Tyndall, "On Heat."

### 31. *Wednesday.*

*Operations* at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.

### *February* 1. *Thursday.*

*Operations* at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.

Harveian Society of London, 8 p.m. Mr. Victor de Meric, "On Syphilisation."

Royal Institution, 3 p.m. Prof. Tyndall, "On Heat."

### 2. *Friday.*

*Operations*, Westminster Ophthalmic, 1½ p.m.

Royal Institution, 8 p.m. The Earl Stanhope, "On the Influence of Arabic Philosophy in Mediæval Europe."

Western Medical and Surgical Society, 8 p.m. Mr. C. Hunter, "A Case of Stricture of the Œsophagus, with Remarks."

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# ORIGINAL LECTURES.

## LUMLEIAN LECTURES
## ON SOME POINTS IN THE PATHOLOGY OF NERVOUS DISEASES.

By C. HANDFIELD JONES, M.B., F.R.C.P., F.R.S.,
Physician to St. Mary's Hospital and Lecturer on Medicine.

### Lecture III.

(Continued from page 87.)

The view which I have advocated respecting the essential nature of neuralgia and hyperæsthesia is strongly supported by the occasional occurrence of acute pain and tenderness in limbs affected with embolism of the main artery. Motor and sensory paralysis are constant, but in some instances there is also pain and hyperæsthesia. A case is recorded in the *Dublin Quarterly Journal of Med. Sci.*, May, 1862, of embolism of the right common iliac, femoral, and lower arteries. The symptoms were sudden acute pain in the calf of the leg, which was so tender that the patient shrieked when it was touched, loss of motion in the limb, and loss of sensation from the knee downwards, with remarkable diminution of the temperature. In the case of a female, recorded by Dr. Fuller, who died in thirty-five days with gangrene of both lower limbs, depending apparently on spontaneous coagulation of fibrine in the arteries and veins, which were healthy, the first symptom was acute pain, which set in suddenly without obvious cause. The whole limb, it is said, was so exquisitely tender that the slightest touch caused intolerable pain; it presented, however, no unusual appearance, and no difference could be detected between the two limbs. Even a week later all that could be observed in the painful limb was a slightly greater fulness of the superficial veins, and a somewhat lower temperature; the difference, however, in colour and temperature was so slight as hardly to attract attention. Mr. Erichsen describes arteritis as attended with excessive sensitiveness of the surface, so that the patient cannot bear the finger to be laid upon it; the pain is of a smarting and pricking character, and is always associated with more or less loss of muscular power. The inordinate sensibility continues, he says, after the limb has become cold, livid, and pulseless, but yields to complete anæsthesia as gangrene advances. The examples I have cited afford, it appears to me, quite sufficient evidence that both neuralgia and hyperæsthesia in their purest forms occur under conditions of lowered vital and nervous power, and that hyperæsthesia is quite independent of any increase in the blood-supply of the suffering part. That a state very similar to hyperæsthesia often occurs also as the result of inflammation is, I think, certain, but it is to be ascribed, not to the local afflux of blood, but to the lowered vitality of the parts involved in the morbid process, which, as is now well known, always implies a tendency to degeneration and decay.

Besides the morbid modifications of sensibility already noticed, there are various common derangements of this property, such as itching, formication, burning, trickling of cold water, and the like. These are often regarded—at least, some of them, viz., pain, temperature, and contact—as being the result of impressions made on different nerve-fibres; and this view is supported by the fact that the consciousness of one of these impressions may be lost, while it is retained of the others. The great multiplicity of separate nerve-fibres which would be required on this hypothesis has always seemed to me a weighty objection against it; and I do not see any more difficulty in comprehending that one and the same fibre may be capable of conveying different impressions than there is in the fact that the same wire may convey to the hand vibrations, caloric, and electricity. The phenomena of colour-blindness seem to militate against the theory. Considering the great variety of colours, and the very varying degrees of this defect, it would seem impossible to suppose that there can be different fibres in every part of the retina, for all the colours and tints which some persons are unable to distinguish, and for which, in them, according to the theory, the perceptive media would be wanting or paralysed.

With regard to this subject I have been favoured with the following communication by Dr. Southey Warter. He states that about four years ago he was studying the spots on the sun through a telescope, having previously shaded the eye-piece with a double layer of smoked glass. He was not conscious at the time that the eye had received any damage, but subsequently he has found that there is a considerable difference between the right and left eye in the faculty of appreciating colours, the normal tints as viewed with the left eye being replaced by duller and dirtier shades in the picture conveyed by the right. Strange to say, however, the right eye, which gives such false representations of colour, is the best for the definition of objects; he can read better with it than the left. The right pupil is slightly larger than the left. He has favoured me with the accompanying tableau of the differences in colour perceived by the two eyes, but states that the differences in the colours of flowers and of painted windows are much more striking than he can depict on paper. Sometimes he fancies that with the right eye he can see colours properly with the very oblique rays, while all the direct ones give a false image, as if one central spot in the retina where the image of the sun rested was alone affected. An ophthalmoscopic examination detects nothing abnormal in the eyes.

It appears in this case that the retinal fibres, at least in the central area, have suffered a paresis as respects their power of appreciating colours, while in other respects their functional capacity is unimpaired. It is impossible to believe that there exist different fibres for coloured and for white lights.

Dr. Basham has kindly communicated to me the case of an artist who, during convalescence from fever, found that all reds appeared to him as greens; the perception of the latter was not altered. Under the use of quinine and iron his retinæ regained their normal state. Here there was evidently a paresis of the nerve fibres with regard to a particular kind of impression.

There is no doubt that the sense of taste is ministered to by more than one nerve; the glosso-pharyngeal, the gustatory, and the palatal branches of the fifth are all capable of conveying impressions of this kind to the sensorium; and all these nerves are also fitted to convey impressions of contact, and the glosso-pharyngeal the peculiar one of nausea besides. Again, the great variety of impressions which the nerves of taste convey has a bearing on this question. To my own mind, there seems little room for doubt that one and the same nerve-fibre is capable of being thrown by different excitants into different states which affect the sensorium with different impressions. If this be true of the peripheral nerves, it probably is true also of the nerve-centres. To this point we shall return.

The actual *seat* of neuralgia and hyperæsthesia is, in many instances, a matter of great uncertainty. We know well that these disorders may depend on a central lesion, but it is often no easy matter to determine whether such is the case or not. Even where there is no organic alteration, the morbid action may be central, or perhaps both central and peripheral, extending along the nervous cords in their whole length. Such appears to be the case when the pain darts up and down the nerve, as it does in some cases of sciatica, or as in other instances where it radiates in a reflex manner from the nerve first affected to various others. Indeed, as we have every reason to believe that the nervous influence is propagated along its paths by molecular change passing instantaneously from particle to particle it seems, that we can hardly speak of nervous disorder as limited to the centre or periphery, except in those less frequent cases where a manifest cause of irritation is discovered in some part of the tract. If a tumour, a decayed tooth, or the like, vex and irritate a sensory nerve, we may say the morbid action originates at the periphery, but we cannot say this in a case of gouty or malaria-engendered neuralgia, where as nerve and centre are alike exposed to the toxic influence contained in the blood it is reasonable to conclude that both suffer simultaneously. The centre involved in most instances is the inferior one, where the nerve appears to be directly implanted, but it is interesting to observe that in cases of great severity other centres become engaged, first those giving origin to other nerves and then the superior, the emotional, or intellectual, as evidenced by the occurrence of hysterical disorder or delirium. The widely-diffused hyperæsthesia of hydrophobia affecting the skin, the mucous membrane of the throat, the eye, and the ear is in all probability central as well as peripheral.

It is of some practical interest to have correct views as to the seat of neuralgia and hyperæsthesia, especially with regard to the use of local applications. I am by no means sceptical as to their frequent efficacy, but I think it is very doubtful whether they act, as they are often supposed to do, directly on the nerves affected. It is too much to suppose that an external application of belladonna or aconite should make its way through thick layers of skin, fat, and fasc not to say muscle—to reach and act upon the sciatic nerve, and if it did, beyond all question grave toxic effects would ensue. Still, we find ourselves, as it were, instinctively applying our remedies as near as may be *loco dolenti*, and I am not prepared to say that this is not right. Assuming, however, that it is, I think the benefit produced must be ascribed to the influence exerted on the cutaneous nerves to which the remedy is directly applied, and which is propagated from thence to the region of the cord where the roots of the suffering nerve are implanted. It is certain that the nerves of the surface acted on must be affected, and that the subjacent trunk cannot be directly; so that there seems no other mode of accounting for the beneficial effect except that suggested. This *modus operandi* would be the beneficial homologue of the reflexion of pain. Just as a morbid stimulus, an irritant, applied to one part generates pain in a remote by being reflected on to its nerve, so a beneficial stimulus being propagated in a like way may annul a morbid condition set up in a centre by impressions transmitted to it from a focus of irritation. It is, however, very conceivable that this result is more likely to ensue when the nerves, stimulated with a curative intention, have their central terminations near those of the nerve fibres which are in a morbid state. A very interesting paper by one of the *Προμαχοι* of the host of scientific inquirers, Dr. Lionel Beale, sets forth grounds for the view that the caudate nerve cells are not the points from which nerve currents radiate in different directions along single fibres, but rather the common points where a number of circuits, having the most different distribution, intersect, cross, or decussate. The so-called cell is part of a circuit, or rather of a great number of different circuits. If this be the case, it adds much to the probability that an agent operating upon one nerve may affect thereby other filaments continuous in the centres with those of the former. It is remarkable that even neuralgic pain depending on organic lesion may be relieved by remote applications. Mr. Tomes mentions that a mustard poultice or ammonia applied behind the ear will be effective in some few cases of toothache, and may be tried with considerable hope when other remedies have failed. Mr. Little testifies from personal experience to the great efficacy of chloroform applied to the temple in two severe attacks of rheumatic inflammation of the eye, in which the pain came on periodically with extreme severity. The chloroform is applied in a watch-glass, so as not to evaporate, and produces a burning sensation locally. He praises its efficacy in a great variety of neuralgias. Dr. Weber tells me that he has repeatedly witnessed the good effect of chloroform applied to the ear in stopping a toothache for a time. It is clear that in both these instances the remedy acts as a local stimulant, exerting an influence on the nerves of the surface to which it is addressed, which modifies the condition of other connected nerves.(a)

It is scarcely digressing from my subject if I allude shortly to the *modus operandi* of general applications made to the whole surface. The recreating influence of warm baths, sulphur vapour baths (as especially remarked by Mr. Green), and Turkish baths appears in all probability to depend on a beneficial stimulus being made on the cutaneous nerves, and by them conveyed to the centres. The result of Beneke's observations is, that the beneficial effect of the bath consists in an elevation of depressed nervous power. For this, he says, the stimulus of the bath must be duly proportioned to the individual; if it is too great the action is depressing, and the vital power and bodily weight is lowered. Karner takes nearly the same view; he thinks that the temperature of baths should be regulated not by the thermometer, but by the sensations of the individual. The action of the temperature is determined by the sum of the excitation of all the peripheral nerves, and its propagation to the nervous centres. The result is modified by many circumstances, as the receptivity of the cutaneous nerves, the mode of life, the being or not being accustomed to the bath, etc. That the great nervous centres are capable of being thus beneficially influenced by means of peripheral impressions is a truly remarkable fact, and scarcely, I think, sufficiently considered. It is clear that it is quite of the same kind as that on which I commented previously—viz., the production of a depressing or paralysing effect by inhibitory impressions. The injurious effect of "*frigus nervis inimicum*" is counteracted by the beneficial agency of caloric, properly applied; but both influences seem to act through the same channels, and in analogous ways. The point which I have before insisted on—that the action of an excitant applied to a sensory surface is determined to a great extent whether it shall be beneficial or otherwise by the state of the nervous power in the nerve centre—is quite borne out by the conclusions which the German observers just quoted have arrived at, and by our own experience. We know, indeed, that a bath at the same temperature which refreshes one man may induce in another dangerous syncope.

The question seems to me well worthy of consideration how far we may regard the great spinal and encephalic nervous centres as susceptible of such affections as neuralgia and hyperæsthesia, apart from any such disorder in the peripheral nerves. Romberg seems to have no doubt on the subject; his fifteenth chapter is entitled Hyperæsthesia of the Spinal Cord and of the Brain, and he speaks distinctly both of spinal and cerebral neuralgia, though he applies the latter term to hemicrania, which most of us, in spite of his protest, regard, I suppose, as a neuralgia of the upper division of the fifth.

With regard to the hemispheres, we know that the grey and white matter of which they are composed is quite insensible to pain—at least, such as can be excited by mechanical injury. As, however, almost all organic diseases of the brain are attended with pain, which sometimes corresponds exactly with the seat of the lesion, and which may occur when the membranes remain perfectly sound (Andral), it seems to me unquestionable that some parts of the encephalic mass, quite apart from the nerves, must be capable in conditions of disease of being so affected as to give rise to pain, or some equivalent dysæsthesia. The case which Romberg gives of a tumour involving the root of the fifth nerve contains a description of marked phenomena of facial neuralgia, quite unlike any suffering which appears to be seated directly in the head. But even though we admit that pain is not so readily to be produced in the brain as in the nerves, it does not follow that the cerebral tissue may not, in its own special way, express its resentment of the operation of the cause which gives rise to neuralgia in the peripheral nerves. It cannot be questioned that malaria, for instance, does actually affect the nerve centres as it does the nerves. It is, however, very possible and probable that the symptoms will differ in the two localities. Our examination of neuralgia led us to conclude that this morbid state essentially consisted in a lowering or deterioration of nerve-power. Now, supposing the hemispheres to be invaded by the influence which produces neuralgia in nerves, they would express their suffering by a failure or disorder of the special functional power which belongs to them. Numbness is a common symptom in peripheral neuralgia, and I think there is much reason to believe that the white fibres of the hemispheres may be affected in a very analogous way, and that an alteration of this kind has much to do with the phenomena of certain pernicious agues attacking the head, as well as of other obscure cerebral disorders. The following case recorded by Torti is, I think, worth our attention. G. J., an eminent lawyer and privy councillor, was attacked with a simple tertian. After two paroxysms he was bled on a free day on account of plethora, and the red, thick, and scanty condition of the urine. The third attack came on about noon the next day. He then began to speak in a broken manner unusual to him; soon after he had difficulty in expressing his thoughts, which he was aware of, but was unable to correct his mistakes, while continually he used one word for another. At last he began to sleep so soundly that he could with difficulty be aroused, and when he was he answered in a random manner, and fell off again into sleep. When the paroxysm was at its turn the sopor diminished, but the tremors of the hands and the twitchings of the tendons showed that the sources of the nervous force in the head were gravely affected. The fourth paroxysm came on with formidable symptoms. Although ℥vi. of bark had been given the previous night, there was manifest delirium, with tremor of the hands and tongue, invincible lethargy, insensibility to any amount of pain, convulsive movements of the limbs and of the whole body, and especially in the course of the attack a frequent and troublesome hiccup. Bark was again administered after the paroxysm, and in three days he was well. Andral relates a remarkable case (p. 86), of which the following is a summary:—A woman, aged 63, who generally had good health, was attacked one morning with great illness, vomiting, and a violent pain of the head. After the lapse of a quarter of an hour, she uttered a loud scream and fell, deprived of consciousness. Half an hour later Andral found her plunged in profound coma, pupils large and motionless, scarce any reflex contraction of orbicularis palpebrarum, face injected, not distorted, all the limbs in a state of complete relaxation, and insensible. Pulse strong and not frequent; heart beating strongly. In spite of venesection the coma continued till 6 p.m., when all the symptoms disappeared. A second similar paroxysm occurred the second day, and lasted till the middle of the third. A third paroxysm continued for thirty-five hours. Quinine was then administered very freely, and the next paroxysm was retarded in its arrival, and was much less severe. The patient had violent headache without vomiting, shivering, which had been absent previously, some convulsive movements of the face, coma for only two hours, after which she remained for some time as it were benumbed. The treatment was continued, and no further disorder occurred. Andral views this case as one of intermittent cerebral congestion, and some may be disposed to take the same view of Torti's case. I cannot but dissent from this opinion, because the symptoms seem to me quite unlike those of active cerebral hyperæmia, and because there was nothing to produce a state of passive congestion. When active hyperæmia exists, the brain, like all other organs in a like state, becomes excited and stimulated, the patient is delirious—sometimes maniacal—is restless, and extremely sensitive to light and sound. This state may be succeeded, if it be of great severity, by stupor and coma, but then these symptoms never come on or disappear suddenly, inasmuch as they depend upon effusion or other organic changes. An opposite condition, one of anæmia, is very likely to produce some such cerebral symptoms as occurred in the two foregoing instances. Anæmiating arterial spasm is now regarded by many as the immediate cause of the unconsciousness and convulsions of the epileptic paroxysm, and it is possible that anæmia of the hemispheres might have caused the coma in Torti's and Andral's cases. I reject this view, however, because in Torti's case the attack did not come on with the suddenness of spasm, but in a more gradual way, and the coma was attended with manifest delirium, and because in Andral's case it is expressly said the face was injected, and the duration of the coma in the third paroxysm was so prolonged that it seems unlikely the brain could have tolerated so long a deprivation of blood and yet recovered its function so rapidly. Kussmaul and Tenner appear to consider that two minutes is the longest period that the brain of the rabbit can remain deprived of arterial blood without losing its capability of again performing its functions upon the renewal of the circulation. I am quite inclined to believe that anæmiating arterial spasm may be the essential condition of single paroxysms of epileptic vertigo and epileptic convulsions, but I think it quite impossible to make this view applicable to all cases, especially those where the attacks are very prolonged, or evidently depend on direct cerebral irritation, as in tubercular and exanthematous disease. In the above-cited and in similar cases I believe the condition of the brain to be very analogous to that of a nerve affected by neuralgia, and which is in that state which Romberg denominates anæsthesia dolorosa. I coincide very much with the opinion expressed by Trousseau, when he recognises in eclampsia and the various forms of epilepsy two distinct things—viz., 1. A peculiar modification or modality of the nervous tissue of unknown nature, which annihilates in a moment all the manifestations of animal life, and which is far the most important element of the disorder. 2. A secondary cerebral congestion, which in rare instances may amount even to capillary apoplexy or meningeal hæmorrhage. I adopt also the proposition which Trousseau lays down as the sequel of his first—viz., that the same modification of the encephalon which causes the epileptic or eclamptic convulsive attack produces also the apoplectic stupor which succeeds it. The anæmial theory seems to me quite to fail to account for the consecutive stupor, which is sometimes extremely profound. Kussmaul's and Tenner's rabbits recovered their cerebral functions speedily after the readmission of blood to the organs, and so ought the human brain to do also.

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(a) Perhaps the popular faith in warm plasters to the loins and chest is warranted by the same principle. Pogonotrophy, I believe, has been found useful to prevent relapses of sore throat. The intention of the oriental khummerbund is similar. In these and such like instances the protection of a sensory surface or its gentle stimulation by uniform temperature acts beneficially through a nervous centre on the nerves and vessels of certain co-ordinated internal parts.

(To be continued.)

**Hospital Libraries.**—The Council of the Royal College of Surgeons of England has presented complete sets of the illustrated catalogues of the Hunterian Museum to the libraries of our metropolitan and provincial Hospitals.

## ORIGINAL COMMUNICATIONS.

## REPORTS AND LECTURES ON ORIGINAL RESEARCHES IN SCIENTIFIC PRACTICAL MEDICINE.

By BENJ. W. RICHARDSON, M.A., M.D., F.R.C.P.,
Senior Physician to the Royal Infirmary for Diseases of the Chest.

### I.—ON A NEW AND READY MODE OF PRODUCING LOCAL ANÆSTHESIA.

Some years ago I published in the columns of the *Medical Times and Gazette* some researches for the production of local anæsthesia by a process which I designated voltaic narcotism. Those researches, very much praised on the one hand, and very rudely and unfairly attacked on the other, failed in the end in leading me directly to any practical means of producing local insensibility applicable to Surgical proceedings. The causes of failure were threefold. The apparatus required was cumbersome; the application was painful; the result was uncertain. In the course of the past year a similar series of experiments have been made by an Italian Physician; but whether in imitation of my previous labours or in ignorance of them, I do not know: they have proved equally unsatisfactory.

The researches on voltaic narcotism, although practically of little value, were not in reality without their use. Previously to making them I was quite conversant of the fact—indeed, I learnt it from Snow—that all the narcotics produced anæsthesia by the process of arresting oxidation; but I had still to learn what Snow himself had not reached, that arrest of oxidation meant, in the end, arrest of motion; and that anæsthesia, in truth, means the temporary death of a part influenced—*i.e.*, inertia in the molecules of the part.

Learning this, I discovered that voltaic narcotism had at its base a fault. My idea in it was, that by quickening the circulation of a part by galvanic stimulus, and by applying over the part where circulation was quickened a narcotic solution which the blood could absorb, I could so charge the blood locally with narcotic substance as to produce local insensibility. In feeble subjects, as the result proved, local narcotism could, in this way, be temporarily set up; but it was always attended with a certain amount of disorganisation. In strong subjects it failed altogether, because such of the narcotic as might be absorbed was carried rapidly into the general circulation. In plain words, by the use of the galvanic current, I was committing the paradox of applying a form of motion for the indirect production of inertia.

The failures I experienced at the period referred to in no degree lessened my efforts to find a practical means for producing local insensibility. They simply caused me to think more on the whole subject, and to invent new methods of inquiry. I came at length to the conclusion that Dr. James Arnott's plan of using extreme cold was the first true step in the progress of discovery, and that if it could be made easier of application, and at the same time could be combined with the use of a narcotic fluid, an important advance in therapeutics would necessarily follow. For full four years this truth has been before my mind, and I have made numerous experiments with the view of demonstrating it. At one time I tried to freeze parts by the application of ice and salt, and then to inject by the hypodermic plan narcotic solutions into and beneath the frozen tissue. These experiments were never sufficiently satisfactory to allow of their publication. At last I hit upon a method which I am now about to describe, and which, although admitting of very considerable improvement, is sufficiently important to justify me in laying it before the Profession.

#### The Anæsthetic Spray Producer.

When the toy for diffusing eau de cologne in fine vapour over the skin, in the form of spray—which some time ago found its way into our drawing-rooms—first came before me, it struck me at once that it might possibly be applied to the production of local anæsthesia; and I set to work to try its applicability in this respect. I was soon afterwards assisted largely in my labours by taking advantage of Siegle's apparatus, with the hand-ball spray-producer invented by my valued friend Dr. Andrew Clarke, and supplied by the manufacturers, Messrs. Krohne and Sesemann, of Whitechapel-road.

With this apparatus I set myself to determine the degree of cold that could be produced by the vaporisation of all the known volatile liquids, and I determined the fact that the intensity of the cold produced held a definite relationship to the boiling-point of the fluid used; the rule being that the lower the boiling point the greater was the amount of cold exhibited. In these inquiries I employed a very delicate thermometer, directing the spray upon the bulb from half an inch to an inch and a-half from the point of the jet. By these means I learnt that with rectified sulphuric ether I could bring down the thermometer within 10 degrees Fahr. of zero, and that by directing the jet on the skin I could produce a certain definite and marked degree of local insensibility, but not sufficient for Surgical purposes.

I next got Mr. Krohne to construct for me a hollow cylinder of thin metal, six inches long and three inches in diameter. In the circumference of this cylinder was a chamber one-eighth of an inch in diameter for containing ether. The ether communicated with a tube which was joined to an air-tube, as in Siegle's apparatus, and the centre of the cylinder was filled with ice and salt mixture. In this way the ether was reduced to zero, and when vaporised gave spray which brought down the thermometer six degrees below zero, and produced on the skin such entire insensibility that I could pass a needle through the part without sensation. On the 11th of December, 1865, I applied this process for the first time on the human subject for an operation. The patient was a lady, who required to have five front teeth extracted. I had previously administered chloroform to this lady for a tooth extraction, but the inhalation had produced so much irregularity in the action of the heart and other disagreeable symptoms, that I considered it inadvisable to repeat chloroform, and she herself was only too ready to give the local measure a trial. The extraction was performed by my friend Mr. Peter Matthews. On directing the ether spray first at a distance and then closely upon the gum over the first central incisor on the left side, we observed, at the end of fifty seconds, that the gum had become as white as the tooth itself, and quite insensible. I then directed the vapour upon the tooth for twenty or thirty seconds more, and on the patient intimating that she did not feel, I suggested to Mr. Matthews to proceed. He extracted a very firm tooth without the slightest expression of pain. The process being continued in the same manner, he extracted three other teeth with the forceps. The fourth gave way, and had to be removed by the lever; but in all cases the result was equally good. Not a drop of blood was lost; there was no painful reaction; and the healing process proceeded perfectly. Our patient, who was exceedingly intelligent, was specially requested to note every step of the operation, such as the applying of the forceps, the insertion of the blades beneath the gum, the loosening process, and the removal. She told us that in two of the extractions she felt nothing; that in one it seemed as though the jaw altogether were being pulled downwards, but without pain; that in another she was conscious of a kind of wrench or loosening but without pain, and that the introduction of the lever was attended with a momentary dull ache, just perceptible. On the whole, the process was quite as painless as when she took chloroform.

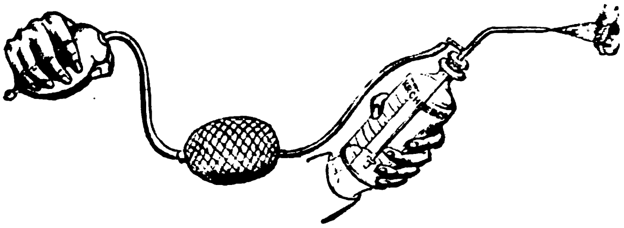
On December 13th I applied the local anæsthetic to the same lady for the further extraction of nine teeth, Mr. Peter Matthews again operating. The results were equally good with the first seven, at which point, unfortunately, the apparatus partly ceased play. At the eighth tooth pain was felt, and at the ninth, the apparatus being out of play, the operation caused great pain. We regretted this much, although it gave us the information of the perfect action of the process when no mechanical obstacle interfered with it. The reason why the apparatus stopped play was very singular, and could hardly have been foreseen. It arose from the condensation of water derived from the air in the air tube, and from the blocking up of the fine jet with a little portion of ice.

In the next step of research I got Mr. Krohne to make for me an apparatus with two spiral tubes, one the air tube, the other a tube for ether; and I immersed these spirals in a closed chamber filled with ice and salt. The degree of anæsthesia at first produced was most intense, and Mr. Spencer Wells was good enough to allow me the opportunity of applying the process in a case where an operation was required for closing a perineal rupture. Unhappily the apparatus, from the very same cause as before, ceased to yield a current; water condensed and became frozen in the air-tube. The apparatus itself was also found to be too cumbersome for practical purposes; I therefore, in this trial, failed to obtain any result.

By this time I had been led, very reluctantly, to the fact that the use of ice and salt for reducing the ether was a failure when the plan came to be tried in practice, nor could I see any ready way of preventing the difficulties that were brought before me. Added to these difficulties there was another, which has always attended my friend Dr. Arnott's plan, viz., that of getting the ice and salt readily for operation. To succeed, therefore, it was requisite to dispense with ice and salt altogether.

In considering how this object could be achieved, it occurred to me that if a larger body of ether than is supplied by Siegle's apparatus could be brought through the same jet, by mechanical force, in the same interval of time, and with the same volume of air, a proportionate increase of cold must necessarily be produced. The theory was one of pure physics, admitting even of arithmetical demonstration, and running parallel with the lessons which had been taught me with respect to the cold produced by liquids having different degrees of boiling point. The theory was put to the test at once, and proved correct to the letter. By driving over the ether under atmospheric pressure, instead of trusting simply to capillary action—or to suction, as in Siegle's apparatus—the spray evolved brought the thermometer within thirty seconds to four degrees below zero—the result that was desired.

Ascertaining this truth, I instructed Messrs. Krohne and Sesemann to construct the very simple apparatus depicted below.



The apparatus consists simply of a graduated bottle for holding ether; through a perforated cork a double tube is inserted, one extremity of the inner part of which goes to the bottom of the bottle. Above the cork a little tube, connected with a hand bellows, pierces the outer part of the double tube, and communicates by means of the outer part, by a small aperture, with the interior of the bottle. The inner tube for delivering the ether runs upwards nearly to the extremity of the outer tube. Now, when the bellows are worked, a double current of air is produced, one current descending and pressing upon the ether forcing it along the inner tube, and the other ascending through the outer tube and playing upon the column of ether as it escapes through the fine jet. By having a series of jets to fit on the lower part of the inner tube, the volume of ether can be moderated at pleasure; and by having a double tube for the admission of air, and two pairs of hand bellows, the volume of ether and of air can be equally increased with pleasure, and with the production of a degree of cold six below zero.

By this simple apparatus, at any temperature of the day and at any season, the Surgeon has thus in his hands a means for producing cold even six degrees below zero; and by directing the spray upon a half-inch test-tube containing water he can produce a column of ice in two minutes at most. Further, by this modification of Siegle's apparatus he can distribute fluids in the form of spray into any of the cavities of the body—into the bladder, for instance, by means of a spray catheter, or into the uterus by an uterine spray catheter.

When the ether spray thus produced is directed upon the outer skin, the skin is rendered insensible within a minute; but the effects do not end here. So soon as the skin is divided the ether begins to exert on the nervous filaments the double action of cold and of etherisation; so that the narcotism can be extended deeply to any desired extent. Pure rectified ether used in this manner is entirely negative; it causes no irritation, and may be applied to a deep wound, as I shall show, without any danger. I have applied it direct to the mucous membrane of my own eye, after first chilling the ball with the lid closed.

I have now employed this mode of producing local anæsthesia in four cases on the human subject. The first case was the extraction of a tooth from a lady, the operation being performed by my friend and neighbour Dr. Sedgwick, on January 24th of this year. On the 29th of the same month I used it again on the same lady for the extraction of three very difficult teeth, Dr. Sedgwick again operating. The results were as satisfactory as in the previous case, where the ice and salt ether apparatus was used.

I have used the apparatus also in connection with my friend Mr. Adams, who had a case at the Great Northern Hospital of deep dissecting abscess in the thigh of a young woman. In the abscess there was a small opening, which just admitted the director. I first narcotised around this opening, and the director being introduced, Mr. Adams carried his bistoury nearly an inch deep and one inch in the line of the director. I then narcotised the deep-seated parts, and enabled him to cut for another inch and a half in the same direction. The director was then placed in the upper line of the abscess, the process was repeated, and the incision was carried two and a half inches in that direction. The patient was entirely unconscious of pain, and after narcotising the whole of the deep surface, Mr. Adams inserted his fingers and cleared out the wound without creating the slightest evidence of pain.

Afterwards, in the case of a lacerated wound, six inches long, in the arm of a boy, who had been injured with machinery, I narcotised while six sutures were introduced by Mr. Adams. The first needle was carried through without the anæsthetic, and caused expression of acute pain; the remaining eleven needles, after a few seconds' administration of the ether spray, were passed through painlessly. The twisting of the wire sutures gave no pain.

These results are so interesting that I make no apology for bringing them at once before my Medical brethren. I wish it to be distinctly understood that at the present moment I only introduce the method here described for the production of superficial local anæsthesia. It is, I believe, applicable to a large number of minor operations, for which the more dangerous agent chloroform is now commonly employed—I mean such operations as tooth extraction, tying nævus, tying piles, incising carbuncles, opening abscesses, putting in sutures, removing small tumours, removing the toe-nail, dividing tendons, operating for fistula, removing cancer of the lip, and other similar minor operations which I need not mention. The process may also be applied to reduce local inflammation.

In course of time, and guided by experience and the advancement of science, we may, however, expect more. If an anæsthetic fluid of negative qualities, as regards irritation of nerve, and which has a boiling point of 75° or 80°, can be obtained from the hydro-carbon series, the deepest anæsthesia may be produced, and even a limb may be amputated by this method. It may also turn out that certain anæsthetics may be added to the etherial solution with advantage, such as small quantities of chloroform, or some of the narcotic alkaloids, if they could be made soluble in ether. A solution of morphia and atropia combined, if they could be diffused through ether, which at present seems impossible, could thus be brought into action so as to cause deep insensibility. In operating on the extremities it would be good practice to stop the current of warm blood by making pressure above on the main artery.

Reaction from the anæsthesia is in no degree painful, and hæmorrhage is almost entirely controlled during the anæsthesia.

One or two precautions are necessary. It is essential, in the first place, to use pure rectified ether; methylated ether causes irritation, and chloroform, unless largely diluted with ether—say one part in eight—does the same.

The *modus operandi* of this process is exceedingly simple. It acts at first merely by extracting force, and afterwards, when the nervous filaments are exposed, by preventing the conveyance of force through them. To be plain, sensation means the conveyance of force or motion from the extreme parts to the brain. The motion is communicated by the blood in the form of heat: it is communicated to the nervous filaments, and by them is conveyed to the sensorium. This is passive sensibility. When we irritate a nervous fibre, as by a cut, we communicate more motion rapidly along that fibre and cause pain. This is active or exalted sensibility. To remove sensibility, therefore, we must adopt one of three processes: we must remove or render inert the sensorium; we must stop the evolution of force generally by arresting oxidation of blood; or we must rob the body locally of its force beyond that with which it is constantly being renewed. We see the first of these processes in action in cases of pressure on the brain, as from injury or effusion of blood; we see the second whenever we produce general anæsthesia by charging the blood with chloroform or other analagous anæsthetic; and we see the third when, by means of extreme cold, we rob the local part of the force that has been brought to it by the blood.

The problem of local anæsthesia will consequently be quite solved when by a rapid process we can exhaust the natural force of a part as fast as such force is evolved in the local structure; and especially when with this we can combine the action of a substance which for the moment controls, as by compression, the conducting power of nerve matter. These two latter objects are to a large extent carried out by the method I have described above.

I cannot conclude this paper without expressing my thanks to Messrs. Krohne and Sesemann, the makers of the anæsthetic apparatus, for the industry, the perseverance, and the skill with which they have carried out all my designs. I feel that without their ready hands it would have been difficult indeed to have conducted the numerous and delicate operations through which the results I have described have been so far brought about.

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# NOTES ON SYPHILIS, WITH SPECIAL REFERENCE TO ITS TREATMENT BY SYPHILISATION.

(Extracted from the *Norsk Magazin for Lægevidenskaben*, xix. Bind, 11 Hefte, Christiania, November, 1865.)

By WILLIAM DANIEL MOORE, M.D. Dub., M.R.I.A.,

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(Continued from page 89.)

A similar state of unsusceptibility of syphilitic action is, as I have said, rarely met with in adults, and then, for the most part, only in individuals with scaly, papular, or pustular cutaneous forms of disease; but such forms occur with us only seldom in comparison to the maculated exanthema. By the latter, the inoculations are almost never prevented; and yet the one case, which I shall now mention on account of its unusual want of reaction after the numerous punctures, is precisely one with roseolar eruption.

C. J. B., aged 23 years, admitted on October 9 with a rather bright roseola on the lateral portions of the chest and on the back. Syphilisation had a good effect until November 29 (1½ months) with a single matter, but from that day we no longer succeeded in obtaining a positive result with a single matter, notwithstanding that fifty-three different sorts were employed; and I sometimes tried, if possible, to increase the reactive power of the skin by applying dry cupping glasses immediately before the inoculations, which were made upon the part drawn up, but in vain. The patient remained quite unsusceptible, consequently immune, and was dismissed cured on March 9, 1864, the syphilitic phenomena on the skin and mucous membranes having disappeared. But so soon as June 7 he was again admitted with a well-marked maculo-papular exanthema over the trunk and extremities. This time we did not succeed in getting a positive result after a single inoculation with twenty-two different matters. On July 19 the eruption had disappeared, and the patient left the Hospital well. He subsequently continued in good health.

Such unsusceptibility is, as I have said, rare; but in a slighter degree it has been observed in not a few cases during the last fifteen months. I will, however, mention only one example of this kind.

In K. M. H., a girl aged 8 years, who was admitted on July 11 with "a number of scattered, reddish-brown papulæ of the size of a pin's head, on the chest and back," and, moreover, slight secondary symptoms, seventy-two different matters were tried in the course of 170 days. She, however, remained in Hospital ninety-one days after this time to undergo local treatment for iritis of the left eye and lymphatic abscesses on the right side of the neck and in the left popliteal space.

This inactivity in the skin in presence of the local irritation is very singular, and the curative effect of these missed inoculations upon the system is quite inexplicable; Professor Boeck has, however, expressed his opinion in reference to this point that a kind of action takes place under these circumstances by absorption of the syphilitic pus through the punctures.

3. Of the 11 patients who, either on account of intercurrent new diseases or of very slowly subsiding syphilitic forms, were subjected to a somewhat varied treatment, and whose average stay in Hospital was $228\frac{8}{11}$ days (the longest time being 304, the shortest 130 days), I shall describe the following three a little more in detail:—

*a.* H. P. O., aged 31 years, was admitted on June 2 with an extensive papular and partly desquamating exanthema on the face, forehead, and trunk, large mucous tubercles on the scrotum and penis; debilitated aspect; tremor of the hands. No regular account to be had of the duration and origin of the disease. For two years there has been a papular eruption on the face and chest, which continued notwithstanding the employment of various lotions and ointments, but disappeared in the course of about a year under the use of a mixture containing iodide of potassium, reappearing in spring, and gradually becoming developed to the above degree. Two and a half months ago the affection on the genitals began.

Syphilisation was employed and took well until August 14. Nothing is to be found in the journal respecting the patient's health until the 16th of that month, when it is stated that he had for several days complained of pain and of a sensation of weight in the whole head. In the afternoon of the same day there were spasms in the left arm and shoulder; the left side of the face was drawn upward; articulation was laboured and thick. The day after the patient was somewhat confused, his movements and speech were unsteady, but he could be understood. The pulse was regular. In the afternoon a fresh attack of spasms. August 18.—The right side of the face was flaccid and pendulous, the left angle of the mouth was drawn upwards, the tongue when protruded turned to the right. . . . Under the use of antiphlogistics and of iodide of potassium the pains in the head diminished, but some weakness in the tongue remained. On October 7 iritis supervened in both eyes, with copious exudation and adhesions posteriorly, both pupils being only slightly dilated and in a very angular manner by the application of atropia. Great pain in and around the eyes. Vision imperfect.

After some fluctuation in the state of the eyes, during which the irido-chorioiditis became constantly worse, the power of vision diminished, so that the patient could not go about alone. He was dismissed on November 30. The exanthema had not disappeared, but was less. The cerebral disturbance had not returned during the last two months, but some slowness of apprehension and difficulty of speech remained.

*b.* M. J., aged $36\frac{1}{4}$ years, had on admission on July 28 a faintly red, macular eruption on the body, many large mucous tubercles upon the genitals, indolent glandular swellings in the neck and groins. The disease had lasted at least three months. Derivation was established September 12. The eruption is distinctly papular.

December 9.—The eruption is somewhat levelled; iodide of potassium.

May 28.—The patient was dismissed, but the spots after the papulæ were still very distinct.

Notwithstanding the "derivation" and the iodide of potassium, the eruption disappeared only extremely slowly, and seemed on the whole not to be particularly affected by the treatment.

*c.* A. M. H., aged 20, on November 20 exhibited secondary symptoms. Syphilisation was established, and proceeded favourably until March 4, 1864, when the patient gave birth to a dead fœtus of the seventh month. Subsequently pelvic cellulitis, of considerable extent, nearly filling up the right iliac fossa, set in, with highly febrile symptoms and with persistent tenderness in the hypogastrium. More than three and a-half months elapsed before the cellulitis was resolved, and then all the syphilitic symptoms had disappeared. The patient was dismissed on June 23, 1864.

4. Among the seven patients who were treated solely with topical applications for their fresh secondary syphilis was a girl, two months old, with hereditary disease, whose treatment required 61 days. The average time for all was $65\frac{6}{7}$ days. These patients got a warm bath occasionally, and the ulcerations were touched with nitrate of silver.(a)

5 and 6 require no special mention. Of the 24 secondary relapses were previously treated with—

| | | Average time of treatment of the relapse. |
|---|---|---|
| Derivation . . . | 6 . . | $38\frac{1}{2}$ days. |
| Syphilisation . . | 7 . . | $49\frac{1}{7}$ ,, |
| Mercurials . . . | 11 . . | 44 ,, |
| | 24 | |

Of the 11 tertiary cases were treated with—

| | | Average time of treatment. |
|---|---|---|
| Derivation . . . | 2 . . | 28 days. |
| Syphilisation . . | 3 . . | $53\frac{1}{3}$ ,, |
| Mercurials . . . | 2 . . | $58\frac{1}{4}$ ,, |
| Sweating cure . . | 1 . . | 48 ,, |
| Not treated . . | 3 . . | $82\frac{2}{3}$ ,, |
| | 11 | |

The two subjected to derivation were:—

J. S. L., admitted on January 22 with superficial ulcers on the calves of the legs and coloured scars after similar ulcers on the forearms and calves of the legs; commenced six weeks ago. The patient was treated by derivation for his secondary syphilis from October 24, 1862, to May 11, 1865. And

O. B. O., who was admitted on May 28 with a large tuberculo-serpiginous ulcer on the right buttock, near the fissure, which had been developed within the last two months. She was subjected to derivation for perfectly fresh secondary symptoms from December 17, 1862, until July 23, 1863. She then went out before complete cicatrisation; so the period of treatment above stated is in fact short. This time both got iodide of potassium.

The three subjected to syphilisation were:—

1. H. H. H., admitted on October 7 with a round, accurately-defined, quasi-fluctuating swelling of the size of a silver dollar piece, with a hard contour, and of the normal colour of the skin, under the left tuber frontale; painful on strong pressure. At first he was unable to assign any cause for the tumour, but, after repeated inquiries, he stated that once in the course of last spring he had got a blow on the forehead, which, however, was so slight that he paid no further attention to it, and could not now point out the place. Professor Boeck, nevertheless, considered this to be the exciting cause.(b) Four months ago the patient began to feel pains in the part now attacked, in which the swelling at the same time began to show itself. The pains went and returned at different intervals, and were always most violent at night. For the last few days he has been free from pain. He was treated by syphilisation in the summer of 1859. He now got iodide of potassium, the tumour was painted with alkaline solution of iodine, syphilisation was tried anew during a period of five weeks, without any particular result being obtained from the inoculations. Pustules were still sometimes produced, but they did not proceed to ulceration, formed no crusts, and the whole soon dried off.

After about five weeks' stay in the Hospital, the patient got iritis of the right eye. On November 19 he went out, "the iritis removed, the swelling on the tuber frontale gone. There remains only a slight elevation of the bone."

This result of the inoculations is usual in those who have once been syphilised to immunity.

In one of the above-named seven patients with relapse of a secondary nature after treatment by syphilisation,

M. J. H., who had been syphilised from July 29 to November 14, 1859, the same treatment was now again tried for sixty days. The result of the inoculations was about the same as in the foregoing cases; the effect was, to be sure, a little more persistent.

But the long series of inoculations from one and the same matter sometimes witnessed in those not previously treated, and especially in the commencement of the cure, are never observed in those who have passed through the treatment by syphilisation. In the latter has occurred a peculiar, but inexplicable immunity of the skin of great physiological interest. That this immunity—four years after the first treatment—is no longer as perfect as it was at the termination of the treatment, will be seen from the respective histories of the cases of these two patients. And the question whether the immunity is permanent, or lasts only for a certain limited time, has not as yet been solved; it would appear, at least from these two cases, as if it is gradually lost.

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(a) This mode of treatment I have now practised for two and a-half years on about fifty private patients with particularly satisfactory results.

(b) Thus I have often read and heard that external influences acting on a universally syphilitic individual may give rise to characteristic local phenomena. It has never yet fallen to my lot to see anything of the kind either after the numerous stibiate plasters employed in the treatment by derivation (they never produce any other than the usual "variolous sores," and I have never succeeded in exhibiting any specific syphilitic action with their contents; inoculations with them do not give rise to the most distant reaction), or after incisions, or after spontaneous openings in abscesses or furuncles, or in ruptures after delivery, in teething, or in the edges of the wound made in dividing the prepuce in phimosis with chancres. In this case it may be, as I have already mentioned, that the lobes—nay, sometimes the whole prepuce—ulcerate away; but this occurs merely by an extension of the original sore or sores to the retro-preputial flap, not at all by the formation of any fresh ulceration in the edges of the wound effected by the knife. In a word, I have never seen any characteristic (specific) syphilitic local affection arise after external influences acting upon a patient labouring under constitutional syphilis.

2. M. E. S., had on the outside of the calf of the right leg two sharply-edged, foul, shallow ulcers of the size of a silver half-dollar; the surrounding parts were unaltered. Developed during the last three months without any known cause. Catamenia regular. Treated by syphilisation from April 25, 1857, to January 6, 1858. After forty-three days' local treatment and keeping her bed, the sores healed.

3. G. K., had on admission swelling of the left testicle and epididymis, which was developed, without any cause known to him, in the course of the last three or four months; a few crusts of ecthyma on the inside of the right thigh and on the left side recently formed; an ulcer two lines in length and one and a-half in breadth on the anterior surface of the right leg, developed after a blow received three months previously; hoarseness for the last six months without pain in the throat.

He was treated by syphilisation for secondary symptoms from July 17, 1861, to January 2, 1862; came in again on July 8 in the same year with deep ulcers on both sides of the scrotum, mucous tubercles around the anus and on the tongue, for which only local treatment was employed during three week's time.

The tertiary symptoms disappeared under the use of topical applications, and of iodide of potassium, after seventy-five days' stay in Hospital.

To these three belongs properly as a fourth,

M. K., admitted on October 14 with several ulcers on both legs and cicatrices after similar previous sores. Was treated by syphilisation from January 25 to May 21, 1862, in which period, however, she suffered from pneumonia; intercurrent febrile attacks are found to render syphilisation less certain in its results. She was transferred after eighty-six days' stay in Hospital to the Municipal Hospital.

(To be continued.)

# REPORTS OF HOSPITAL PRACTICE
IN
# MEDICINE AND SURGERY.

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## THE LONDON HOSPITAL.

### RESUME OF A WEEK'S ADMISSIONS.

BEING THE SUBSTANCE OF A CLINICAL LECTURE DELIVERED WEDNESDAY, JANUARY 10.

(Cases under the care of Mr. HUTCHINSON.)

[Reported by Mr. WAREN TAY.]

GENTLEMEN,—Our week which ended yesterday has been one of unusual interest. As regards numbers admitted, we have had the usual average, and our mortality has not been heavy; some of our single cases, however, furnish unusually tempting materials for detailed clinical study. The following is our list:—

Strangulated inguinal hernia reduced *en masse* (operation), 1; injury to the head, 2; rupture of kidney, (?) 1; dislocation of the astragalus, partial, 1; retention, from organic stricture, 1; compound dislocation at the ankle-joint, 1; synovitis of knee-joint, 3; periostitis of tibia, 1; necrosis of tibia, 1; phymosis, 1; burn, 1; lacerated scalp, 1.

Fractures (simple): of tibia and fibula, 5; tibia only, 1; fibula only, 3; femur, 2; humerus, 2; ribs, 3; (compound): phalanges of fingers, 1; metacarpus and carpus, 1; first metatarsal bone, 1.

Inflamed arm, 1; hand, 2; elbow, 1; leg, 2; foot, 1; gland, 1. Contusions, 11.

Ulcers, 3; hydrocele (injection of iodine), 1; amaurosis (white atrophy), 1; carcinoma, epithelial, back of hand, 1; encephaloid of tibia, 1; syphilitic disease of larynx, etc., 1; syphilitic double orchitis, 1; gangrena senilis, 1; tumour, fatty, 1.

Total, 62.

Chief amongst our interesting cases have been two of injury to the head.

#### HEMIPLEGIA AFTER INJURY TO THE HEAD FROM A FALL.

On January 2, a man, aged 56, was brought in who had fallen from a ship's mast whilst at work in the rigging. He had sustained a severe fracture of several ribs on his right side, and his symptoms were chiefly referable to his chest. He was in collapse and had much difficulty of breathing. On a subsequent day, however, we noticed that his mouth was drawn somewhat to the right side, that he protruded his tongue towards the left, and that he had partially lost the use of his left arm and leg. He was quite conscious, could hear well, answered all our questions, but spoke thickly and mumbled his words. Now, we could find no traces of injury to the scalp or skull, excepting a trivial cut over the right eyebrow; there was no swelling anywhere, and he had had no bleeding from ear or nose.

Let us concentrate our attention upon this symptom of hemiplegia, and ask how it is to be explained. During the last three or four years, in connexion with the Astley Cooper Prize, I have been paying especial attention to injuries to the head, and one of the most interesting results which I have arrived at has been the observation that lacerations of certain parts of the surface of the brain cause paralysis of the opposite side. Lacerations of the brain surface in connexion with falls or blows on the head are tolerably common, and in a considerable series of cases where such laceration involved the middle of one hemisphere, I found more or less of hemiplegia on the opposite side. When the anterior lobes are lacerated, hemiplegia does not result; respecting the posterior lobes I can say nothing, for it is very unusual to find them much injured. Cases of cerebral laceration from injury are usually complicated with more or less effusion of blood, and those who believe that local effusion of blood within the skull can produce symptoms of local compression, might hold that the hemiplegia which results was due to the compression rather than the laceration. Physiologists have, I believe, been sceptical as to the possibility of producing hemiplegia by damage to the surface of the hemisphere, and hold that it is necessary that the more central parts should be implicated.

This result of clinical observation was, therefore, somewhat at variance with the doctrines of the day. At length, however, two almost conclusive cases occurred. In each a man was admitted with a severe compound fracture of one parietal bone, retaining his consciousness, but hemiplegic on the opposite side. In each I trephined the skull, removed large portions of bone, and left the dura mater exposed, so that there was no longer any possibility of local compression. In each case the hemiplegia persisted, and in each we had a post-mortem, and found, as expected, that the damage consisted in extensive laceration of the brain surface. We have had several cases in which patients showed this symptom of partial hemiplegia after severe blows on the head, and recovered from it in the course of a few months, and in these I have ventured to diagnose laceration of the middle or sphenoidal lobe. There is a very important feature characteristic of this form of hemiplegia, and it is this, that both motion and sensation are involved. In the common forms of apoplexy, in which usually the corpus striatum or thalamus is lacerated by extravasation of blood, hemiplegia, as is well known, results, but the hemiplegia usually involves motion to a very much greater extent than sensation. In fact, some Physicians have, I believe, doubted whether in common hemiplegia from apoplexy sensation is involved at all. You will see that the essential feature of difference between traumatic lacerations of the brain and lacerations from disease is that the one are almost always on the surface and the other usually near the centres.

To return from this digression to the case before us. Is it probable that this man has sustained a surface laceration of his right hemisphere, to which the symptom of hemiplegia is due? He fell a height of twenty-five feet, and, although there is no contusion of his scalp, we know from abundant experience that the brain within may be smashed by injuries which do not show themselves externally.(a) It is therefore very possible that his hemiplegia may be traumatic. My diagnosis is that it is not so. I suspect rather that the man had apoplexy while in the ship's rigging, and fell in consequence. The hemiplegia which he presents much more nearly resembles that which occurs from apoplexy than that which we meet with in our Surgical wards in connexion with injuries. His sensation is very slightly impaired. On the two sides of his face we cannot make out that there is any difference. The mumbling way in which the man speaks is exactly that of Medical apoplexy, but I think there is yet a more trustworthy reason for doubting the existence of traumatic laceration. It is not likely that a blow on the head sufficiently violent to inflict a severe laceration of one hemisphere should not at the same time so shake the rest of the cerebral mass as to induce the symptoms commonly, and I think quite correctly, ascribed to general concussion. These symptoms are, after the first stage of collapse has passed off, a stupid, sleepy condition, with great disturbance of the intellect, with a hot surface, and often with a good deal of restlessness alternating with the sleepiness. Now of these symptoms our patient has shown not one. He has slept at nights, and kept awake in the day; he has taken his food; he has always been able and willing to answer questions, and has shown not the slightest irritability of manner.

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(a) See, for example, the next case.

There is yet one other hypothesis in explanation of his hemiplegia which I must endeavour to dispose of; that, namely, which would suggest local compression by effused blood. I have no belief whatever in the possibility of permanent paralysis resulting from local compression of the brain; such paralysis being restricted to one part, and not implicating the nervous system generally.

A temporary paralysis may result from a local effusion of blood, but the brain mass is so yielding and can accommodate itself so readily to intrusion of other matters within the cranial cavity, that hemiplegia from this cause never lasts long. Of this we had a capital example about six weeks weeks ago. A man had hemiplegia, incomplete, but well marked, on the day of his admission, and on the next day he had none whatever. We proved at the post-mortem that this symptom had been due, as we conjectured at the time, to effusion of blood between the dura mater and the bone from laceration of the middle meningeal artery. Whenever you find lasting hemiplegia, whether of face, of limbs, or both, or paralysis of any single nerve or single set of nerves, the patient showing no symptoms of general damage to his nervous system, you may be sure that the paralysis in question does not result from local compression, but from some structural lesion, most probably from laceration.

### FRACTURE OF OCCIPITAL-BONE AND LACERATION OF ANTERIOR LOBES OF BRAIN.

We have had this week another most interesting head case, one which at first puzzled us a good deal, because we had an incomplete history, but which, when looked at by the light of the post-mortem, is very characteristic of an important group. When the man was first admitted some conjectured that he was intoxicated; afterwards we had to entertain the hypothesis of fever or of arachnitis. The man himself, from the first, was in a state of stupor. Just after he came into the Hospital he managed to tell the nurse his name; but after that we could never get him to speak. He was admitted about Wednesday noon, and he died on Saturday. During the whole of this time he had lain in a stupid condition, without speaking; capable of resisting vigorously when we disturbed him, but never speaking. His tongue and lips were dryish, but he would never put his tongue out. His face was flushed and bloated; his surface temperature varied very much. When he was covered his skin got hot; but when he kicked the clothes off, as he often did, he rapidly became cold. His pulse was steady, and usually about 65. We could not make out that he was paralysed in any part; he moved all his limbs when we pricked them, and screwed up his eyes when we tried to open them. His pupils were of medium size. He was more or less restless, frequently tossing the clothes off and turning in bed. He could rouse himself when the bladder was full, and would then get out of bed, stagger to the next patient's bedside, and make water against it. No friends came to see him, and the only history which had been obtained from those who brought him was, that he had had a fall of a few feet, and that he was a very drunken man. There was no contusion to be discovered about any part of his head. He had had no bleeding from ears or nose, nor was there any ecchymosis of his eyes. We could find no fever spots on his body. After remaining three days in the condition I have described, getting gradually more and more stupid, he had, on the morning of the third day, a succession of convulsions, each one weaker than the preceding, and after which he died.

In discussing the diagnosis of the case, I had remarked that on the whole I was inclined to think that he had sustained some severe injury to the head, and I pointed out that it was unusual in cases of mere concussion that we should be unable to rouse the patient to speak. I stated, also, that the circumstance that he could rouse himself when the bladder was full was quite in keeping with what we often notice in concussion, very often a patient who is in a stupid sleep at all other times will rouse himself to make water, then go to sleep again. The absence of paralysis seemed to show that the patient had no extensive injury to the middle parts of his hemispheres, and it was also, to my mind, tolerably conclusive that he had no surface arachnitis. I will explain my reasons for thinking so at a future lecture. On the day of the man's death we obtained an account of his accident from the foreman of the yard where he had worked. He had, whilst sober, fallen backwards from the cart which he was loading, and struck the back of his head. He was stunned, and was picked up by the bystanders. Soon afterwards, he regained consciousness sufficiently to tell them that "he felt very bad, but hoped he should be better soon." He was at once conveyed to the Hospital, and the rest of the case I have already given you. The height which he had fallen was eight or nine feet.

Now, let us ask what are the usual consequences of a severe blow on the occiput such as this man had received? Very often there is, in the first place, a fissure fracture of the bone where struck, and a slight contusion of the cerebellum above it; but the most important lesion is to the anterior lobes of the brain. These are driven violently forwards against the skull, and very frequently they are lacerated (laceration by contre-coup). Not unfrequently there is further evidence of the effects of contre-coup in a few linear fissures in the thin plates of the frontal bone on each side the ethmoid and in ecchymosis beneath it. Connected with the laceration of brain, there is always the effusion of more or less blood into the bruised brain-substance, into the meshes of the pia-mater, and into the arachnoid cavity. These were precisely the lesions which our patient had sustained. I show you in this sketch the direction which the line of fracture had taken.

The symptoms which the man had presented fitted very well with the conditions found at the post-mortem. The case was essentially one of very severe concussion of the entire brain, plus laceration of the anterior lobes, plus a certain amount of general compression by effused blood. The compression had probably a good deal to do with the immediate cause of death. The convulsions no doubt very much hastened his death, and they might have been due either to the laceration or to the compression. I have known a series of convulsions precede death in a case of pure and uncomplicated compression.(b)

We have had two or three other head cases, but not calling for special notice. In one case of slight concussion, the patient is a young man who had fallen from a waggon on to his head. In another the patient is a delicate infant only ten months old, whom, we are assured, had fallen, or been thrown, from a window thirty feet high. This child presents no serious symptoms. Its head is hydrocephalic, the fontanelles are large, and the whole of the sagittal suture gapes. This condition of yielding parietes would tend very materially to diminish the risk of injury to the brain.

(To be continued.)

## BIRMINGHAM GENERAL HOSPITAL.

### ILLUSTRATIONS OF THE CAUSES OF DEATH IN BRIGHT'S DISEASE OF THE KIDNEYS.

(By JAMES RUSSELL, M.D.)

(Continued from vol. ii. 1865, page 708.)

### III.—COLLAPSE OF THE LUNGS, THE CONSEQUENCE OF EFFUSION.

*Case* 16.—*Acute Dropsy*.

A. B., aged 4 years. Scarlet fever without sore-throat, about a month ago; exposure and neglect. Anasarca three days ago in upper extremities, face, and trunk; retching. Urine at admission smoky; ¼ albumen. Uric groups; blood and exudation-casts. Next day, pulse 160; rapid, catching, and irregular breathing. Cough, with expectoration, Clear intellect. Dulness over right base. Puffed hands and face. Urine very scanty; ½ albumen; more smoky. Death in the night.

*Sectio Cadaveris.*—Considerable effusion in each pleura, some in pericardium and abdomen. Heart contained blood. Partial collapse of entire lungs, complete of right and left lower lobes; inflation of the edges and of particular lobules. Not much mucus in the tubes. Pulmonary artery free. Coarse injection of kidneys; very anæmic cones; granular cells; opaque tubes. Some bloody coils.

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(b) See London Hospital *Reports*, vol. ii.

In the preceding case the fatal effusion was probably brought on by exposure in bringing the child to the Hospital. A condition amounting to the same state may be induced in the adult by rapid increase of fluid within the chest in the course of the chronic form of Bright's disease, the lungs being already crippled by coexisting disease. Such was no doubt the cause of death in the following case. The fatal event was quite unexpected at the particular time when it occurred.

### *Case* 17.—*Granular Fat Kidney, Early Amyloid.*

E. S., aged 24. Delicate constitution; very sedentary habits. Permanent impression on his health from typhoid fever eight years ago. Excessive masturbation. Bone abscess. Cough and some hemoptysis four or five years. Health declining a year. Œdema six months; dry skin; liability to vomit; diarrhœa lately; scanty urine; advanced anæmia; considerable anasarca; constant diarrhœa. Some amendment, with considerable diminution of anasarca. Increasing rapidity of pulse; retching. Death took place with much rapidity, and was not anticipated. Urine averaged 26 oz.; specific gravity, 1036; very ammoniacal; albumen from ⅓ to ¼; intracellular hyaline casts.

*Sectio Cadaveris.*—Considerable ascites; very copious effusion in right pleura compressing the lung (the more healthy one); copious miliary tubercles through the lung. Left lung upper third cirrhosed; adhesions half inch thick. Effusion in the pericardium. Heart 12 oz.; fat on each ventricle; fascicles healthy. Spleen waxy; 16 oz. Liver, 4½ lb. (avoir.); not unhealthy. Kidneys, 16 oz.; excellent specimen of the granular fat kidney; much blood in the larger vessels; general hypertrophy of the arteries; resplendent tufts. Ulcers in the ilium.

## CARDIAC DYSPNŒA.

### *Case* 18.—*Chronic Desquamative Disease.*

J. N., aged 49.—A hard drinker of ale; had been exceedingly stout; once "rheumatic gout." Ailing fourteen years; severe fit of vertigo; three epileptiform fits, the last two years ago, ending in prolonged delirium. Then steadily progressive anasarca, loss of flesh, constant cough and expectoration. Shortness of breath amounted at last to orthopnœa; when visited by me had passed five or eight nights in his chair. Copious anasarca; advanced anæmia.

Orthopnœa relieved. As he mended urine amounted to fifty to sixty oz. in twenty-four hours; specific gravity, 1007-9; very albuminous, and containing granular casts. Subsequently, after ten days' suspension of treatment, was found with complete suppression of urine for three days; increased dyspnœa; dulness; pupils natural; had constant vomiting; bowels refused to act; cerebral oppression increased. He died early on the fifth day; one stool, and only a few ounces of urine.

*Sectio Cadaveris.*—Fluid in the pleural cavity; condensation of right lung; œdema of both lungs. Hypertrophy of left ventricle of heart; fatty growth encroaching on the fibre of the right; tissue flabby and brown. Kidneys advanced in chronic desquamative disease, and contained cysts.

### *Case* 19.—*Chronic Desquamative Disease.*

Mr. S., aged 39. Has a son diabetic. He has had the symptoms of the same complaint for four years. Special failure of health six months,—debility, emaciation, irritability of bowels, some dyspepsia and tendency to vomit; frontal headache, severe vertigo; occasional slight epistaxis; anasarca for some time, considerable for three months, with known albuminous urine.

Nineteen days before death extreme dyspnœa, very intolerant of movement, aggravated by paroxysms of spasmodic character; during this entire period sat up in bed, or with head resting on a table. Sleep only obtained by snatches, and patient became greatly exhausted, worn, and haggard. Spasmodic cough, dry, or with scanty expectoration. Pupils small, little dilatable; intellect entire till last four nights. Physical signs in chest normal throughout, except feeble impulse of heart and depressed apex by descent of diaphragm.

Anasarca very copious, and though relieved by profuse discharge from punctures—the serum soaking the bed and forming pools on the floor—soon reappeared. Finally intense restlessness and frequent delirium.

Urine fell the first day of my attendance from very large quantity to 88 oz., sp. gr. 1013; then to 30—40 oz. sp. gr. 1011. No trace of sugar. Albumen ⅓ Large number of granular casts up to $\frac{1}{300}$th inch diameter. Some large waxy casts.

## DEATH FROM SUPPRESSION OF URINE.

Suppression of urine may occur at any period of the disease. It may constitute the one main symptom of an acute attack, and be the direct cause of death; or it may prove fatal through the intervention of some organic change. It may present itself during the course of a chronic case, and may be relieved, or may prove fatal, exhibiting in its fatal operation the same variation as in the acute form.

Again, the symptoms to which suppression may give rise, even when it remains uncomplicated by any organic change, may present remarkable variations; they may involve the intellectual faculties, or may leave them intact; they may present a decidedly typhoid aspect, or may be free from this characteristic, retaining, however, always, a manifest tendency to asthenia; irritation of the gastro-intestinal tract may be present or absent; anasarca may be copious, or there may be none at all; and hæmorrhage may take place from the mucous membranes, or this accident may never occur at all. Once more, life may be extinguished rapidly, or may be surprisingly prolonged.

Some of these variations admit of explanation, by peculiarity in the patient, and by changes in the blood; some by the particular manner in which nature endeavours to establish a compensating excretory process; but more, no doubt, by the success with which this subsidiary elimination is performed.

The length of this paper forbids my entering into further details; the two following cases, though unfortunately without post-mortems, strikingly exhibit some of these contrasts:—

### *Case* 20.

Master W., aged 13. He had mild scarlet fever, and was out on the fourth day. Eight days after renewed submaxillary swelling, soon subsiding, and severe paroxysmal pain in the abdomen. Vomiting set in next day; he then passed some deep red urine. No fever; tendency to doze. Whole illness lasted twelve days; absolutely no urine, with the following exceptions:—Twice one ounce, twice one drachm; densely albuminous. No anasarca throughout; no eruption, except for one day a few purple specks. Great difficulty in acting on the bowels; only once copious dark fæcal stools: twice stools of very fetid blood. Not much perspiration.

Incessant vomiting from first to last of green or yellow fluid; twice of "coffee-ground" matter; quantity asserted much to exceed ingesta; entire impossibility of administering food or medicine by the mouth.

Breath very urinous, and strongly alkaline, and at last surface of body also. Tongue dry and glazed. Intellect remarkably clear; only some drowsiness towards last; slept at night. Pupils only exhibited some tendency to contraction as the case advanced; pulse 100, feeble, and became thready; respiration 14; temperature normal. Emaciation proceeded rapidly, and great depression came on. Sounds of heart feeble; respiratory sounds clear.

Three convulsive fits in last three hours of life; died after the third. Every endeavour was made without success to introduce fluid by mouth or rectum.

### *Case* 21.

Mr. S., aged 26, after a doubtful throat affection, with abscess in tonsil, during which urine was very scanty; urine became almost entirely suppressed. Suppression of urine continued through six days. During that period profuse watery purging, at first from medicine then spontaneously; some perspiration. Steady pulse at 80; very dilated pupils; clear intellect; troublesome wakefulness. Severe paroxysmal pain in abdomen through these six days, with tension, at last necessitating an opiate stupe; it gave great relief, but pulse fell at once to 40, with some dulness and diminished dilatation of pupil.

On the next day, from the fall of pulse, reappearance of urine, which soon reached a pint in twenty-four hours; sp. gr. 1013, increasingly albuminous. On the eleventh day a very thick erythematous eruption over entire surface, much like measles, and twice copious hæmoptysis; and next day several malænous stools. The symptoms then became decidedly typhoid; sordes, dry tongue and throat; apathy; feeble voice; proneness on the back; intellect clear; pulse rising slowly to 68 on fifteenth day, and 93 on eighteenth day; on that day renewed hæmoptysis. (The blood did not contain urea.) The pulse had now assumed a peculiar state of irregularity by groups of beats, once fell to 38; respiration 22.

Typhoid symptoms continued with dry, sticky tongue and fauces. Patient slowly emerged, but never perfectly. He died rather suddenly, having been encouraged, by commencing improvement, to leave for his country house, insisted on with obstinacy which savoured of delirium. The last few days' excess of urine above normal standard; albumen ¼; hyaline casts. The eruption only left within a week of death. The day preceding death pulse was 130. Entire absence of œdema throughout, and surprising absence of emaciation.

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# Medical Times and Gazette.

## SATURDAY, FEBRUARY 3.

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## THE NEW PARLIAMENT.

The assembling of a new and untried House of Commons awakens a lively sensation of interest in all classes who have anything to lose or anything to gain by legislation. About one-fourth of the members of the new House take the oaths of allegiance for the first time, and it is not unreasonable to suppose that so large an infusion of untried strength or untried weakness will give a new character to their deliberations and a fresh impetus for good or evil to the political life of the country. As we are not politicians except in the narrow circle of Professional interests, we are spared the necessity of prophecying on the fate of the Ministry, the character and scope of the Reform Bill, the Fenians, Jamaica, the American claims, and a host of other topics which a hard fate imposes on our contemporaries. But there are several subjects which bear directly on the interests of the Medical Profession, or which affect the economical condition, and therefore the physical welfare, of the people, which must be discussed by the new Parliament, and are legitimately within the pale of the Medical journalist. Foremost amongst these is the manner in which the present Government has met the disaster of the importation of Rinderpest. We shall hope to hear from the lips of Her Majesty's Minister the reasons for many things which at present appear inscrutable. First, we shall be curious to know why the disease was allowed to exist and spread for many weeks before the Government, although repeatedly warned and urged to exertion, thought fit to institute a Commission of Inquiry into its nature and the mode of arresting it. It will also be a satisfaction to learn what sum of the public money was placed at the disposal of the Committee to enable them to institute experiments and collect evidence. The temporising and hitherto inadequate measures of the Government, the manner in which they have shifted the responsibility of carrying out the only certain method by which the plague may be arrested from their own shoulders to those of local and irresponsible Boards, will afford a subject of debate in which the skill of fence possessed by the Ministry must be severely tested. The recommendations of the Commission appointed by themselves, backed by the prayer of the whole agricultural interest, by the advice of every competent scientific authority in the country, and by the universal experience of Europe, have been disregarded with such disastrous results that it will be at least satisfactory to learn on what grounds Her Majesty's advisers have virtually refused to put a peremptory stop to the transmission of the poison by living cattle. Another subject of importance to the Profession is the present working of the Poor-law. Recent events have proved so incontestably the abuses which exist in the relief both of the resident and casual poor, and the evils flowing from the be-lauded "Anglo-Saxon" system of local unpaid government by boards of guardians, that we may hope some improvement may be ventured on. The Profession well know the necessity for Poor-law Medical reform, and we trust that they will be sufficiently alert to introduce some substantial measure when the management of the poor is before the Legislature. The question of increased Hospital accommodation for fever and small-pox in London and other large towns is another subject on which Government have promised to deliberate and decide. The reports of the Committees on the state of the Army and Naval Medical services, and on the prevalence of Venereal Diseases in the two services, will, we hope, be thoroughly discussed in the Senate. These are some of the subjects of public moment in which our Profession is directly interested. As in previous years, we shall take care to furnish our readers with a weekly condensed report of all the matters discussed in Parliament which bear on their own interests, or on the physical and social condition of the population. From the party zeal which the death of Lord Palmerston has let loose we may predict that the next session will be of far more political importance than its immediate predecessors. We hope that it will also bear more fruit in the advancement of those interests which are identified with the Profession of Medicine.

## THE NATURE OF RINDERPEST.

Vaccination has proved itself to be no preventive against Rinderpest. At this result we are scarcely, if at all, disappointed, much regret though we feel at the loss of so incalculably great a boon as a preventive power in vaccination would certainly have been. We have seen, and have pointed out to our readers, how slender and how unsatisfactory are the grounds upon which the identity of cattle plague and variola has been asserted. Hence, we felt what little reason there was for anticipating that vaccination would afford any immunity against infection by Rinderpest. But cases were adduced in which vaccinated cattle seemed to be exempt from it. So we hoped, without feeling more convinced that Rinderpest was small-pox, that in vaccination we had hit upon, by a piece of good fortune, a prophylactic against the disease. Still we pointed out how uncertain was the evidence which even many apparently successful cases could afford from the fact that many cattle not treated at all had escaped an attack of the disease which might have been expected to take it.

In our numbers for January 13th and 20th there appeared letters from Mr. John Fairmann, of Hanley, Staffordshire, in which he stated that in a large herd in which cow-pox had prevailed last autumn, fifteen animals had been attacked by the plague, of which number five had died, and that more than half the number attacked had had cow-pox. This was the first case reported of the non-protective power of vaccination, and doubts were expressed by the advocates of the small-pox hypothesis as to whether the autumn attack of this herd was true cow-pox, although Mr. Fairmann had observed on the udder of one of the cows affected with Rinderpest the marks of the cow-pox.

Since then, however, the correctness of this gentleman's observations has been fully borne out by other observers. Mr. Tollemache, so hopeful as to the value of vaccination, placed an Alderney calf, which had been very satisfactorily vaccinated, in a confined space with four other calves that had Rinderpest for five days and nights, commencing on the

11th. It was then removed, being still free from signs of Rinderpest. On the 17th it was, however, attacked with the disease. In the *Times* of last Saturday there appeared a letter from Mr. Tollemache, announcing the result of what he felt was the *experimentum crucis* of the power of vaccination: on the 25th "the calf succumbed to the disease, after being ill eight days."

Further on in his letter to the *Times* of Saturday last, Mr. Tollemache states that he has also one vaccinated cow ill from the disease, and another cow, also vaccinated, that he has great misgivings about. Some vaccinated cows on the farm of this gentleman's bailiff have also been seized with Rinderpest.

In the *Times* of last Tuesday Lord Airlie states that in order to test the efficacy of vaccination as a preventive against the cattle plague he sent two successfully-vaccinated animals and one not vaccinated to an infected farm on the 15th inst. He had just heard at the time of writing that one of the vaccinated animals was dead, the other apparently quite well, and the unvaccinated one ill, with no hope of its recovery. He also mentions that on his farms he has not had a single case of disease, although one farm is surrounded by infected farms—a result which he attributes to rigid isolation and liberal use of disinfectants.

In the *Times* of the same date also appeared a letter from Mr. George Okell, of Over, Cheshire. He says in it that he has vaccinated at least 500 head of cattle; and gives the following instance, selected from among others, in which cattle have been attacked with Rinderpest and have died, although they had been successfully vaccinated:—On January 3 he vaccinated twelve cows belonging to his father, Mr. Okell, of Gorstage, Cheshire, and on the 10th the remainder of the stock, fifteen in number. In all, except two, a cow and a bull, the operation was successful. None of the cows were ill at the time. But in a few days several of the herd became affected with Rinderpest, so that by the 27th, nineteen head of cattle had been attacked with the disease. Eight cows had then died, and five of these had been successfully vaccinated at least fourteen days before they showed symptoms of Rinderpest. Four cows were recovering, and singularly enough, he says, the bull and the cow in which the operation for vaccination was unsuccessful were quite well.

Mr. Harper, of Holbeach, has also found vaccination to fail in preventing infection by cattle plague. In the *Times* of Wednesday, he writes that two heifers which he had successfully vaccinated, and then separately exposed to the influence of diseased beasts, have both taken the plague and died of it.

We also are informed that at the Albert and at the Royal Veterinary Colleges vaccinated animals have taken Rinderpest. At the Albert College the cow-pox was well-marked, and several children were actually vaccinated from the vesicles.

Little room for comment presents itself in these cases. Any one of them, the correctness of which is not disputed, is sufficient to show that vaccination is but poor protection, to make the best of it, against the contagious influence of cattle plague. Whether or not cattle plague is small-pox modified remains undecided. It can hardly be said to be disproved that it is such by the failure of vaccination in preventing it. For it seems that *vaccinated* cows take cow-pox, and that, according to Lord Airlie, inoculation does not seem to be more successful than vaccination in preventing an attack of cattle plague. Lord Airlie states that a stock-owner in the neighbourhood of Forfar has had seven animals inoculated with the virus of diseased cattle, and that four out of the seven are dead.

At the same time, we are almost at a loss to understand on what grounds the believers in the small-pox hypothesis support it. The skin affection can hardly be asserted ever, if at all, to have the characters of that of small-pox; the lesions of the mucous membranes, though closely like those in some cases of small-pox, can hardly be said to be peculiar to these diseases; and lastly, small-pox in any of its forms has not been shown capable of producing Rinderpest, or Rinderpest, small-pox. We must only wait for those who have still a confidence in this hypothesis of the nature of cattle plague to set forth some fair grounds on which to claim our assent to its probability, if not truth.

## SANITARY SCIENCE AND OUR PUBLIC SERVICES.

People are very apt to be deceived by the amount of talk upon a subject, forgetful that it is talk and nothing else. What appears to exhibit a good deal of energy is in reality often only a dreary sham—the dreariest and saddest of shams when you get to the bottom of it, and discover the little earnest work it conceals. It is so much easier to let energy evaporate in words instead of converting it into actions. Hygiene, sanitation, and so on—all their equivalents and derivatives—are words found often enough on people's lips; they edge their way into all the newspapers and journals, and you go to sleep over their endless repetition through the pages of a Blue Book. The Government, however, like Gallio, cares for none of these things, after all. It may be necessary to hoodwink the public by now and then putting the right man in the right place, without any intention of giving heed to the right advice when given. Sanitary science means an outlay of money, when it ceases to be mere talk; and what chance is there for her claims in a conflict with the penurious, cheese-paring policy of the present Government?

The late loss of 220 human beings in the *London* struck most people with dismay, but our unfortunate troops may be decimated by disease—by disease such as ordinary foresight might have anticipated and prevented—and there is perhaps a leader in the *Times* only to mark the date of its occurrence.

Let any candid person peruse the account of the late epidemic of yellow fever at Bermuda, and he may convince himself that the insanitary state of that station was such as to have rendered it a hot-bed, well manured, and admirably adapted for "forcing" the seeds of disease. The principal mercantile port of the colony is the town of St. George, and a truly pleasant place it appears to be! It is said to resemble certain villages of the West of Ireland, the advantages of the comparison being greatly, however, upon the side of the Irish. Here is the sanitary picture from Surgeon-Major Barrow's capital report in the last Army Medical Blue Book:—A town seated in a hollow, composed of the narrowest streets, ingeniously cut off from winds, redolent of offensive odours from cesspools and the filth thrown into the streets (which are unscavengered); no sewers, no drains, but cesspits, which are rarely emptied; the water supply being rainfall, and the houses, overcrowded at all times, becoming excessively so during the American war—the population rising from 900 to 1500.

So far for the town; and the barrack buildings are very much on a par with it. These are defective in the sites and low levels they occupy; in their ventilation, light, drainage; in the close proximity of crowded out-buildings and privies—often placed to windward of them. At St. George, which is the head quarters, there is overcrowding also. The average strength of the garrison of the Bermudas is about 1150 men, while the barrack-room, at 750 cubic feet of air per man, only admits of 606.

We need not test the reader's patience with the other details, such as the account given of the Hospital—intended for forty-eight patients, but, allowing 1500 cubic feet for each individual, only capable of accommodating twenty-four—*with large store-rooms and pack stores occupying its basement floor!*

There are striking features of similarity between many epidemic diseases. The three factors for the cultivation of cholera, says Dr. Richardson, are:—1. A centre of pollution for its cradle; 2. a ship for its transport; 3. a number of cities and towns properly prepared for its reception and development.

*En passant*, we may state that Dr. Barrow argues strongly in favour of the local origin of this epidemic of yellow fever, and against its importation into the colony. The first and second true cases of the disease, however, appear to have occurred in the persons of men who had arrived from Nassau, which is a significant fact to our minds. Be this as it may, in whatever way we view the facts we arrive at one result, viz., the abominably insanitary state of the town and garrison of St. George. Now comes one of the most extraordinary pieces of official hardihood. The 2nd Queen's, on its arrival from Gibraltar, was encamped near the town of St. George. The civil Physician warned the commanding officer of the great danger the troops were incurring, recommending their immediate removal; in spite of which a large body of these unacclimated troops was kept for fifteen days in the same dangerous locality. One would have thought the authorities were actuated by a spirit of dogged indifference, but for the totally inadequate efforts which they subsequently made. The troops were not only moved too late, but this removal was rendered very ineffective when it did take place. The General Hospital establishment, commissariat, purveyors, ordnance stores, etc., had been allowed to remain in the town, or its close proximity, necessitating the constant exposure of a great many men to the same pestiferous locality. Of course no one can now say of what kind, or how many, were the representations made by the Medical officers; but we are bound to state that the writer of the report from which we quote acted with great energy and discrimination. The spread of the disease was at last subdued, not without entailing a fearful loss of life among officers and men alike, including a, relatively, very large number of military Surgeons.

Now let us turn to China, for the latest, as well as the saddest exhibition of an utter want of foresight in preventing, and the most reprehensible mismanagement in dealing with the evils when they did arise. The story appears to be a simple one. The Government had determined upon reducing the army expenses on the China station, and no sacrifices must stand in the way, we presume, when the Government has made up its mind. The Indian allowances were to be withdrawn in order to effect this reduction, although Hong Kong is about the dearest station in the world. To do this, the native Indian troops were to be removed and replaced by British troops. Indian soldiers can stand the Chinese climate and exposure to night air much better than British ones. So far, then, there was some risk in the measure, but this was very far from being all. The barrack accommodation at Hong Kong is bad at the best. It is insufficient for *one* regiment, much less for two; indeed, it is so limited as to be in reality only adequate for *one wing of a regiment*. We know what China is: there is no lack of evidence in proof of fever, dysentery, and cholera being endemic there. On a previous occasion the 59th Regiment was well nigh destroyed by disease.

The late season proved to be a very unhealthy one, and the Government authorities seemed determined that nothing should be wanting on their part to place the garrison in the most unfavourable and inviting condition. We have heard that when the steam-transport conveyed the 11th Regiment there no provision was made for their reception. Their arrival was premature and unexpected. The unfortunate soldiers, and their more miserable wives and children, were lodged almost anywhere and anyhow—that is, they were encamped during the wet season in close proximity to an old burial ground. The items making up the bill of mortality and disease are—(1) an unhealthy season and climate; (2) overcrowding, impurity of air, and insufficiency of rest. The soldier actually did more night duty, and was infinitely worse off as regards accommodation and rest in this pestilential climate than he would have been in the worst barrack in England. How many poor fellows now sleep in the burial ground known as the "Happy Valley," how many more have had their constitutions shattered, will appear from this table, taken from a correspondent's letter in the *Standard* of the 17th ult.:—

*Return of Losses to the Garrison from Death and Sickness between June* 1 *and October* 31, 1865.

| | Officers. | Men. | Women. | Children. | Total. |
|---|---|---|---|---|---|
| Died . | 4 | 87 | 9 | 52 | 152 |
| Invalided . | 8 | 223 | 47 | 57 | 335 |
| Total . | 12 | 310 | 56 | 109 | 487 |

On June 1 the strength of the garrison was 93 officers and 1871 men.

Many of the survivors, the convalescents, and the women and children were despatched to Japan for change of air. As to what happened *there*, we have no need to tell. It was a repetition of the same blundering unpreparedness. The *Times* of the 20th ult. supplies us with the latest facts:—

> "The lists of death and disease have been already given in these columns; but as the tale is not yet told, and we have yet to learn who died at Hongkong, who at Yokohama, to which the 11th Regiment was removed, and who in the further wanderings of the plague-smitten battalion, we will only quote at present a very brief announcement in our yesterday's columns. In our Naval and Military Intelligence we read what must be almost the last act in this strange and miserable history: 'The transport *Gresham*, from Hongkong, arrived in Simon's Bay, December 7, bound to England. On departure she had on board 280 invalids, principally military from the 2nd, 9th, and 11th Regiments. Forty-two are reported to have died on the passage to the Cape; 12 of the worst cases were transferred to the Naval Hospital; 50 of the sick were sent to Seringapatam, and 68 others were placed under canvas at Simon's Town.'"

Exaggerated some of these accounts may be; disgraceful they unquestionably are.

Now, who is to blame for all this want of precaution and miserable mismanagement? The public debit it to the account of the Doctors; and if it really belongs to them there can be no mistake about the verdict they deserve, and will most certainly get. Dr. Dick was the senior Medical Officer at Hongkong, and he must have been in the condition of the Pharisees—seeing he did not see, hearing he did not hear, and, we will add, smelling he did not smell—if he did not protest against the authorities sending an additional regiment to Hongkong. We can know nothing positive of course, but we have heard and believe *that he did repeatedly, earnestly, and emphatically protest against it;* and, what is more, he prognosticated the evils that have actually ensued. We cannot understand it. There were healthy stations near: Singapore is one of them, Japan is another. At the former place there are said to be magnificent barracks, never yet occupied. How comes it that the local authorities did not take upon themselves to post the new regiment there when the danger was so imminent? Mr. Bright and a host of politicians manifest their sympathies with the much-injured black in Jamaica in very impassioned and eloquent terms; can none of these men find a voice for their own countrymen? The matter must be sifted to the bottom. Dr. Dick is to be relieved directly, we understand. We believe and hope, for the credit of the Medical Department and the Profession generally, that it will be proved that every effort was made to point out and avert the calamities which have befallen our troops in China.

## THE WEEK.

### CHARGE OF "MANSLAUGHTER" AGAINST THE ASSISTANT OF A POOR-LAW MEDICAL OFFICER.

We fear that fresh proof of the risk of confiding the care of patients to an unqualified assistant is afforded in the case of one of the Medical officers of the Stockton Union. Mr. John Richardson is the Medical officer for the Middlesborough district, and it appears that his assistant was attending a man named William Jenkinson, since deceased. From the evidence taken at the coroner's inquest it did not appear that the assistant possessed any qualification. The post-mortem examination proved that death resulted from stricture of the urethra, apparently of long standing. No effort was made to relieve the bladder until the man was *in extremis*, and his death was caused, in the opinion of Mr. Jonathan Dickinson, who made the examination, by extravasation of urine from bursting of the urethra in consequence of retention. From the evidence of those who were in attendance upon the deceased, he appears to have repeatedly asked during his illness that an effort should be made to relieve him. The jury returned the following verdict:—

> "We find that the death of the deceased has been caused through the want of competent skill and proper caution on the part of Mr. Simpson [the assistant to the Medical officer], and it is to be regretted that Dr. Richardson [the Medical officer] did not take the opportunity of seeing the deceased earlier."

This being in effect a verdict of manslaughter, Mr. Simpson was committed for trial. We cannot but think that were Union Medical officers to take greater pains to acquaint themselves with the requirements of the regulations prescribing their duties, they would avoid even the risk of appearing accessory to circumstances causing inquiries of this painful character.

### THE MENTAL CONDITION OF EPILEPTICS.

Mr. W. A. F. **Browne**, Commissioner of Lunacy in Scotland, has lately published a lecture, delivered to Professor Laycock's class of Medical psychology, on the question, "Is every epileptic of unsound mind?" which affords some valuable observations on the question of the responsibility of at least one class of the criminal insane. He nowhere hints that all criminal lunatics, or supposed criminal lunatics, are epileptic; and we therefore need not discuss with him the question of moral responsibility in its relation to the great bulk of offenders in whose defence it has been raised. In fact, his theory of the non-responsibility of epileptics supposes a loss of consciousness and memory during the attack the existence of which must be at once negatived by the proof of any preparation for committing a criminal act or endeavour to justify it or to conceal it after its commission. He writes:—

> "There is a portion of each epileptic's moral life during which he has not lived, of which he has no record nor experience, such as other men have; not even of transactions, and these of grave importance, in which he has shared, or seemed to share."

Again:—

> "We have often compared the fury of the epileptic maniac to the rush of a runaway locomotive. It is not only that he throws himself headlong against all opposing objects and forces, regardless of himself and them, overturning, crushing, destroying, but that he is endowed with strength which is as irresistible as his murderous instinct is dangerous. At large he would be a destroyer; in a padded room, doors, walls, fall before his force and fury. André and others have related cases where the orgasm was manifested in a sudden start and race forwards, in a straight line, until the patient was brought up by a wall, or a ditch, or by exhaustion; and then, however marred and mutilated he might be, deep unconsciousness prevailed. I have seen only one case of this kind. An epileptic is the most powerful as well as the most dangerous of lunatics. The mania is almost invariably destructive, often homicidal. Georget and Bucknill have adverted to the frequency of the association of epilepsy with the homicidal impulse. Trousseau, rushing into the region of hypothesis, holds that the mere commission of a motiveless, aimless, unpremeditated murder 'est *presque certainement* le résultat du choc epileptique.'"

Great wits to madness are allied; the author shows that epilepsy is not seldom the connecting link. Julius Cæsar and Napoleon I., Bossuet and Molière, Newton and Madame de Staël, Pascal and Mahomet, are all ranged to support his belief that epilepsy, even when it only amounts to the recurrence of *petit mal*, is always attended by important modifications in the mental and moral condition of the patient.

### THE ISLINGTON INQUEST.

We have received a copy of the verdict pronounced by the Coroner's jury in the case of the woman Margaret Scollard, to which Mr. Hume referred in the letter we published last week. The verdict was one of "death from natural causes" —"inflammation and effusion of serum into the bag of the heart;" but in addition the jury appended the following resolution:—

> "The jury empanelled on the 11th day of January, 1866, at the Earl of Essex, Essex-street, Islington, to inquire into the cause of the death of Margaret Scollard are of opinion that she ought to have had Medical attendance, and that she ought not to have been refused an order at the Workhouse, and that Dr. Hume, the parish Medical officer, ought to have seen her when sent for."

The evidence went to show that the deceased was a woman of 40 years of age, that she was addicted to drinking, and that she had been ill for a long time, having attended as an out-patient at the Royal Free Hospital for four months. On Sunday, January 7th, she was worse, and sent for Mr. Hume, who asked for an order to attend her from the relieving officer. The messenger applied to the workhouse authorities, who refused to give the order, it being Sunday; but told her to go back to the parish Medical officer and tell him "that he must come." Mr. Hume's servant said he could not come, and Mr. Hume stated in the letter which we published last week that he was then at a midwifery case. The woman died at 5 o'clock on the 7th. Mr. Hume heard nothing more of the matter until he saw in a local newspaper that he had been censured by a coroner's jury.

We certainly think that Mr. Hume has a just right to complain. It was not incumbent on him to go to any patient without an order from the relieving officer of the parish. This he never received. When the second message arrived at his house he was absent on Professional duty, and it was impossible for him to attend. He was not allowed to give exculpatory evidence before the Coroner's jury or even informed that an inquiry was to take place, and yet a verdict of condemnation was registered against him. We hope that the verdict did not meet with the approval of the Coroner.

### M. GOUNOD'S "TOBIAS."

We may remind our readers that a grand *function*, as the Spaniards would say, will be held at St. James's Hall on the evening of February 13, in aid of the funds of University College Hospital. Several unpublished works of M. C. Gounod, the author of "Faust," and of that most charming *méditation* on Bach's first prelude, which is or ought to be heard in some shape or other in every drawing-room, will be presented for the first time. There will be a good chorus and full orchestra, under the bâton of M. Benedict; that is, unless the composer himself shall conduct in person, which is possible. The second part of the performance is to consist of an entire new sacred drama on the well known and affecting story of Tobias. There is a kind of additional *prestige* conferred on some of the compositions of Handel by the fact that their earliest public performances were consecrated to the cause of charity. It will be a thing of good augury for the future fame of M. Gounod's "Tobias" that it was first performed for the benefit of a Hospital, in which so much sound work and good teaching has been done; and it will be creditable to the Medical Profession that they give a hearty support to a performance at which the most tender precepts of ancient charity will be combined with the highest flights of modern music, and applied to the cause of science and humanity. To such of our readers as like to vary the dull realities of Physic with speculation of an antiquarian turn, we may commend a study of the original story with a view to the unravelling of the Medical problems contained therein. What was the foundation in fact of the story that Sara had strangled seven successive husbands, each on his nuptial night? Assuming that *seven* may stand for any number more than one, and knowing the prevalent ideas of the demoniacal character of epilepsy, is it possible that she had in an excess of epileptic fury strangled one or more husbands on the nuptial night? Are any similar cases on record? We have heard of one, well authenticated, which gives a shadow of probability. We believe that pinches of snuff, or other strong diffusible stimulant, may turn the scale against an epileptiform attack. Had the empyreumatic vapour of burnt fish a similar virtue in this case? Again, was old Tobit's blindness due to opacity of the cornea? Has the gall of a crocodile or other animal any virtue in causing absorption? Suffice it to say that the machinery of this tale may interest the Medical philosopher, whilst M. Guonod's music fascinates the ladies of his family.

### FROM ABROAD.—THE STOMATOSCOPE—RESPIRATORY THERAPEUTICS—POPULAR LECTURES ON MEDICAL SUBJECTS.

A NEW instrument, to be termed the *stomatoscope*, was exhibited last week to the Paris Surgical Society by its inventor, Professor Bruns, of Breslau. A platinum spiral wire (enclosed in a box-wood cup, to prevent the transmission of heat), brought to a red heat by the passage of an electric current from two of Middeldorps' elements, is placed in the mouth behind the teeth. The light reflected by a very small mirror is sufficiently intense to render the jaw transparent, so as to allow of the vessels proceeding to the roots of the teeth, the smallest specks of caries, etc., etc., becoming visible. By reason of the transparency, even the labial coronary artery may in some subjects be seen at the level of the commissure, and its course followed. The instrument is therefore likely to form a useful means of exploration in dental affections.

M. Sales-Girons, encouraged, we suppose, by the favourable reception which his plan of administering pulverised liquids in a limited class of affections has met with, seems disposed, after the manner of over-sanguine inventors, to convert it into a hobby, to be ridden on all occasions. In a note accompanying a memoir sent into the Academy of Medicine, entitled "Respiratory Therapeutics," he attempts to generalise this plan of treatment, declaring that the bronchi, and not the stomach, are the proper channel for administering the principal medicinal substances. It is true he has only one solitary case to bring forward at present, but his object is to call attention to the subject.

> "If there is a fact," he says, "which may be affirmed by the best proofs of modern physiology, it is certainly the preference which should be given to the respiratory passages over the digestive organs as the means of administering medicinal agents. Organic susceptibility, excellence of tissue, a position in the primary centre of hæmatosis, a special contiguity to the blood globules, a superior aptitude for absorption, cleanness of surface,—all these advantages of the bronchial mucous membrane contrast with the opposite conditions of the gastric membrane as a means for the good administration of medicines. It is true that the respiratory passages do not present the facilities of introduction and dosage enjoyed by the digestive canal; but, if a cure can be better operated through the former, the indication is furnished, and it will be attained by the means of art and practice. Until better contrivances can be devised, we offer the pulverisation of liquids as a means of introducing medicinal substances into the bronchi, as all those of which we now have to treat are soluble in liquids. Until we have clinical proofs, I am aware that the best physiological warrants are but favourable presumptions; but, if these presumptions will induce clinical researches, my end will be answered, for, persuaded that sooner or later the recommendations of physiology will lead to favourable results, my ambition counts only in hastening these on. I have only one case at present—that of an obstinate intermittent fever treated and cured by a pulverised solution of quinine."

The popular lectures on scientific and literary subjects, which have so long formed a feature amongst our own educated classes, have recently taken root in Paris, and have spread through the chief towns with something like enthusiasm. As might be expected, many of these have been characterised by great ability, and their delivery is likely to be of utility. This last remark cannot be predicated, however, of a series now in course of delivery by M. Marchal de Calvi, who, we feel certain, will never find imitators in this country, at least amongst persons of the same stamp as himself. An accomplished orator, and holding himself a high position in the Paris Medical body, he has been addressing immense audiences of ladies and gentlemen in the *Salle Valentino* upon Medical topics, taking cholera, small-pox, vaccination, etc., for his subjects. How difficult such a task must be to accomplish with tact, delicacy, and efficiency before a mixed assemblage of this kind need not be explained, any more than the necessary incompleteness and uselessness of the results which must, after all, attend its execution. If this were all, we might pass the matter by as a mere foolish undertaking; but, when it is stated that the orator has condescended to flatter in place of combating the prejudices of his auditors, and amidst salvos of applause held up what he chose to consider the shortcomings of the Profession to the gaze of a mass of persons totally unfit to entertain an opinion on the matter, one can only regret the right of holding public assemblies in France, which has been so often withheld for so many useful objects, has been granted on this occasion for one so destitute of utility and so fraught with mischief.

### THE PERFECT CURE!

(*From a Correspondent.*)

Two hapless calves are down with the disease, and by dying they teach us that vaccination affords no protection against cattle plague. Thus has the small-pox fancy, falsely spoken of as the general opinion arrived at by scientific men, and puffed into publicity, suddenly collapsed. Soon, indeed, has the vaccination bubble burst—too soon for some who thought to find by it a short and easy road to scientific fame.

The Veterinary Surgeons have so far gained little credit, but they have at least exhibited wisdom in keeping silence and candour in confessing their inability to cure or prevent this frightful malady. Long ago, indeed, did many of them most strongly advocate the pole-axe, and to the pole-axe, wasteful as it seems, shall we come at last. Had this course been resorted to in the first instance how much would have been saved to us which is now lost! We know no more at this moment concerning the nature of cattle plague than we did when the first case occurred in this country. Thousands of pounds have been spent, and we have arrived at the safe conclusion that cattle plague is an "eruptive fever" of a very fatal character; but precisely how it kills, why it kills, and what it is that kills, have we yet to learn.

Now that the work of the Commission is pretty nearly over and those working for it have nearly completed their reports, it is little use suggesting the importance of further scientific investigation. Probably the Government is tired, the Commission tired, and the scientific men tired of the cattle plague; but let us not therefore conclude that all that could be done has been done. A few thousand pounds judiciously spent in experiment would have taught us far more than we now know, not only concerning cattle plague itself, but as regards the nature of some of the most important morbid changes occurring in man and the higher animals. It will be almost a disgrace to the scientific energy, to the wealth and to the persevering nature of Englishmen, if we do not learn the exact nature of this disease before it is effectually stamped out of the country and the opportunity for ever lost. We say *for ever*, for it is quite certain cattle plague will never again be permitted to ravage our herds as it has done for some time past and continues to do at this present time. We wonder that before this there has been no association established for the discovery of the nature of cattle plague, and we strongly recommend enthusiastic veterinarians to take the matter up, get all the scientific assistance they can, and thus gain credit for themselves, for science, and for the country.

## SENSATION SCIENCE.

(*From a Lecturer.*)

Never, perhaps, in the history of British science did things look more dismal than at this time. A few persons with considerable scientific influence, power, and attainments, seem determined to make science appear ridiculous in the eyes of thoughtful men, and it is difficult to decide whether their acts should be condemned as resulting from vulgar taste, from intense conceit, or from bad judgment. There was a time when men worked at science from a love of it and a desire to find out what was unknown before. The discovery of a new truth was their highest ambition; the admiration of their fellow-workers their greatest reward. Teaching what they had themselves learnt afforded them income and brought them renown, and their pupils spread their fame. Quietly they lived and worked; quietly each one contributed his elaborately-carved stone to the ever-rising temple, well knowing how little his life's labour would really advance the great work, but hopeful because he knew others would continue the task when his generation had ceased to work.

But now how different! The scientific of this age speak as if they stood upon some lofty pinnacle and looked down, with something akin to pity, from a vantage ground peculiarly their own, upon scientific work past and to come. Science, or rather that which has been wrongly called science, is to be dragged into vulgar notoriety. Things not yet proven, but of vast interest to thoughtful men, are forced before the public long before they have assumed a form in which they can be either interesting or intelligible. Crude theories are advanced and taught as if they were well-ascertained facts, and are replaced in a few months by new theories as crude and as ill-founded as themselves. Thus the public laugh at the last new thing in science, and come to see the last new man who is brought forward for their amusement, as they come to see the last new giant or the last new conjuror. Surely it is time for those who think at all, to consider if science can be advanced by thus being dragged through the dust. What may not the whole body of scientific men lose, and what can the individual popularisers themselves hope to gain?

Some scientific men, not satisfied with the vast field of nature in which to work, would constitute themselves the directors of the general education of youth. Continually changing science is to be forced into the place of fixed and settled branches of human learning, proved by ample experience to be at least good, and employed for training in our schools; as if every boy's mind were as capable of mastering the last new atomic theory or the Darwinian hypothesis as the elements of Latin and Greek. Nay, there are some teachers of science who, not content with all this, must exalt the teachings of (*their*) science above those of Christianity itself. Plain men are tortured with the so-called scientific truths and the wonders of the universe and the omnipotence of solar energy and the physics of intellectual action, until they feel giddy and begin to loathe the very name of science. *Punch* and little boys will soon laugh at the pretentious boastings of vain-glorious science, and scientific theories will become bye-words. Plain fathers find a scientific authority condemning prayer as useless, and ask themselves with humble anxiety how this man comes to know so much more than they. Then, again, they tremble lest, after all, the confident assertions of modern science should not prove to be true, and, after having seen their sons lured away from the rock on which they fain would have them rest, as they themselves have rested, they find them recklessly abandoned on an ever-shifting sand, which cannot become a resting-place within the time allotted to men to live. To them it seems that the present tendency of science is to destroy all faith, for no scientific man has hitherto stated in plain words what he does believe, or the grounds of the belief he may have. Still, men must have and will have beliefs, and there are some now living who perhaps remember with horror something about a feast of a Goddess of Reason. Some avow that nothing is to be believed save that which can be distinctly demonstrated, and that all that cannot be understood by existing human intelligence is to be regarded as mere fable or the creation of fancy. Sensation scientific thought and work still tend almost unopposed in the same direction.

A scientific man lecturing on a Sunday evening in St. Martin's Hall, looked with horror upon the impious and blasphemous imprecations of the cix. Psalm, and appeared to think that it was his mission to educate the public mind on these matters, concerning which the mouths of the ministers of religion were closed or capable only of utter perversions.(a) After the enunciation of modern scientific dogmas concerning the antiquity of man, the organ peals forth, and the incongruous entertainment is brought to a close. Thoughtful hearers are simply confounded, and wonder what relation there can be between the music of Handel and the antiquity of man. Poor Handel! No one knows better than the scientific men who have thus made themselves conspicuous that no real good whatever can result from such scientific teaching. Of all thorough useless work, the delivery of a sensation scientific discourse must be the most useless. They know by experience that it is impossible for any one to learn science in one or in many scientific lectures, and smatterings of few branches of knowledge are so injurious as smatterings of advanced speculative science, for they necessarily make men more conceited without necessarily making them them more profound.

But if some of those whose stern duty it is to jealously guard the honour and to protect to the utmost the interests of British science, and, above all, to preserve her purity, pandering to the desire for popular notoriety, choose to devote their talents and energies to pleasing and amusing the public, and exalting beyond measure one-sided scientific theories, there is no reason why Medical scientific men should follow. We have no great scientific victories to celebrate or grand discoveries to proclaim. Little by little we may learn more of disease; but how very little we really know, our daily work tells us in language we cannot mistake. The method pursued by Harvey and Hunter is the method which a man must follow if he would advance Medicine. Quietly and submissively working on from year to year, he may, if he live long, succeed in adding something to existing knowledge. Grandiloquent boastings are, however, occasionally met with in modern Medical writings. Assertion sometimes takes the place of research, and the admiration of unthinking and irresponsible writers not unfrequently forces into notoriety that which fair and not too searching criticism would show to be of little real worth. Our reviews often give friendly praise instead of honest criticism; and tact in coming before the public has, perhaps, more to do with mere scientific or Professional success in these days than sober merit or thorough work. If, however, Medicine is to retain the respect of the public, our scientific men must avoid the sensation tendencies of the age in which we live, and if those among us who are aspirants for scientific fame feel tempted to leave the sequestered paths of quiet, steady, unobtrusive scientific inquiry, and ply for short-lived notoriety, let them reflect upon the fate of some of the most recent and most favourite theories recently advanced, forced into short-lived popularity and refuted in a few short weeks, and then reflect how differently Harvey and Hunter thought, and worked, and hoped.

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(a) See an article on "The Sunday Science Movement," *London Review*, January 27, 1866. The true philosopher is usually a man of modesty and good taste. Compare F. W. Newman's eulogies on the Psalms, the Son" etc., etc., quoted in Stanley's second series of lectures.

The days of true work seem past. There was a time when scientific men loved their laboratories and workshops as they now seem to love amusement halls and large audiences; when, instead of forcing their ideas down the throat of a public already suffering from the nausea caused by scientific repletion, they met together, discussed the last discoveries advanced, and encouraged one another to work on. But fashion has already established a new order of things; new sensation scientific articles must enliven the pages of our evanescent, but overwhelming weeklies, and new favourites will be forced into an artificial but fatal notoriety, first petted and spoilt, and then ruthlessly abandoned to fate, or laughed at by the very caterer for novelty who seduced them to emerge from a happy, but useful, obscurity and honest work to serve the trumpery purpose of the hour. S. P. E.

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# REPORTS ON THE EXISTING CONDITION OF TOWN AND COUNTRY,

AND

# THEIR STATE OF PREPARATION AGAINST THE INVASION OF CHOLERA.

(BY OUR OWN SPECIAL COMMISSIONERS.)

## No. IV.—ST. PANCRAS.

THE parish of St. Pancras, with a population (by the last Census) of 198,788, and an area of 2700 statute acres, contrasts favourably with some and badly with other London parishes. Thus Hackney, with scarcely a third of the population, contains 4000 statute acres, whilst Bethnal-green has a population more than half as great, yet a superficial area of only 760 acres. Bordering towards the west upon Regent's-park and Highgate, and easterly upon St. Giles's and Clerkenwell, it contains slums that might almost vie with Bethnal-green and Webber-row; and near to its west end, yet acquiring no tincture of decency from proximity to fashion and society, is the most disreputable court in the whole parish. At the east end is the terminus of the Great Northern Railway, and the "Midland," which crosses here, will, by its proposed alterations, turn nearly 10,000 people out of doors, and at the same time clear away many obnoxious places.

The avocations of the people are very various—costermongers, artificial flower makers, small shop-keepers, stablemen, day labourers, and cabmen, form the chief part of the lower orders. The number of mews is large, and most of the hay-lofts are turned into dwellings. Those who delight in "mazes" may find scope for their ingenuity in exploring these upper regions, in ascending to which, after first passing the hind legs of several horses, you climb a staircase (provided, or not, with a hand-rail, according to the demand for hockey-sticks by the stable boys), and then, if not quite stifled by the smell of hay and horse-dung, you may try to find your way, being lucky if your hat and legs meet with no accidents. Yet the people who live up here are, as a rule, healthy, perhaps because the drains and dung-heaps are looked to once or twice a week for the sake of the money got from the sale of the latter. The "arterial" system of drainage is perfect, as any one may see who will view the plans of it at the Board of Works, where the green circles pointing out the openings into the mains, and the small figures in red and black showing the depths of the drains below the surface at different points, testify to the labour bestowed. To make a summary statement, all the sewage *north* of the main drain running eastwards goes down to Barking Creek with a constant fall, whilst that to the *south* goes to Old Ford, from which level it is pumped into a reservoir to acquire a fall for carrying it to the outlet. In the sub systems of drainage, however, many faults lie, and choked-up drains running under dwellings, broken traps, and drains built of brick, so that the sewage escapes through the crevices, are the causes of much that is bad. Unless these smaller evils be attended to, the means for good may become the seeds of pestilence, since when the traps of the drains leading into the mains are broken, an air-shaft is actually formed leading from the main, and conducting noxious vapour into the yards intended to be made healthy.

The deaths in St. Pancras from *all* causes amount to 22 per 1000, and those from typhus in 1864 amounted to 128; in Bethnal-green, for the same year, they were 138, with a population, as has been shown, of scarcely more than half that of the former. In St. Pancras, the deaths from typhus in 1865 were 135, according to the Registrar-General's Report, showing an increase on the previous year, though slight considering the heat of last summer and the greater crowding.

In point of filth and destitution, I do not think that any dwellings can be found in this parish so utterly bad as those described in the Reports on Bethnal-green and Southwark; and such is the opinion of those who have had opportunities of comparing them; yet still I managed to single out some dreary abodes, and one of the very worst was *Mary-place*, a blind alley situate between Hampstead-road and Clarence-gardens. About twenty cases of typhus have been lately taken into the Fever Hospital from this spot, and it was to accommodate some cases from this place that room was made in the Workhouse. Among them were the patients from whom the late Mr. Roberts contracted his fatal attack of typhus. A policeman to whom I spoke described the inhabitants of *Mary-place* as "thieves, prostitutes, and costermongers," and the aspect of the place seemed suited to the description of its inhabitants. A court paved with flags, much below the level of the street, and slanting downwards at its further end, with a row on each side of dirty two-floor cottages, first met the eye. Lots of begrimed, half-clad children were playing about, some singing "Jolly Dogs," and apparently as happy as they said they were. Other slatternly girls and women lolling out of the windows reminded one strongly of the "March to Finchley." Two whitewashed houses on the right side contrasted strongly with the filthy exterior of the others.

I entered one of the houses where fever had been, and found it to have just such dirty, plaster-stripped walls, with broken floors and ceilings, as were described by your correspondents in the other districts. No traps in the back yard but "five-hole" drain-tiles, and the inevitable oil-butt metamorphosed into a water-tub; the rooms small, from eight to nine feet square, very low and ill-ventilated. I could not smell any effluvia from the drains, but a blear-eyed woman said that the Medical Officer had been there the day before and had told her to scatter some chloride of lime around the apartment. All complained of the bad smells in the summer time. I asked how many slept in the rooms at night, and was told "only three or four." The policeman, however, assured me that as many as eight or twelve slept there. Another house into which I went was much after the same style, enough to show that so long as places exist such as *Mary-place*, we shall not see the last of typhus. I was glad to get away from this locality, and so seemed the policeman, who said—"You see, Sir, we never go there except when we are obliged."

In "Bellford-place," close by, the houses had, I think, the smallest modicum of stairs for descent that I ever saw; there were no traps for the drains, and actual ordure was piled up in one corner close to an over-filled dust-bin.

In *Brook-place*, Munster-square, were broken and wet flags, with a broken closet seat, and a heap of rubbish reaching nearly up to the top of the wash-house. The yard next to this consisted mainly of some puddly soil called a garden, with a small half-dead fir-tree in it, planted round with oyster-shells, the mementoes of last "grotto-day." In this quarter are several more small streets, dirty and forsaken-looking and ill-paved. Wending my way towards the east end of the parish, I came to *Little Pancras-street*, a small thoroughfare near a mews, paved with large round stones slanting down to a gutter in the middle of the street, and well adapted for accumulating rain and sundry fluids ejected from the houses. One of the houses here, No 7, stands prominent in the black books as a fever den. There has been no fever in any other part of this street, so that the circumstances under which

No. 7 is placed are noteworthy. One of a small number of two-storied cottages, it has been innocent of paint and whitewash for at least three years; the walls are plastered with filth, and the ceilings of the rooms displayed the laths in various parts. The state of the backyard was disgraceful even for a pig-stye; the tiles broken and covered over with water; a pool of greenish, milky mixture receiving the drainage from the roof; the water-tub exposed, dirty, and the water in it muddy; the dust-bin so choked up that an accessory dust-heap was made in one corner of the yard; the privy foul and the seat broken; no traps to the drains, but five-hole tiles substituted for them. Close up to this yard were men working in a timber-shed, and to these the proximity cannot have been agreeable. In-doors things were just as bad; the back-cellar was uninhabited, and had been converted into a temporary dust-cart, for here were thrown last summer's accumulations; the smell of it was strong; the woman who dwelt in the front cellar—a low, dark, wet place—said that all during the last summer the stench had been insufferable, yet she paid two shillings a week as rent for the room, such as it was. Six cases of typhus have been sent from this house to the Fever Hospital, and one of these patients died in the Hospital last week but one. I went up-stairs to the room in which the fever broke out. The look of it was melancholy; disorder and dirt were supreme. The length of it was 10 ft. 8 in., the breadth about 9 ft., and the height 8 ft. 4 in., giving 800 cubic feet of air for six people. The mother had taken the fever first, then the father, then the woman who nursed him, and after her it had spread to the front room. The rent for these rooms was from 2s. 6d. to 3s. per week; the only ventilation in them was from broken panes of glass. The drains from the next three houses, if not stopped up, emptied themselves in that of this house. True, the people here were very dirty and slovenly, but whether as a cause or a consequence of the state of their domiciles is open to question. A woman at the rag-shop a few doors lower down said that the house (No. 7) had been ill-looked after for a long time; but she vindicated the healthy condition of her own back-yard, though the dust-hole in it was full to the top. She likewise plunged her arms up to the elbows into the heap to satisfy me that it was "quite clean dust."

More dwellings as bad as those in Mary-place and Little Pancras-street are not easily met with, but I think that the rank next to them may be filled up by *Compton-place*, bordering on St. Giles's parish, and close to Little Coram-street, which has lately figured in the papers as a fever den. *Compton-place* and *Hunter-place* are tolerably well paved, only one part near to the houses, but unoccupied by any, being destitute of any kind of flags or stones; this free ground is, however, a nuisance, since unused cabbage-leaves, stones, and dirt are all thrown upon it. The people who live here are mostly Irish, and destitute enough do some of their children look—"Kays" of the future and presidents of swearing clubs to come, in all probability. The houses vary from two to three stories in height, and are more dirty than they ought to be. A great evil in nearly all of these houses is the placing of the privies inside the lobbies just under the staircase, and as the water-cistern is put either on the top of the privies, or close in apposition to them, it is clear that the chance of pure water is out of the question. Many of the houses have *no yards at all*, so that drains, privies, water tubs, etc., are crammed into corners right under the noses of the tenants. Some of the sleeping apartments are, as it were bedrooms off bedrooms, getting thus only secondary light, which, dim originally, becomes exceedingly glum at last; yet for some of these rooms six shillings a week are paid. At No. 17 there was no back-yard, the closet very dirty, six or seven persons sleeping in a small upstairs room, and great complaints were made about the smells from the drains. Some urinals at the entrance to the court are rather a nuisance in hot weather.

One of the offshoots of Judd-street, which latter is one of the best streets in the parish, is *North-place*, where the abusive and disgusting language of the district seems to be concentrated; whitewash and plaster are unknown here, and the ricketty stairs, sloppy yard, and untrapped drains show as little regard to cleanliness as the indwellers do to godliness. In one of these back yards a breeze which was blowing was operating on a large dirt-heap in the corner, and carrying the particles into the top of the uncovered water-tub, there forming so complete a dusty layer that the nature of the fluid underneath it could not be determined. The cellar was 2s. 6d. a-week, and two dark and dismal rooms on the ground floor 4s. a-week. Great complaints were made of the difficulty in getting the dustmen to come if there were no chance of any beer for them.

In *Catel-place*, Cromer-street, the water-cistern was put over the closet, which was common to the whole court, consisting of several cottages. The traps were broken, and the complaints of the smell from the drains were numerous.

*Draper's-place*, one of those selected by Dr. Jeaffreson for his visits, is chiefly occupied by costermongers, driven from "The Brill" by the railways. It has a bad reputation, and seems to warrant as much by its looks; yet, still, in one or two things, Draper's-place can give a lesson to more pretentious-looking parts. Thus, no drains run under the houses, but they are disposed in a long row under the yards, and empty into the main drain at the end. Twelve months ago typhus was very bad here, and in one of the houses typhus and typhoid were seen in the same room; but since then the drains have been repaired, and the health of the place is now better. One nuisance, however, was there, in the shape of a gully running down the middle of the court, the trap of which at one end was stopped up, so that the slops thrown into it had accumulated, and were offensive.

At No. 20, Lancing-street were lately some bad fever cases. The drains here had, however, been examined shortly before the outbreak, which began in the first floor and extended until at last eight or nine persons were affected. In the front of the house next to this was a large heap of dust, broken pots, and dirt.

At a house in *Wellesley-street* were three cases of typhoid fever in the same room—one child 8 years old having had it first, and the two younger children having been attacked during his convalescence. It was difficult here to say how these attacks arose, for the only defect in the arrangements was a broken trap, everything else being clean and well looked to.

*Isaac's-place.*—Strong smell of acrolein from a tallow-chandler's; rubbish grounds in front of houses; in some no pan to closet. In one of these houses a boy died not long ago from hæmorrhagic small-pox after an illness of only three days. The house and room were very dirty.

*Speedy place.*—One large dust-bin common to the whole court, exposed with no lid. Three cases of typhoid fever at one of the houses. "Five-hole" drain-tiles.

Not to enter more at length into wearying details, I may add that most of that part called "The Brill" in Somers Town, has been cleared away by the Midland Railway; other courts and streets, such as *Hertford-street*, *John's-place*, *Beale's-place*, *South-place*, etc., etc., are much the same, though not quite so bad, as those described.

At 10, West-street, a man littered his horse in the yard and heaped the dung against the parlour window.

*Ashby-street*, King's-cross: Typhus had visited three of the houses here. Some of the people litter their horses in the back parts, and the old tale of dustheaps, exposed water-tubs, and broken privy seats might be repeated here.

In *Span's-place* I found an old harridan in a room so crowded with old garments, chairs, etc., that there was little scope for air—the place certainly was stifling, and the sense of suffocation great. A large feature here was an old arm-chair—a remnant of some owl-and-bottle club, with the motto "In nocte lætamur." I opened the window, the capability of which to be opened much astonished the occupant of the chamber.

Before taking leave of the parish, it may be as well just to notice the new model lodging-houses, which, though not very elegant externally, are still extremely healthy and commodious within. Some of the rooms can be had in sets of two for 3s. a-week, other larger ones at five shillings, and three rooms with a small scullery for 7s. a-week. The drainage is excellent, and the supply of water abundant. Those who occupy the rooms have to take turns at keeping the passages and steps clean. Typhus is a thing unknown here.

Such is a short review of the parish of St. Pancras; and it tends to confirm the conclusions drawn from reports of other parishes in this, that it is the stinginess and carelessness of the small landlords that stand in the way of sanitary improvements. So long as stubborn Vestries will not support the alterations proposed by Medical officers, so long will this system of things continue. We want decent lodging-houses built for people whose wages average 18s. a-week; houses where the drains don't run under the floors, where the water supply is good and kept in cisterns, and where cleanliness is compulsory. Only by these means can we keep away typhus, and preserve lives with less damage to our pockets.

## REVIEWS.

◆

*Du Suicide et de la Folie Suicide.* Par A. Brierre de Boismont, Dr. en Méd. de la Fac. de Paris, Directeur d'un Establissement d'Aliénés, etc., etc. Second Edition. Revue et augmentée. Paris: Libraire Germain, Baillière. 1865. 8vo. Pp. 763.

*On Suicide and Suicidal Madness.* By A. Brierre de Boismont, M.D. Paris. 1865. Second Edition.

This is a really classical treatise. By far the most interesting question with regard to suicide is that of its causation, and on this head M. de Boismont has given us much valuable information; indeed, one-third of the volume before us is taken up by the consideration of this subject. The notes of 4595 cases of suicide, deposited in the Archives du Parquet, are the foundation upon which M. de Boismont builds his remarks upon suicide. It is but just to say that he has shown the greatest carefulness in excluding, as far as possible, the errors which are inseparable from statistical results.

Suicide is undoubtedly hereditary. It is often the only sign of madness which shows itself in a family. Fabret speaks of a family where a taciturn father had six children, five boys and one girl. The eldest, at 40 years of age, threw himself out of a window without known motive; the second strangled himself from disappointment at 35; the third jumped over a window; the fourth shot himself. A cousin threw himself into the river. We are by no means surprised to learn that men commit suicide oftener than women; the proportion is three to one. Women are exposed comparatively seldom to the exciting causes of suicide; they can lean upon another's strength, and they perhaps want the physical courage to inflict deadly injury upon themselves. When they do destroy themselves they usually select a death where there is no disfiguration. They poison themselves with charcoal or drown themselves.

In spite of the popular belief in the tenacity with which old people cling to life, statistics show that suicide becomes more common as age advances. Of all persons living between the ages of 16 and 21, 1 commits suicide in 22,417; of those living between 70 and 80, 1 commits suicide in 8717. More girls commit suicide between the ages of 15 and 20 than at any other time, showing the influence which puberty and its dangers have upon them. Young men living in large cities frequently commit suicide between the ages of 25 and 30, probably because at that period they are mentally excited, and having left the parental roof, have not yet assumed the responsibilities of a new home. But no age is entirely free from suicide. Children of 5 years of age kill themselves because they fear a scolding or because they wish to make their parents sorry, more rarely because they feel themselves a burthen to those who take charge of them. Out of the 4595 cases, 44 were of children under 16 years of age. Nor is excessive old age free. We have it on the authority of a Russian Home Minister that a serf hung himself in his stable at the age of 120.

Nothing has a better influence on suicide than married life. Out of the 4595 cases, only 1644 were married people, although in the general population there are more married than single people. 1180 suicides had children. Absolute want is not such a frequent cause of suicide as is generally supposed. Of the 4595 suicides, 697 were well off, 2000 were earning a livelihood, 1588 (or about a third of the whole number) were poor. Of these 282 appeared to have killed themselves on account of their absolute wretchedness.

The statistics on education are not very satisfactory. Out of 4595, the educational status of 3086 suicides is given. 1362 were well educated; 1656 could write without orthography; 3 could not write; and 65 could not read. M. de Boismont has attempted to trace the influence of education on suicide by comparing his own suicidal tables with those of the Minister of the Interior as to the proportionate number of children sent to school in each department. He says that, without detecting a distinct relation between education and suicide, still the latter is most prevalent in those departments where most children are sent to be instructed.

It is impossible, however, to estimate education from school returns. No doubt the high suicide rate in large towns is greatly due to the irregular education gained in theatres and their places of amusement.

It is difficult to appreciate the effect of any profession on suicide, as we have no returns of the number of persons following each profession.

There is one class of unfortunates whose profession we have always regarded as a direct incentive to suicide. Dr. Tait tells us that in Edinburgh a fourth of the prostitutes annually attempt suicide; one-twelfth actually accomplish it. On the other hand, Parent du Châtelet agrees with de Boismont that suicide among French prostitutes is very rare. Probably this difference is due to the superior education of the Scotch women.

So much for the predisposing causes of suicide. What are its exciting causes? They are often multiple, and are consequently not easy of classification.

The wretchedness which leads to suicide is often the result of idleness, of want of forethought, of prodigality, of drunkenness, sometimes of hunger. Some men kill themselves to secure a competency for others, some because they are ruined, or because they are in debt. The depression produced by want of work, or that which follows a debauch, not infrequently impels towards self-murder.

In another class of cases suicide is committed on account of some family sorrow, the loss of a dear friend, dislike towards the inmates of one's house. Love is a frequent source of suicide. Jealousy prompts either to murder or self-slaughter. Remorse for what one has done, for some shameful action long since committed, the feeling that one is sinking in public or private estimation, often leads to suicide. Play is constantly having its victims. Pride and vanity make many follow the example of Chatterton. Every sentiment, no matter what be its nature, if it is only exaggerated enough, is sufficient to tempt certain persons to the fatal act.

In one class of cases the exciting cause of suicide is physical pain. Those of us who have watched by the bedside of a patient slowly dying from cancer will understand how ardently the peaceful grave is longed for by those whose days know no joy and whose nights know no rest.

Certain diseases, more especially those connected with the genital organs, are more apt than others to urge towards self-slaughter.

Nothing can be more difficult than to decide upon the sanity or insanity of a suicide. Some men look upon the act of self-slaughter as in itself evidence of insanity. M. de Boismont takes the opposite view. He cites typical cases of sane and insane suicide. A military man retires from military duty because a revolution has occurred and he can no longer fight with a clear conscience. The time hangs heavily on his hands. At length he finds that gaming is his only distraction. For some years he goes on gambling—now gaining, now losing, but always losing more than he gains. At a calm moment he reviews his position. He has dissipated half of his fortune; enough remains to educate his son and keep his wife comfortably. He feels that he cannot resist the passion for gambling, which has grown upon him, and that if he goes on the dear ones whom he loves will soon be reduced, by his misconduct, to beggary. He shoots himself dead to avoid such a catastrophe. Again, a melancholic patient imagines that he is persecuted. Soon he sees supposititious enemies surrounding him on every side. He believes that his friends are trying to poison him. He holds threatening conversations with invisible foes. He has not a moment of peace, and at length, unable any longer to endure such torment, he strangles himself. Surely, says our author, common sense would teach us not to class these two cases as parallel; the first was an instance of simple sane suicide, the second of suicidal madness. No doubt there is a wide difference between these two cases, but is it a difference in kind or only in degree?

There are two distinct classes of insane suicides. In the first category, self-murder is immediately due to hallucinations, to illusions, to delirium; in the second, it is perpetrated under pressure from the passions. There is an insane impulse which can always—at least, at first—be combated. But there is no sudden step from one category to another, nor is there a well-marked line between the second class and many who go about without any imputation upon the strength of their intellect.

The man who is most healthy is he whose balance of health is most perfect, whose mind is not in advance of his body, whose judgment is not overruled by his imagination, nor paralysed by his passions. It has been said that civilisation and education sometimes prove more a curse than a blessing; but this can only be because the education is partial and imperfect, so that the just balance is destroyed. That education is the most perfect which cultivates equally the physical, intellectual, and moral attributes of our nature. But how seldom is this education to be obtained! The body is cared for, and the mind is neglected. Æsthetic enjoyment is searched for everywhere, while the reasoning faculties are allowed to decay; or we bow down and worship our intellect, and impiously deny our God.

Men of small minds still wish to shine. They select one faculty and educate it at the expense of the others. They are men of one idea; bigots, intellectual monsters, who bear the same relation to a perfect man as a blacksmith with brawny biceps and shrunken calf bears to the Apollo Belvedere. The danger in this nineteenth century of ours is, that the intellect should be over-stimulated. Realism has the advantage over idealism. There is very little danger that we shall go forth to spill our blood, fighting against windmills, to do honour to some Dulcinea whose charms and graces are entirely supposititious; but there is danger, or if no immediate danger still there is a tendency, to sit down coldly and count up the cost.

> "Whether 'tis nobler in the mind to suffer
> The stings and arrows of outrageous fortune,
> Or to take arms against a sea of troubles,
> And by opposing end them?"

The safeguard against that sane form of self-destruction, which arises because a man doubts whether it is worth his while to live, is found in the consciousness that there is a nobility in suffering, if suffering come in the way of duty, and that every one of us has his place and duty fixed here by One wiser than himself. In the words of a poet of the same school—

> "Ut melius, quicquid erit, pati!
> Seu plures hyemes, seu tribuit Jupiter ultimam,
> Quæ nunc oppositis debilitat pumicibus mare!"

*Some Effects of the Climate of Italy.* By THOMAS KING CHAMBERS, M.D., etc., etc. London: John Churchill and Sons. 1865. Pp. 96.

MOST men in good practice know the climate of Italy, not as a last and doubtful remedy for the consumptive, but as a means of warding off the commencement of degeneration and decay. The clear, dry air, the bright light, and warm sun are resorted to for the purpose, as it were, of baking, drying, colouring, and vivifying the pale, lymphatic, and flabby, who languish under the pale sky and damp air of these islands. Dr. T. K. Chambers, who writes with that knowledge derived from personal observation, will tell us where, how, and when to send our patients, what they should do and what they should avoid.

## GENERAL CORRESPONDENCE.

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### THE SMALL-POX HYPOTHESIS OF THE CATTLE PLAGUE.

LETTER FROM DR. JOHN FAIRMANN.

[To the Editor of the Medical Times and Gazette.]

SIR,—As the *Times* of to-day contains a letter from Dr. Murchison, in which we are informed that he no longer maintains the prophylactic influence of vaccination, there is no need for me to adduce additional instances to show that the fact of cows having had cow-pox gives no immunity from the plague. And, though it has at no time formed any part of my object to cast discredit upon the trials which have been so extensively put in practice as to the preventive power of vaccination, I cannot have been insensible to the utter want of scientific accuracy evinced in so many of these experiments. The surprise is, not that the idea of the preventive force of vaccination is now given up by its ablest advocate, but that such facility in the admission of evidence favouring this idea should have been allowed. When we found such a one-sided experiment as that of Mr. Tollemache with his vaccinated heifer advanced by himself, and not objected to, as forming "a crucial test," any one not biassed by a foregone conclusion, and aware of the real nature of an *experimentum crucis*, must have seen the utter worthlessness of all such trials as those so prominently advanced by the believers in the preventive influence of vaccination. And not only was there an unphilosophical readiness shown in admitting all manner of evidence on the one side, but a commensurate repugnance was displayed when dealing with counter proof.

The statement of fact contained in my letter which you did me the favour of inserting in your issue of the 13th inst. is an illustration of this. I made the statement there on my own personal observation, or on the evidence of competent eye witnesses. Dr. Murchison endeavoured to throw doubt upon my assertion of fact on the evidence of an informant who declined to examine these eye witnesses, and satisfied himself with the opinion of the master, who neither had personal charge of the cows nor had milked them. And we may not doubt, if Dr. Murchison had sifted the grounds upon which this "additional information" rested, he would not have allowed himself to express the doubt he seemed to entertain as to the accuracy of my statement, though it was opposed to the notion he was then so ably advocating. Very possibly, if his "cases" were examined, more doubt would arise as to their accuracy than he himself believes at all likely. Keeping to the principle of my former letter, my information places the evidence as to "Case X." of his letter to a contemporary, of January 20, in a somewhat different light from that in which we have it there given. Upon the whole, the conclusion to be drawn from this, as from too many other instances of theories having been advanced, is, with how much caution we should receive statements of fact when our own opinions are in question.

I am, &c.
JOHN FAIRMANN, L.R.C.P. Edin., etc.
Staffordshire, Hanley, January 31, 1866.

### BLISTERING IN ACUTE RHEUMATISM.

LETTER FROM DR. HERBERT DAVIES.

[To the Editor of the Medical Times and Gazette.]

SIR,—The following brief but very satisfactory notes of the results of the blister treatment of acute rheumatism have been kindly sent to me by Mr. E. Howard Moore. The cases were under his care in the Infirmary of the Bethnal-green Workhouse. They exhibit the rapidity, efficiency, and safety of the plan.

I am, &c.
Finsbury-square, December 16. HERBERT DAVIES.

*Case* 1.—W. H., admitted February 17. All joints affected, but chiefly the right hip, both knees, and right ankle. To these blisters (acetum lyttæ) were applied, which gave relief immediately the serum was evacuated. Next day the right shoulder and wrist were intensely painful and swollen, and were treated in the same way and with a similar result, which shows the necessity of blistering all joints simultaneously, whether affected much or little. Discharged cured, March 1, without any cardiac mischief.

*Case* 2.—W. L., admitted March 3, aged 19. Second attack. Rheumatic pains confined to the knees and ankles, but the fever in this case ran very high. Blisters applied to the affected joints as in the other case, with an equally satisfactory result. Discharged cured, March 15, without any heart affection.

*Case* 3.—C. N., admitted March 21. Blisters were applied to right hip, both knees, and both ankles, as in these joints only was pain felt. Much relief was afforded by the following day, but feeling some pain in right shoulder, he asked to have a blister applied to it. Discharged cured, April 3, without any heart affection.

*Case* 4.—J. L., admitted April 6. Blisters applied to right elbow, right wrist, and right ankle, and also over the heart's region, on account of a slight mitral regurgitant bruit. Discharged cured, May 1, without any heart affection.

*Case* 5.—J. B., admitted April 12. In this case the wrists only were affected. Blisters were applied, as in the other cases, above the seat of pain. Next day able to move the joints without much pain. Discharged cured, April 24.

*Case* 6.—S. J., aged 58, admitted April 28. Joints affected were right hip, right and left knee, and right ankle. To these blisters were applied. The fever in this case was well marked. Discharged cured, May 23, without any heart affection.

N.B.—In all these cases no medicine was given, except in Case 4, when a morphia pill was ordered at night, and in Case 6 a saline mixture as a placebo.

BEQUESTS of one hundred guineas each, free of legacy duty, have been made to the Bristol Infirmary and Clifton Dispensary by Joseph Cookson, Esq., formerly of Clifton, Somersetshire.

# REPORTS OF SOCIETIES.

## ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, January 23.

Dr. Alderson, F.R.S., President.

Dr. C. B. Radcliffe related a case of

### ACUTE UNCOMPLICATED MYOCARDITIS, IN WHICH THE DISEASE WAS DIAGNOSED DURING LIFE.

The case which forms the subject of this article is an example of a grave affection, of which there is little, if any, certain knowledge—acute uncomplicated myocarditis—or, in other words acute inflammation of the muscular structure of the heart, without any inflammation of the endocardium or pericardium. The patient was a fine, stout, strong, married man, middle aged, a varnish maker by occupation. For six weeks he had had occasional attacks of sharp pain at the pit of the stomach, and shooting thence into the left arm—attacks evidently of the nature of angina pectoris. In other respects he thought himself well in health, and he was well enough to follow his daily work, and to get about with little or no discomfort up to the day before his death. When seen for the first time (July 27, 1865), the indications of the disorder evidently pointed to a very weak heart. The pulse was extremely feeble, and somewhat slow, but not irregular. The hands were cold and clammy—remarkably so. The first sound of the heart was absent. The cardiac impulse against the walls of the chest could not be felt. The second sound of the heart could be heard; but faintly only, and several times (in an examination extending over several minutes) it was distinctly reduplicated. There were no morbid sounds of any kind whatever. In the attempt to detect the cardiac impulse the patient winced more than once, and complained of feeling sore and tender at the part. There was no arcus senilis; the arteries were to all appearance free from atheromatous deposits, and, in short, the only indications of physical disorder were those which have been mentioned. The first attack of pain happened at a time of sudden and severe mental trouble. Previous to this the health had been in all respects excellent. The patient was seen for the second time on the following day, and then he was dying. He was sitting awkwardly on the edge of a chair by the side of the bed, supported by his wife. On suggesting that his posture was a very uncomfortable one, he gasped out, "I must keep as I am—I dare not stir." He had been in this position for ten or twelve hours, literally without moving in the least. His face was pale and ghastly; large beads of sweat stood out on the forehead and went trickling down the face; his extremities, upper and lower, were clammy, and corpse-like as to paleness and coldness. The pulse at the wrist had failed altogether. His breathing was short, shallow, and gasping, and with it was a rattle of which the significance could not be mistaken. His mind was clear and collected; he complained of sickness, and said he knew that he was dying. The history given of this sudden change was this—that he got out of bed to pass urine in the middle of the night, after several hours' quiet sleep; and that while up for this purpose the pain at the pit of the stomach returned in an unusually severe form, with cold perspirations, and with a feeling of deadly faintness. For the next four hours this pain continued without intermission, even without alleviation, and then it ceased suddenly, and the condition as suddenly changed to that which has been described. The post-mortem examination was made by Dr. Willis and Dr. Bazire twenty-four hours after death. In the cavity of the pericardium were nearly two ounces of serum, reddened by blood, but having no flakes of lymph in suspension. The pericardium itself presented no traces of inflammation, old or new; its visceral layer was intensely injected with ramifying capillaries filled with dark blood, but without ecchymoses, and elsewhere it was of the natural colour and character. The heart was dilated and flabby. The muscular structure of both ventricles, and in a lesser degree of both auricles also, was soft and friable, of a mulberry-juice colour, almost black in fact, contrasting in this respect in a very marked manner with the natural redness of the muscles of the chest walls. It broke down readily under the finger like hepatised lung. As seen with the naked eye, it did not appear to be fatty, but there were considerable deposits of fat about the exterior of the heart. The endocardium and all the valves were quite healthy, and so also was the aorta. The left ventricle contained some loose very dark clots of semi-coagulated blood; and in the right ventricle were some fibrinous, but not decolorised, clots adherent to the walls. Upon lifting up the heart by a portion of the right ventricle, the muscular structure broke down and tore like wet paper by the weight of the heart itself. Unfortunately, no microscopic examination was practicable. The grounds upon which the diagnosis was made were in the main these:—The history of the disease seemed to point to acute rather than to chronic disease, to begin suddenly in a way which suggested the idea of a "broken heart." There was no sufficient reason to suspect pericarditis or endocarditis, for there were none of the morbid sounds which mark the presence of these inflammations. So far seemed plain enough. It seemed, moreover, that the main symptoms were easily explainable on the supposition that the muscular structure of the heart had been attacked by inflammation. Inflammation of the muscular structure of the heart, as a matter of course, would weaken the muscular powers of the structure, and this weakening would account for that failure in the action of the heart which was the most prominent symptom. Moreover, the same weakening would carry along with it, if sufficient in degree, absence of the first cardiac sound, and absence likewise of the usual cardiac impulse. Nay, it seemed as if the symptoms present—sudden failure in the action of the heart, with loss of its first sound and of the impulse of the apex, with some tenderness on pressure in the intercostal spaces in the cardiac region, with some pain, but without the severe pain of pericarditis, without the morbid sounds of pericarditis or endocarditis, and without arcus senilis, atheromatous vessels or other signs, good or bad, to point to common fatty heart—were all the symptoms and signs one had a right to expect in inflammation of the muscular structure of the heart. At any rate, it was on these grounds, be they sufficient or insufficient, that the diagnosis was made; and it was this diagnosis which led to the post-mortem examination, for if it had not been so, the body—such was the opposition of the friends—would have gone to the grave unexamined.

The President objected to the coinage of new words for cases of disease, and thought in the case just read, carditis would have been a sufficiently distinct term.

Dr. Radcliffe referred to Dr. Stokes as his authority for the word he had used, "myocarditis."

## EPIDEMIOLOGICAL SOCIETY.

Monday, December 4.

Dr. Hermann Weber read a paper on

### PROFESSOR MAX PETTENKOFER'S THEORY ON THE MODE OF PROPAGATION OF CHOLERA,

based on this author's last publication on the subject.(a) Pettenkofer believes that the disease is propagated by human intercourse, and never without it. Not, however, by simple contact with the diseased or their excretions, according to the old theory of contagion, but by means of certain local accessory causes relating to the soil. The only indispensable conditions are human intercourse yielding the germ in the excretions of cholera patients, and the soil developing this germ into activity. The qualities of the soil considered as necessary for the cholera germ are: 1. That it shall be porous—*i.e.*, permeable to air and water; 2. That subsoil water shall exist at a certain depth below the surface; and 3. That the soil shall be to some degree impregnated with the products of organic decomposition, especially those of excrementitious origin. Respecting the first condition, Pettenkofer and the members of the Bavarian Commission for the Investigation of Cholera in 1854 have found, without a single exception, that the soil in the towns and villages epidemically affected with cholera was porous, while localities built on impermeable rock were either entirely spared, or at all events exhibited only isolated cases. Several apparent exceptions were on closer examination found to confirm the law. The well-known researches of Boulbee and Fourcault are in accordance with this law. 2. With regard to the presence of subsoil water, Pettenkofer points to the fact generally acknowledged that the cholera spreads with predilection along the courses of rivers, and in hollow situations; but he regards the water of the soil underneath the habitations themselves as much more important than that of the more distant river, and maintains that, as a rule, those localities suffer more from cholera which lie nearer to the level of the subsoil water, the distance of which from the surface depends, of course, on the depth of the first impermeable strata. The level of the subsoil water in the same locality may vary considerably in the same year, and in different years; on this fluctuation the varying degree of susceptibility of the locality for the cholera epidemics seems to depend. Under equal circumstances the rise of the ground water will cause a greater susceptibility by moistening a higher stratum of the porous soil, which is generally more impregnated with organic matters the nearer it is to the surface. It is the period of receding of the ground water from its greatest elevation which is most dangerous; as this occurs usually in July, August, and September, cholera usually makes its greatest ravages at that period; but the unfavourable condition of the soil may, through unusual circumstances, occur in winter instead of in summer, and cholera epidemics may occur, as experience shows, in the midst of a Russian winter. With regard to the cholera germ itself, the author assumes it to be contained in the intestinal excreta of cholera patients, but believes that it cannot produce cholera by itself, but must first undergo some change under the influence of the susceptible soil, and thus become developed. This interchange between the cholera germ contained in the excreta and the soil may, the author suggests, either take place in the soil, and the developed germ may be thence inhaled, or otherwise introduced into the body, or it may take place within the human body itself, the product being the active germ.

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(a) "Ueber die Verbreitungsart der Cholera." *Zeitschrift für Biologie.* Jahrgang, 1865, pp. 323, ss.

[⁂ *Quere.*—Is not the subsoil water the direct vehicle of the poison when, and when only, used for drinking purposes, as Snow and Richardson affirm? and is not the alleged necessity of interchange between the cholera germ and the soil an unnecessary incident in the propagation of cholera?—*i.e.*, would not the *fresh* excrement of a cholera patient admitted into the mouth, or inhaled, as in the act of washing dirty clothes, be enough to propagate the disease? —Ed.]

## BOOKS RECEIVED.

Clinical Notes on Uterine Surgery; with Special Reference to the Sterile Condition. By J. Marion Sims, A.B., M.D., etc., etc. London: R. Hardwicke, 192, Piccadilly. 1866. Pp. 436.

⁂ Dr. Marion Sims takes as the basis of his work the several conditions which are necessary, collectively, for fertility. These he enunciates in eight formal postulates; and then in as many divisions of his work treats of the physical conditions opposed to each necessary condition of fertility, and of the Surgical measures which may remove those conditions. Many things are here described on paper which have hitherto been veiled in Professional silence, even if they entered the imagination of Professional men. Still, Dr. Marion Sims has but carried out minutely, and with many a detail which he probably would be glad to have spared himself, processes of fertilisation, some of which are well known to readers of John Hunter. We shall not be surprised, by the way, if the publication of this book, and the extension of the remedial agents for sterility which it includes, shall in time supply a great want, in the shape of a new, elegant, truthful, and suggestive term of vituperation. We are already in possession of a tolerably copious vituperative vocabulary based upon the supposed paternity or maternity of the person vituperated, and varying from the mild "son of a gun" up to the more sporting phrase "son of a bitch," and to the still severer "son of a w——e." If Dr. Marion Sims's book acquire due vogue, young people in the next generation will ask in wonder the meaning of the phrase *"son of a squirt!"*

A Report upon the Epidemic Occurring at Maplewood Young Ladies' Institution. By A. B. Palmer, M.D., etc., etc. Boston: Clapp and Sons. Pp. 36.

⁂ A most valuable document for any one who wants to know the cause of typhoid. Here were 56 cases of typhoid and 16 deaths in a school and family of 112 persons, and all clearly proved to proceed from the effluvia of privies and cesspools.

The Westminster Review, January, 1866.

⁂ Good articles on Sir W. Hamilton, Coleridge, Palmerston, Livingstone; and one on Vivisection.

The Glasgow Medical Journal, January, 1866.

⁂ The original articles are all good;—a Successful Ovariotomy and a paper on Tracheotomy in Croup, by Dr. G. Buchanan; one on Embolism, by Dr. Gairdner; Superfœtation, by Dr. Paxton; Tetanus, by Dr. Holt; Typhus, by Dr. Perry and Dr. Currie; and Hernia of the Stomach, by Dr. Paxton.

The Quarterly Journal of Microscopical Science, etc., January, 1866.

⁂ A good paper by Jabez Hogg on Vegetable Parasites of the Skin.

The Half-Yearly Abstract of the Medical Sciences. Vol. 42. July to December, 1865. London: John Churchill and Sons.

Report of the Metropolitan Board of Works, 1864 and 1865.

The Use of the Hypophosphites of Soda and Lime in the Treatment of Consumption. By John C. Thorowgood, M.D. London: McGowan and Danks.

A Lecture on Sanitary Science: its Importance as a Branch of General Education. By A. B. Palmer, M.D.

Medizinische Jahrbucher. Jahrgang, 1866.

On Intra-Thoracic Cancer. Part 2. By John Cockle, M.D. London: John Churchill and Sons.

Nouveau Dictionnaire de Médicine et de Chirurgie Pratiques. Tome Quatrième.

The Anatomical Remembrancer; or, Complete Pocket Anatomist. Sixth Edition. London: John Churchill and Sons.

Die Lehre von der Mania Transetoria. Von Dr. R. Krafft Ebing.

Die Febris Recurrens in St. Petersburg. Von Dr. Hermann und Dr. Kuttner.

The Introductory Address Delivered at the Opening of the Medical Department of King's College, London, Session 1865-66. By William Priestley, M.D. London: W. and R. Chambers.

A Treatise on the Principles and Practice of Ophthalmic Medicine and Surgery. By T. Wharton Jones, F.R.S. Third Edition. London: John Churchill and Sons.

The Journal of Mental Science, January. London: John Churchill and Sons.

The Journal of Social Science, January. London: Chapman and Hall.

The Harveian Oration, 1865. By Henry W. Acland, M.D. London: Macmillan and Co.

## MEDICAL NEWS.

Royal College of Surgeons of England.—The following gentlemen having undergone the necessary Examinations for the Diploma were admitted Members of the College at a meeting of the Court of Examiners on the 25th ult., viz.—

Stephen Woottan Bushell, Brixton, Herbert Goldingham Budd, Wercester, and William Ifill Buhôt, M.D. Jeaff. Coll., Pennsylvania, Tobago, West Indies, Students of Guy's Hospital; Israel John La Mert, Albemarle-street, of University College; John Fraser Hussey, Salisbury, of King's College; Thomas Diver, M.D. St. Andrew's, and L.S.A. London, of St. Bartholomew's Hospital; and Henry Pelham Gordon, Queensland, of the Dublin School.

It is stated that out of the fifty-six candidates who have been undergoing their Examinations at the College during the past three days, only eight were referred back to their studies for six months.

Naval Surgeons.—At a meeting of the Court of Examiners on the 25th ult., the following Assistant-Surgeons in the Royal Navy passed their Examinations for full Surgeons in that department of the public service, viz.—

William Yarde, M.D. St. Andrew's, of Her Majesty's ship *Industry*, Woolwich Dockyard, Diploma of Membership of the College dated July 3, 1857; Robert James McMorris (half-pay)), Member May 16, 1859; Archibald Grant Colquhoum, L.S.A., of the Royal Marine Infirmary, Woolwich, Member July 30, 1861; and George Curtis, of Haslar Hospital, a Licentiate of the Royal College of Surgeons Ireland, May 20, 1861.

Apothecaries' Hall.—Name of the gentleman who passed his Examination in the Science and Practice of Medicine, and received a Certificate to Practise, on Thursday, January 25, 1866:—

Henry Pearson, Plymouth-grove, Manchester.

The following gentlemen also on the same day passed their First Examination:—

William French Thurston, Guy's Hospital; Richd. Strange Hall, Manchester, Guy's Hospital.

Of the thirty-two candidates who presented themselves for the Preliminary Examination in Arts on January 26 and 27, 1866, the following passed and received Certificates of proficiency in general education, viz.—

William Atter, Edward E. A. Batchelor, J. H. Clark, G. K. Elphinstone, William Edwd. Fulford, Henry B. Harrison, Charles Hamor Hill, Thos. Wood Hill, William Hodgson, W. H. Johnson, John C. Keighley, Henry Medd, J. W. Moss, Alfred Blake Norman, Windham Randall, B. Stewart Ringer, William Sheard, H. H. Spratt, Thomas Unicume, Samuel Walker, Francis Warner, Fredk. William Willmore.

### APPOINTMENTS.

⁂ The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Boxwell, Richard, L.K.Q.C.P.I., has been elected Medical officer to the Workhouse Infirmary and Fever Hospital of the Gorey Union.

Butt, W. F., M.R.C.S. Eng., has been elected Resident Surgeon to St. Pancras Workhouse and Infirmary.

Chater, Sidney, M.R.C.S. Eng., has been promoted to the rank of Surgeon in the London Rifle Brigade.

**Craster, Thomas L.**, M.R.C.S. Eng., has been appointed Medical Officer for the Bramley Union Workhouse.

**Flinn, John J.**, L.R.C.P., has been elected Surgeon to West Derby Union Workhouse.

**Hilliard, Henry C.**, L.R.C.P. Lond., has been elected House-Surgeon to the Surrey County Hospital, Guildford.

**Soper, Robert W.**, M.R.C.S. Eng., has been elected Resident House-Surgeon to the South Devon and East Cornwall Hospital, Plymouth.

**Webster, Thomas J.**, M.R.C.S. Eng., has been appointed Assistant Medical Officer to the Budge-street Workhouse, Manchester.

## BIRTHS.

**Batt.**—On January 27, at 37, Clapham-road-place, Clapham, the wife of Edward Batt, M.D., of a son.

**Bell.**—On January 18, at Castle-terrace, Edinburgh, the wife of J. Bell, M.D., of a daughter.

**Biggs.**—On January 25, at Springfield, Tooting, S., the wife of J. Strange Biggs, M.D., of a son.

**Browning.**—On January 30, at Stoke Damerel, Devonport, the wife of B. Browning, M.R.C.S., R.N., Surgeon H.M.'s steamer *Basilisk*, of a daughter.

**Diver.**—On January 23, at South Penge-road, Penge, the wife of Ebenezer Diver, M.D., of a daughter,

**Fuller.**—On January 25, at Manchester-square, W., the wife of Henry W. Fuller, M.D., of a daughter.

**Graham.**—On January 24, at Everton-road, Liverpool, the wife of Dr. A. F. Graham, of a daughter.

**Harris.**—On January 24, at Reigate, the wife of Henry Harris, M.R.C.S. Eng., of a son.

**Houghton.**—On January 26, at 6, Mount-street, Grosvenor-square, W., the wife of Henry G. Houghton, M.D., of a daughter.

**Knight.**—On January 5, at Sibford Ferris, Banbury, Oxon, the wife of C. F. Knight, M.R.C.S. Eng., of a daughter.

**May.**—On January 29, at 41, Sloane-square, S.W., the wife of A. S. May, M.R.C.S.E., of a son.

**orton.**—On January 27, at Clifton, the wife of Assistant-Surgeon J. S. Morton, M.D., Madras Army, of a son.

**Nicholas.**—On January 29, at Wandsworth, S.W., the wife of Dr. George E. Nicholas, of a son.

**Twyford.**—On January 24, at St. Helens, Lancashire, the wife of E. P. Twyford, M.D., of a daughter.

## MARRIAGES.

**Frodsham—D'Iffanger.**—On January 30, at St. Mark's, Hamilton-terrace, John M. Frodsham, M.D., to Therese, eldest daughter of the late Thomas D'Iffanger, Esq.

**Gray—Adams.**—On January 18, at the Parish Church, Petersfield, Hants, Frederick J. Gray, Surgeon, of Rugeley, to the second daughter of W. Adams, Esq.

**Hammond—Hawkins.**—On January 24, at St. Saviour's, Hampstead, Charles Hammond, L.R.C.P., to Amelia, eldest daughter of Thomas Hawkins, Esq.

**Jones—Smith.**—On January 23, at Liverpool, P. W. Jones, Surgeon, of Shrewsbury, to Matilda, daughter of the late W. A. Smith, Esq.

**Maudsley—Conolly.**—On January 30, at Hanwell, Henry Maudsley, M.D., to Annie Caroline, youngest daughter of John Conolly, M.D., D.C.L.

**Park—Williamson.**—On January 24, at Union-street, Aberdeen, George Park, M.D., to Christian, younger daughter of the late P. Williamson, Esq.

**Peacock—Ridge.**—On January 18, at St. Giles's, Cambridge, Albert L. Peacock, M.R.C.S.E., of Churchinford, Devon, to Fanny, eldest daughter of S. Ridge, Esq.

## DEATHS.

**Crosse, Thomas**, M.R.C.S. Eng., at Thorverton, Devon, on January 22, aged 68.

**Duncan, William**, L.R.C.S. Edin, at Amble, Northumberland, on January 21.

**Evans, William H.**, M.R.C.S. Eng., at St. Albans, Herts, on January 28, aged 53.

**Frame, John**, M.D. St. And., at West-street, Glasgow, on January 18.

**Griffith, Richard J.**, M.R.C.S. Eng., formerly Surgeon R.N., at 15, Adelaide-road South, Hampstead, on January 25, aged 79.

**Hulme, Mr.**, Physician's Assistant at the Royal Infirmary, Manchester, of typhus fever, on January 20.

**Laycock, Robert**, L.R.C.P. Lond., at Bramley, Leeds, on December 28.

**Morton, John**, late Superintending Surgeon Madras Medical Service, at 13, Brighton-park, Clifton, on January 28.

**Schuh, Professor Franz**, the distinguished Professor of Surgery of the Vienna University, and Surgeon to the General Hospital, died at the latter end of December.

**Smellie, John**, L.R.C.S. Edin., at Ruddington, Nottinghamshire, on January 18, aged 62.

**Strutt, George H.**, M.R.C.S. Eng., at Tutbury, near Burton, on January 21, aged 32.

**Walker, William G.**, M.R.C.S. Eng., at Oxford, late of Brill, Bucks, on January 24.

## POOR-LAW MEDICAL SERVICE.

⁂ The area of each district is stated in acres. The population is computed according to the last census.

### RESIGNATIONS.

*Crediton Union.*—The Morchard Bishop District is vacant; area, 13,200; population, 2776; salary, £52 10s. per annum.

*South Shields Union.*—Mr. James Williamson has resigned the Workhouse; salary, £35 per annum.

*Southwell Union.*—The Eighth District is vacant; area, 16,664; population, 2091; salary, £20 per annum. Also the Ninth District; area, 19,23[illegible]; population, 3361; salary, £25 per annum.

### APPOINTMENTS.

*Buntingford Union.*—Benjamin Cocks, L.R.C.P. Edin., M.R.C.S.E., L.S.A., to the North-East District.

*Clutton Union.*—Alexander Waugh, M.R.C.S.E., L.R.C.P., to the Midsomer Norton District.

*Croydon Union.*—Peter Thomas Dean, L.R.C.P. Edin, M.R.C.S.E., to the Second District.

*Dartford Union.*—William Parker Hoare, M.R.C.S.E., L.S.A., to the First A District.

*Derby Union.*—William M. Bobart, M.R.C.S.E., L.S.A., to the First District.

*Fylde Union.*—William Gradwell, L.R.C.P. Edin., M.R.C.S.E., L.S.A., to the Lytham District.

*St. Giles and St. George, Bloomsbury, Parishes.*—Matthew Charteris, M.D. Edin., M.R.C.S. Edin., as Assistant Workhouse Medical Officer.

*Isle of Wight Union.*—Henry Lynch, M.D. Aber., M.R.C.S.E., L.A.H. Dub., to the Shorewell District. Frank B. Tuttiett, M.R.C.S.E., L.S.A., to the Whippingham District. Ernest Powell Wilkins, L.R.C.P. Edin., M.R.C.S.E., L.S.A., to the Carisbrooke District.

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**The New Baronets.**—The *Gazette* of Tuesday last contains the official announcement of the baronetcies conferred on Sir J. Y. Simpson, M.D., and Sir Dominick Corrigan, M.D., Physicians Extraordinary to the Queen in Scotland and Ireland.

**Dr. Forbes Winslow.**—It affords us great gratification, and we feel assured the Profession will participate in the feeling, to be able to announce that this Physician, who has for these last nine months been suffering from an injury to the spine, caused by a fall from his horse, is sufficiently recovered to resume the practice of his Profession.

**Death of a Medical Officer from Fever.**—We are sorry to announce the death of Mr. Hume, one of the Physician's Assistants at the Royal Infirmary, Manchester, who died on Monday, January 22, from malignant typhus, contracted in the discharge of his duties. He was a most zealous and earnest Medical officer, and universally beloved by those with whom he came in contact.

**Death of a French Judge from Hydrophobia.**—Two days since M. Blondel, one of the judges of the Tribunal of Arbois, France, died from hydrophobia. The unfortunate gentleman had been bitten two years since by one of his dogs while out shooting.

**The Venereal Diseases Commission.**—The report of the members of this important Commission has just been submitted to the Lords of the Admiralty, and it is stated that some stringent measures have been proposed for the purpose of diminishing the evils which are so detrimental to the health of our sailors and soldiers.

**Mr. Stokes, of Nailsworth.**—Mr. Stokes, the highly respected Surgeon of Nailsworth, has been presented by the inhabitants of that town and its neighbourhood with a testimonial of the value of £226. It consists of a silver claret jug and stand, a microscope, and a portrait of Mr. Stokes, which is to be placed in the Subscription room.

**Hunterian Museum.**—A skeleton of the Greenland whale (*Balnæa mysticetus*) has recently been added to this collection.

**Mr. Peabody** has presented the poor of London with a second gift of £100,000. Considering the destruction of their houses by railways, this splendid alms is now doubly welcome. But surely English millionaires will not be outdone in benevolence by a foreigner? It will take much more than the quarter of a million Mr. Peabody has so generously given to build up the dwellings of the poor which have been destroyed by public companies. But either they must be replaced or we must be prepared to provide fever Hospitals, workhouses, and orphanages on a proportionate scale.

**Cambridge.—Medical Officers of Unions.**—A great deal of discussion is now going on involving questions of the utmost importance to the Profession as to what are the duties of Medical officers of unions. At a recent meeting of the Cambridge Board of Guardians, Dr. Ransom, who had resigned the appointment of District Medical Officer and accepted that of the house, called the attention of the guardians to the fact that orders had been given indiscriminately to persons not considered paupers, and that he had attended such persons. The Board might decide that they were not paupers, whereupon Dr. Ransom writes to know to whom he is to look for payment for services rendered. It appears that the relieving officer was to blame in granting orders to persons able to pay for medical attendance. The guardians are in a dilemma, for first they decide the persons are not paupers, and then that they are, and that the Medical officer is bound to attend anybody, and that they have nothing to do with Dr. Ransom's complaint. Up to the present time no gentleman has offered himself as a candidate for Dr. Ransom's place as Medical officer of the second district.

THE ANNUAL GENERAL MEETING OF THE ODONTOLOGICAL SOCIETY was held on the 8th instant, at 32, Soho-square; the President (Mr. Thomas Rogers) in the chair. Notice had been given by the Council of proposed alterations in the laws and bye-laws of the Society. A long discussion took place, and the matter was referred back to the Council for reconsideration. The following gentlemen were elected as council and officers of the Society for the ensuing year:—*President*: W. A. N. Cattlin, Esq. *Vice-Presidents (Resident)*: W. Imrie, Esq., W. Perkins, Esq. G. A. Ibbetson, Esq. James Parkinson, Esq., H. J. Barrett, Esq.; *(Non-Resident)*, S. Tibbs, Esq. (Cheltenham), Dr. Roberts. (Edinburgh), R. H. Moore, Esq. (Dublin), C. Bromley, Esq. (Southampton). *Treasurer*: Arnold Rogers, Esq. *Librarian*: J. B. Fletcher, Esq. *Honorary Secretary (Ordinary)*: J. Drew, Esq. *(For Foreign Correspondence)*: Thomas Underwood, Esq. *Councillors (Resident)*: H. T. Kempton, Esq., R. T. Hulme, G. Owen, Esq., A. Hill, Esq., S. Cartwright, Esq., E. J. Winterbottom, Esq., J. Saunders, Esq., F. Weim, Esq., R. Hepburn, Esq., W. A. Harrison, Esq., J. Tomes, Esq.; *(Non-Resident)*, S. L. Rymer, Esq. (Croydon), W. Hunt, Esq. (Yeovil), J. A. Baker, Esq. (Dublin), T. R. M. English, Esq. (Birmingham), J. King, Esq. (York), N. King, Esq. (Exeter).

PORT ROYAL SENNA.—A species of senna, used largely in Jamaica by both French and English, has been very recently again re-brought to England by Dr. Bowerbank. It is the produce of the Cassia Porturegalis (Bancroft), or Port Royal senna, and passes many qualities that recommend themselves strongly to our notice. Its taste is very much—in infusion—like that of tea; it possesses very efficient purgative qualities, and never gives rise to griping or other sign of irritation; it is especially valuable for children. It may be given in infusion, or more conveniently, perhaps, in the form of a liquor. It is not at all improbable that it will very greatly supersede—when better known—the ordinary varieties, which, however prepared, always exhibit a certain nauseous quality especially disliked by children, a property which the Cassia Porturegalis seems to be entirely devoid of.

A RECIPE FOR LONGEVITY.—The *Moniteur* relates that the will of a certain Dr. Julius von Fischweilher, of Magdeburg, who died at the age of 109, has been opened with solemnity conformably to the wishes of the testator, as in it he bequeathed a communication of importance. It discloses that the whole secret of his longevity, which is also attainable by all who will follow his directions, consists in assuming the horizontal position as often as possible, and always during the night, in such a manner that the head may be kept in the direction of the north pole, and the rest of the body as nearly as possible in that of the meridian. From a persistence in this attitude, corresponding with the course of the magnetic currents which traverse the surface of the globe, there results a regular and continuous magnetisation of the mass of iron which exists in our economy, and consequently a notable increase of the vital principles upon which are dependent all the organic phenomena interested in the conservation of our existence. It is gravely asserted that a society has been formed at Magdeburg for the purpose of continuing the old Doctor's experiments, and ascertaining whether his discovery really possesses the value which he attributed to it.

ACTION OF IRON ON THE TEETH.—Dr. John Smith has contributed to the last number of the *British Journal of Dental Science* some careful observations on the Action of Medicinal Preparations on the Teeth. His experiments were made by steeping human teeth in solutions of eight preparations of iron, in solution of sulphate of quinine (gr. v., to sulph. acid gtt. i., water ℥ss.), dilute phosphoric acid, and Condy's fluid. After steeping for twenty-four hours the teeth were found unaltered in solutions of the carbonate and saccharine carbonate of iron, the phosphate of iron, the iodide of iron, the citrate of quinine and iron, and in that of the sulphate of quinine. Changes had taken place in the solutions of vinum ferri, the muriate of iron, and the phosphoric acid, showing that these preparations had exerted chemical influence on the teeth. Ten days' steeping in vinum ferri, sulphate of iron, muriate of iron, phosphoric acid, and Condy's fluid, produced marked changes in the teeth. Precipitates were formed in the solutions, and the substance of the teeth was softened. From these experiments it would appear that the injurious effect of iron on the teeth depends on the mineral acid with which the metal is combined. Dr. Brown concludes that certain preparations of iron, when directly applied, do exercise a powerful effect on the substance of the teeth. And the ratio of the effects obtained would seem to prove that of all the preparations employed in these experiments that of the tincture of the muriate of iron acts most powerfully, the sulphate of iron next, and next to that again, although in comparison very immaterially, the vinum ferri—the other preparations of iron appearing to be inert.

THE following are the last week's Cattle Plague Returns. By comparison with those of the previous week, it will be seen that there have been 12,842 attacked, 8541 deaths, 740 slaughtered, and 1823 recoveries, since January 13:—

| Census Divisions. | 1. Attacked. | | | 2. Result of reported Cases from the Commencement of the disease. | | | | |
|---|---|---|---|---|---|---|---|---|
| | Week ending January 20. | Week ending January 13. | Week ending January 6. | Attacked. | Killed. | Died. | Recovered. | Remaining. |
| 1. Metropolitan Police District . . | 21 | 38 | 67 | 7418 | 8134 | 3378 | 313 | 593 |
| 2. South Eastern Co. . | 33 | 30 | 107 | 4786 | 1477 | 2674 | 414 | 221 |
| 3. South Midland Co. | 800 | 681 | 786 | 9506 | 1769 | 6277 | 632 | 828 |
| 4. Eastern Counties . | 315 | 265 | 260 | 7587 | 2808 | 3749 | 496 | 534 |
| 5. South Western Co. | 82 | 40 | 59 | 1044 | 256 | 551 | 112 | 125 |
| 6. West Midland Co. . | 444 | 264 | 251 | 2938 | 473 | 1759 | 242 | 464 |
| 7. North Midland Co. | 442 | 565 | 455 | 4109 | 522 | 2770 | 307 | 510 |
| 8. North Western Co. | 3738 | 2465 | 1964 | 15743 | 570 | 10322 | 944 | 3907 |
| 9. Yorkshire . . | 1314 | 1508 | 2028 | 16833 | 882 | 10333 | 2536 | 3082 |
| 10. Northern Counties. | 290 | 216 | 175 | 2330 | 560 | 1168 | 244 | 363 |
| 11. Monmouthshire & Wales . . | 542 | 661 | 319 | 4435 | 97 | 3286 | 448 | 604 |
| 12. Scotland . . | 1960 | 2510 | 2649 | 30639 | 3587 | 17643 | 5143 | 3996 |
| | 10041 | 9243 | 9120 | 107098 | 16135 | 63905 | 11831 | 15227 |

COUP-DE-GRACE TO THE VACCINATION THEORY.—It will be seen from the following letter of Dr. Murchison's that he has given up all hope that vaccination will be of use in staying the progress and spread of the Rinderpest; we suppose that it may also be understood that he is satisfied that Rinderpest is not bovine small-pox. The points of resemblance between small-pox and the cattle plague have been noticed by nearly every writer on the latter disease, from Lancisi downwards; but the subject has not been fully and scientifically examined until lately, and it must now be held to be fully proved that however much alike the two diseases may be, they are not identical. Dr. Bence Jones may, we suppose, be considered as now agreeing with the majority of the Cattle Plague Commissioners as to the means necessary to be adopted to stay the plague; and we will hope that the failure of the protection-by-vaccination theory will at last spur the Government into efficient action. Dr. Bence Jones and Dr. Murchison are rather hard on Mr. Tollemache and others of the "laity" who believed that the "most eminent authorities" held absolutely the doctrine of the identity of Rinderpest with small-pox. The theory was put forward so ably, and the resemblances or points of analogy between the two so insisted on, that non-Professional persons might well be excused if they fell into the not uncommon error of mistaking a very plausible theory for an accepted doctrine:—

"*To the Editor of the 'Times.'*

"Sir,—The points of resemblance between cattle plague and small-pox are so striking that certain observers were led to hope that vaccination might protect cattle from the prevailing disease. The experiment, I believe, has now been fairly and fully tried; and, although the first accounts appeared favourable, there is sufficient evidence that vaccination confers no permanent protection from the plague. It is well that this fact should be generally known by publication in the *Times*. Rigid isolation and the suspension of all movement of living cattle must still be the preventive measures on which we mainly rely.

"In reply to a correspondent whose letter appears in the *Times* of to-day, I may state that neither Mr. Ceely nor I

**ever maintained that cattle plague and human small-pox were identical. We merely pointed out that the analogy between the two diseases was sufficiently close to call for the experimental inquiry above referred to.**

**"I am, your obedient servant,**

**"Charles Murchison, M.D.**

**"79, Wimpole-street, London, W., January 30."**

***(From the "Times" of January 29.)***

**"Sir,—Mr. Tollemache, in your paper to-day, says, 'The most eminent authorities seem satisfied that Rinderpest is bovine small-pox.'**

**"Mr. Tollemache has no authority for saying this. It would be much nearer the truth if he had said that cattle plague in many respects resembles small-pox, and belongs to the same class of diseases; but that it is not bovine small-pox, and cannot be kept off by vaccination or by inoculation, but only by insulation. "I am, your obedient servant,**

**"31, Brook-street, January 27. "H. Bence Jones."**

## NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Dr. Falconer is thanked for his valuable table for registering the temperature of fever.

*An Army Surgeon* says we are wrong in stating the Committee lately sitting at the Admiralty recommended any earlier permissive retirement. Perhaps so; we only gave the rumours we have heard. If there is to be no earlier retirement for the seniors and no earlier promotion for the juniors, it is, in our opinion, tantamount to nothing being done at all. We can only trust, therefore, that our correspondent is mistaken. Time will prove.

*Syphilisation.*—The practice was discussed by Mr. J. S. Gamgee, Mr. H. Lee, and Mr. Victor de Meric prior to the papers of either Dr. L. Lindsay or Dr. D. Simpson. Our correspondent who furnished the memoir of the latter, was, therefore, mistaken in attributing to him priority in the matter. Dr. Simpson, however, brought the results of Christiania experience more prominently before the Profession than his predecessors.

### THE GRIFFIN TESTIMONIAL FUND.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The following subscription has been further received on behalf of the above fund:—Dr. John O'Reilly, Ware, 10s. 6d. Amount previously announced, £132 19s. 3d. Received at *Lancet* Office, £9 9s.

I am, &c.,

Robt. Fowler, M.D., Treasurer and Hon. Sec.

145, Bishopsgate Without, January 31, 1866.

### PUERILE RESPIRATION IN PNEUMONIA.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—At a late meeting of the Medico-Chirurgical Society of London, Dr. Waters, of Liverpool, brought under notice two cases of pneumonia, in which a puerile respiration in the affected part preceded the more ordinary symptoms of the disease. On this point I beg to state that it has been long known in Dublin as occasionally occurring, and will be found specially noticed in the able work of Dr. Stokes published some twenty-five years ago. I am, &c.,

Dublin, January 31, 1866. Henry Kennedy.

### THE LATE DISCUSSION ON LATERAL CURVATURE OF THE SPINE AT THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In your impression of last week, it appears that I stated in the discussion which followed the reading of Mr. Barwell's paper on Lateral Curvature of the Spine at the Royal Medical and Chirurgical Society, that "After rotation had taken place appliances were useless." It should have been that elastic appliances were useless: but well-constructed instruments are sufficient to cure curvature of the spine even after considerable rotation has taken place.

I shall esteem it a favour if you will allow this to appear in your next number. I am, &c.,

20, Grosvenor-street, W., January 27. B. E. Brodhurst.

### GOOD-SERVICE PENSIONS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I beg to bring under your notice and for the consideration of the Director-General of the Army Medical Department, the opportunity now afforded him for recommending for good-service pensions—vacated through the deaths of Sir John McGregor and Sir John Hall—two Medical officers from the half-pay list, who have not been so fortunate in obtaining coveted honours and lucrative emoluments as some of their brethen in the department have been.

The Director-General has ample choice from amongst half-pay Deputy-Inspectors and Staff Surgeons-Major for selecting two officers for these pensions, and I trust he will not be led away by importuning C.B's. and K.C.B's. of the substantial and substantive rank of Inspector-General, who have feathered their nests in India and elsewhere; but that he will select those who have not been so fortunate, their services being as good but their half-pay very considerably less. Colonels in the Army in the enjoyment of good service pensions forfeit therein promotion to the substantive rank of Major-General, and I do not think that Inspectors-General of Hospitals with a rate of daily half-pay of £1 17s. 6d., have any great claim for a pension, especially whilst others of equal Professional merit with a much lower rate of half-pay are eligible for the pension.

I am, &c.,

London, January 25. Crimea.

### POOR-LAW MEDICAL REFORM.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I shall feel obliged by your giving insertion to the annexed list of names of gentlemen who have forwarded their subscriptions towards the funds of the Association. I would willingly at once apply to the Poor-law Board and ask their consent to receive a deputation; but I fear the reply might be—"There is no proof now that any great body of the present Medical officers are dissatisfied with their position." If, however, 500 Medical men should answer the appeal which Mr. Prowse has made to them, then I should feel justified in at once taking active measures, either by a deputation to the Poor-law Board or by a bill in Parliament.

List of subscriptions sent to Mr. Prowse, of Amersham:—Blackshaw, J., Stockport, 5s.; Buée, W. A., Eton, 5s.; Brooks, W. F., Wye, 10s.; Bowes, John, Bleam, 10s. 6d.; Clark, W., Epsom, 10s. 6d.; Willon, J., Ash, 10s. 6d.; Blythman, R. O, Rotherham, 10s.; Arnison, W. C., Hexham, 7s. 6d.; Montgomery, W., Haltwhistle, 5s.; Hewitson, Hexham, 7s. 6d.; Chapman, J., Brentford, 20s.; Brodie, Bellingham, etc., 5s.; B. E., 10s. To Mr. Griffin.—Buckoll, E. C., Radford, 5s.; Turtle, F., St. George-in-the-East, 5s.; Taylor, J., Banbury, 5s.; Ashworth, G. M., Oakham, 5s.; Dicken, P., Ashby-de-la-Zouch, 5s.; Walker, T. O., Towcester, 5s.

I am, &c., Richard Griffin.

### DR. BENCE JONES'S PEROXIDATION THEORY.(a)

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I must agree with your correspondent "Physiologist." in questioning both the correctness of Dr. Bence Jones's "Peroxidation Theory" and the logic of his arguments in its support. Now, I would ask, is it possible that in those diseases of which he has written the phenomena can be due to peroxidation when the resultant products are all more or less highly organised—*i.e.*, possessing a comparatively small percentage of oxygen? If there be, indeed, diseases characterised by processes of peroxidation, evidently peroxidated products must result; the reverse is the case. Indeed, the theories of Dr. B. Jones are contradicted by his practice, for he finds of the most signal service those agents which, as hot-air baths, injection of pure water, etc., in an eminent degree tend, not to de-oxidate, but to oxidate tissue. I should trespass far too largely on your space were I to take up Dr. B. Jones's propositions *seriatim;* one instance will suffice, and scarlatina, which has been already spoken of, will be a convenient one to test the "Theory of Peroxidation."

The chemistry of scarlet fever is evidently this: a sudden arrest of the constant conversion of superficial heat into force (necessary for the driving asunder of perspiratory water to form vapour) causes the retention of this heat in the body (blood); thus aiding in the production of that early symptom of scarlatina—rise of temperature.

This rise of temperature becomes general, owing to the universal arrest of natural decay, solid matters ceasing to be degraded into fluids (a process which would, of course, be accompanied by a corresponding conversion of heat into force). The arrest of destructive metamorphosis in the skin thus spreads to internal organs; the kidney, so manifestly compensating to the skin in its functions, has to do double duty in the elimination of effete products, which should have been removed *per cutem.* For a time this is done; but at length over-taxed, and itself ill-supplied with fibrin, etc., for renewal, and oxygen for the necessary metamorphosis of its own proper tissue, it gives way. This tale is told by the post-mortem appearances of the over-worked organ. We find fibrin, which should have passed away oxidised, retained as fibrinous deposit; lymph accumulated which healthy absorbents and an uninterrupted circulation would have removed; and epithelium both imperfectly organised and irregularly detached.

It may be asked, What, then, is the destination of that oxygen which must at first be redundant? Doubtless, it is misapplied, with the effect of reducing an unusual amount of tissue to a slight degree of oxidation.

I am, &c., Edward T. Blake.

63, Darlington-street, Wolverhampton.

### LINES WRITTEN ON HEARING OF THE SUDDEN DEATH OF CHARLES G. RITCHIE, M.D., DECEMBER 22, 1865, AGED 24.

Doctor Charles Ritchie had attained high distinction in his Profession for learning, ability, and devotion to science. On the day he had signified to his family at Glasgow (he was the only son of Dr. Ritchie, of that city,) his intention of being with them at Christmas, "he was found in his consulting room in a dying state, and he died apparently from some poisonous agent with which he had been experimenting."

A victim to Science,
  A martyr to Truth,
Bidding danger defiance,
  He dies in his youth.
Grand was his history,
  Sudden its close;
Life is a mystery,
  Death a repose.

His life he devoted
  To Science and truth;
His name will be noted
  A lesson for youth.
In his death all consistent,
  Expiring he lay,
With one purpose persistent,
  The truth to essay.

Ah! life is uncertain,
  What tales would be read,
Could man but lift the curtain,
  That shroudeth the dead.
With his heart overflowing,
  He just told a friend,
"To my home I am going,
  The Christmas to spend."

To his home he has gone,
  To the last place of rest,
Where we're all journeying on
  And believers are blest.
The work of Salvation
  He knows through Christ's Grace,
And, beholding Creation,
  Sees God face to face.

Torquay. R. T. E.

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(a) See *Medical Times and Gazette,* January 13, 1866, p. 31.

### GENUINE VACCINE LYMPH.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

r,—As spurious vaccine lymph is being sent into circulation, and the lt of such a fearfully wicked fraud is calculated to lead to much un- ness to those who have used genuine vaccine lymph, and have either ed to produce any result or have obtained the proper one; I trust you allow me to remark that for the last seven years, with but one excep- , and that for a short time, I have been the only person who has ad- tised the sale of vaccine lymph in the *Lancet*, *Medical Times and ette*, *Medical Circular*, *Dublin Medical Press*, and other Medical pub- tions.

ne gentleman, of undoubted respectability, also advertises lymph from cow. I beg to say that on no occasion has any but pure vaccine lymph n collected or sent out by me, and I am sure my numerous correspon- ts, many of whom have been most successful operators lately on cattle, l kindly vouch for the truth of what I aver. Surely those who state rious vaccine is in circulation can also give the names and addresses the persons from whom it was obtained, and thus set the general public their guard against the imposition.

am induced to ask you to allow this to appear, as I am receiving so ny letters asking if I will guarantee the purity of the lymph already plied by me.

I am, &c.,

0, Endell-street, and 12, Roseberry-villas. W. FAULKNER, M.R.C.S.

COMMUNICATIONS have been received from—

. W. FAULKNER; Mr. B. E. BRODHURST; Mr. LAWSON TAIT; Mr. E. T. BLAKE; CRIMEA; APOTHECARIES' SOCIETY; Dr. W. FALCONER; ROYAL INSTITUTION; Mr. R. GRIFFIN; Messrs. SOUTHARD and Co.; Dr. DIVERS; Dr. J. N. VINEN; EPIDEMIOLOGICAL SOCIETY; X. Y. Z.; KING'S COLLEGE MEDICAL SOCIETY; Dr. A. SAMUELSON; NEMO; Dr. ROBERT FOWLER; Dr. P. MANSON; MEDICAL SOCIETY OF LONDON; Dr. FOTHERBY; Dr. G. AIRD; Dr. KENNEDY; Dr. EDWARD CRISP; Dr. FREDERICK SIMMS; Dr. HANDFIELD JONES; Dr. TILBURY FOX; Mr. G. F. DUFFEY; Dr. W. D. MOORE; Mr. J. HUTCHINSON; Dr. E. DIVERS; Mr. J. CHATTO; Dr. HUGHLINGS JACKSON; Dr. B. W. RICHARDSON.

## VITAL STATISTICS OF LONDON.

*Week ending Saturday, January 27, 1866.*

### BIRTHS.

Births of Boys, 1090; Girls, 1059; Total, 2149.
Average of 10 corresponding weeks, 1856-65, 1918·3.

### DEATHS.

| | Males. | Females. | Total. |
|---|---|---|---|
| Deaths during the week .. .. .. | 674 | 689 | 1363 |
| Average of the ten years 1856-65 .. .. | 725·2 | 733·8 | 1459·0 |
| Average corrected to increased population.. | .. | .. | 1605 |
| Deaths of people above 90 .. .. .. | .. | .. | .. |

### DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

| | Population, 1861. | Small pox. | Measles. | Scarlatina. | Diphtheria. | Whooping-cough. | Typhus. | Diarrhœa. |
|---|---|---|---|---|---|---|---|---|
| West .. | 463,388 | 1 | 9 | 2 | 1 | 7 | 8 | 4 |
| North .. | 618,210 | 6 | 13 | 13 | 1 | 9 | 23 | 2 |
| Central .. | 378,058 | 2 | 4 | 7 | — | 4 | 3 | 2 |
| East .. | 571,158 | 5 | 3 | 10 | 2 | 15 | 12 | 1 |
| South .. | 773,175 | 1 | 14 | 5 | 6 | 12 | 10 | 3 |
| Total .. | 2,803,989 | 15 | 43 | 37 | 10 | 47 | 56 | 12 |

### METEOROLOGY.

*From Observations at the Greenwich Observatory.*

| | |
|---|---|
| Mean height of barometer .. .. .. .. .. .. | 30·138 in. |
| Mean temperature .. .. .. .. .. .. .. | 43·1 |
| Highest point of thermometer .. .. .. .. .. | 54 3 |
| Lowest point of thermometer .. .. .. .. .. | 32 0 |
| Mean dew-point temperature .. .. .. .. .. | 39·5 |
| General direction of wind .. .. .. .. .. .. | SW, W, NW. |
| Whole amount of rain in the week .. .. .. .. | 0·23 in. |

### COMPOSITION AND QUALITY OF THE METROPOLITAN WATERS IN JANUARY, 1866.

The following are the Returns of the Metropolitan Association of Medical Officers of Health:—

| | Total Solid Matter per Imperial Gallon. | Loss by Ignition.(a) | Oxydisable Organic Matter.(b) | Hardness. | |
|---|---|---|---|---|---|
| | | | | Before Boiling. | After Boiling. |
| *Thames Water Companies.* | Grains. | Grains. | Grains. | Degs. | Degs. |
| Grand Junction . . | 20·95 | 1·57 | 0·76 | 13·6 | 4·0 |
| West Middlesex . . | 23·45 | 1·96 | 0·66 | 13·5 | 5·2 |
| Southwark and Vauxhall. | 21·46 | 1·89 | 0·73 | 13·6 | 4·6 |
| Chelsea . . . . . | 19·79 | 1·00 | 0·93 | 13·5 | 4·2 |
| Lambeth . . . . . | 19·36 | 1·80 | 1·03 | 11·4 | 5·0 |
| *Other Companies.* | | | | | |
| Kent. . . . . . | 26·12 | 0·86 | 0·19 | 17·5 | 7·0 |
| New River . . . . | 21·05 | 1·00 | 0·35 | 16·2 | 4·9 |
| East London . . . | 24·25 | 1·28 | 0·59 | 15·7 | 6·4 |

(a) The loss by ignition represents a variety of volatile matters as well as organic matter, as ammoniacal salts, moisture, and the volatile constituents of nitrates and nitrites.

(b) The oxydisable organic matter is determined by a standard solution of permanganate of potash, the available oxygen of which is to the organic matter as 1 is to 8; and the results are controlled by the examination of the colour of the water when seen through a glass tube two feet in length and two inches in diameter.

### BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, January 27, 1866, in the following large Towns:—

| Boroughs, etc. | Estimated Population in middle of the Year 1866. | Persons to an Acre. (1866.) | Births Registered during the week ending Jan. 27. | Deaths. | | Temperature of Air (Fahr.) | | | Rain Fall. | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Corrected Average Weekly Number.* | Registered during the week ending Jan. 27. | Highest during the Week. | Lowest during the Week. | Weekly Mean of the Mean Daily Values. | In Inches. | In Tons per Acre. |
| London (Metropolis) | 3067536 | 39·3 | 2149 | 1400 | 1363 | 54·3 | 32·0 | 43·1 | 0·23 | 23 |
| Bristol (City) . . | 163680 | 34·9 | 100 | 73 | ‡102 | 53·2 | 30·6 | 42 6 | 0·43 | 43 |
| Birmingham (Boro') | 335798 | 42·9 | 288 | 163 | 166 | 52·5 | 33·4 | 42·8 | 0·15 | 15 |
| Liverpool (Borough) | 484337 | 94·8 | 442 | 281 | 386 | 51·0 | 38·9 | 45 8 | 0·30 | 30 |
| Manchester (City) . | 358855 | 80·0 | 267 | 203 | ‡228 | 50·8 | 33·6 | 43·1 | 0·73 | 74 |
| Salford (Borough) . | 112904 | 21·8 | 96 | 57 | 74 | 50·8 | 35·6 | 43·9 | 0·64 | 65 |
| Sheffield (Borough) . | 218257 | 9·6 | 185 | 115 | 129 | 50·5 | 36·7 | 43·4 | 0·38 | 38 |
| Leeds (Borough) . | 228187 | 10·6 | 277 | 116 | 167 | 53·0 | 35·5 | 44·4 | 0·35 | 35 |
| Hull (Borough) . | 105233 | 29·5 | 80 | 49 | 52 | 49·0 | 30·0 | 39·6 | 0·34 | 34 |
| Nwcastl-on-Tyne, do. | 122277 | 22·9 | 104 | 65 | 77 | 50·0 | 36·0 | 43·5 | 0·00 | 0 |
| Edinburgh (City) . | 175128 | 39·6 | 120 | 84 | 93 | 56·0 | 32·0 | 43·5 | 0·30 | 30 |
| Glasgow (City). . | 432265 | 85·4 | 377 | 252 | 244 | 58·7 | 35·9 | 44·7 | 1·14 | 115 |
| Dublin (City and some suburbs) . | 318437 | 32·7 | 196 | †156 | 162 | 52·0 | 37·0 | 44·9 | 0·14 | 14 |
| Total of 13 large Towns . . . | 6122894 | 34·4 | 4681 | 3014 | 3243 | 58·7 | 30·0 | 43·5 | 0·39 | 39 |
| | | | | | Week ending Jan. 20. | Week ending Jan. 20. | | | | |
| Vienna (City) . . | (1863)<br>560000 | .. | .. | .. | 394 | .. | .. | §<br>36·3 | .. | .. |

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 30·138 in. The barometric pressure fell to 29·63 in. on Monday, and rose to 30·50 in. on Thursday.

The general direction of the wind was S.W., W., N.W.

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* The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.

† Registration did not commence in Ireland till January 1, 1864; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in that city were the same as the averages of the rates in the other towns.

‡ The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

§ The mean temperature at Greenwich during the same week was 46·9°

## APPOINTMENTS FOR THE WEEK.

### *February* 3. *Saturday* (*this day*).

*Operations* at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free Hospital, 1½ p.m.
ROYAL INSTITUTION, 3 p.m. Prof. Westmacott, "On Art Education."

### 5. *Monday*.

*Operations* at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.
EPIDEMIOLOGICAL SOCIETY, 8 p.m. Mr. Radcliffe, "On Recent Outbreaks of Bilious Remittent Fever in France," and "On the Epidemic Remittent Fever of Bengal."
MEDICAL SOCIETY OF LONDON, 8 p.m. Clinical Discussion, and Mr. W. F. Teevan, "On Lithotomy."
ODONTOLOGICAL SOCIETY, 8 p.m. Meeting.
ROYAL INSTITUTION, 2 p.m. General Monthly Meeting.

### 6. *Tuesday*.

*Operations* at Guy's, 1 p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; St. Peter's Hospital for Stone, 3 p.m.
ANTHROPOLOGICAL SOCIETY OF LONDON, 8 p.m. Meeting.
PATHOLOGICAL SOCIETY, 8 p.m. Meeting.
ROYAL INSTITUTION, 3 p.m. Prof. Tyndall, "On Heat."

### 7. *Wednesday*.

*Operations* at University College Hospital, 2 p.m.; St. Mary's, 1¼ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.
HUNTERIAN SOCIETY 7 p.m.: Annual Meeting.—8 p.m.: Annual Oration, by Mr. D. De Berdt Hovell.
OBSTETRICAL SOCIETY OF LONDON, 8 p.m. Dr. Snow Beck, "On Enlargements of Uterus, etc." Dr. Sansom, "On the Anæsthetic Properties of Bichloride of Carbon." And other Papers.

### 8. *Thursday*.

*Operations* at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.: West London Hospital, 2 p.m.
KING'S COLLEGE MEDICAL SOCIETY, 8 p.m. Mr. Perrin, "On Syphilis."
ROYAL INSTITUTION, 3 p.m. Prof. Tyndall, "On Heat."

### 9. *Friday*.

*Operations*, Westminster Ophthalmic, 1½ p.m.
ROYAL INSTITUTION, 8 p.m. Archibald Smith, Esq., F.R.S., "On the Deviation of the Compass in Iron Ships."

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*Vide* The Lancet, *Nov. 11th* and *18th*, 1865.

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# ORIGINAL LECTURES.

## LUMLEIAN LECTURES
## ON SOME POINTS IN THE PATHOLOGY OF NERVOUS DISEASES.

By C. HANDFIELD JONES, M.B., F.R.C.P., F.R.S.,
Physician to St. Mary's Hospital and Lecturer on Medicine.

### Lecture III.

(Continued from page 115.)

I will adduce now a few instances of the less severe cerebral affections, which seem to me to make it very probable that the brain tissue may suffer in a very similar way to that of the nerves. A lady, on her return from India, came under my care in a state of great prostration from frequently-recurring symptoms of distracting headache, attended with violent throbbing at the vertex, and relieved only by chloroform inhalation or large doses of morphia. Her aspect was peculiar, indicative of distress, and gave one the idea of impending insanity. After she had improved a good deal on a tonic regimen, hemicrania occurred, affecting the right side of the head, and she remarked that this extra-cranial pain was quite unlike the head attack she had had previously. A recurrence of the headache subsequently was attended with hysterical symptoms and depression, indicating that the emotional centres were involved in the morbid action. At the present time she has almost quite recovered, so that organic disease may be excluded from our view of the case. In not a few instances the headache is attended with absolute incapacity for mental exertion, or feelings of bewilderment—plain indications that the organ of the intellect is functionally enfeebled. One patient, whose case might serve as a type of neuralgic depression, complained that her head, which was cool, felt giddy and confused; such sensations came over her that she quite went out of her mind at times, while her left hand and arm got numb, and her speech failed. Iron, ammonia, and calumba benefited her much. A third has no pain, but describes her distress thus: that her head becomes numb and stupid, as if she were going out of her mind, while her hands, and feet, and her mouth also get numb; anything that startles her makes her worse. A fourth, of florid, rather sanguine aspect, which depended, however, on a morbid flushing of the face, had suffered for nineteen months with distressing feelings in her head, and was almost beside herself at times. The attacks came on her especially when she was alone; she was then obliged to get up and do something to mitigate her uneasiness. She described the attacks as consisting in a feeling of misery, wretchedness, and stupidness, while her mind was vexed with bad thoughts, which made her fear to be alone, and evidently tended in the direction of suicide. Heat flushes occurred at these times—the common signs of vaso-motor paresis. Society and moderate stimulants relieved her, and under a treatment just such as might have cured a neuralgia she amended greatly. The foregoing instances correspond most to neuralgia inasmuch as the signs of torpor and debility predominate; in the following, hyperæsthesia is more in the ascendant:—A lady subject to brow ague, and having the stamp of Indian disorder upon her, while suffering with neuralgic pain of the left side of the head, experienced such great irritability that the mere rustling of paper distressed her. Another, whose powers were failing under suckling, complained that she had a peculiar pain in the head, which she could not describe; was very irritable, and at times quite violent. She could not endure the slightest noise; her memory was very failing; sleep was bad; she felt afraid to be trusted by herself. A clergyman, aged 60, suffering from baruria, was so brain weak that a few minutes' application to reading or writing exhausted him. He was also extremely hyperæsthetic, and was intolerant of ordinary sounds.

Some cases of sleeplessness seem to be referable to no other cause than persistent cerebral hyperæsthesia. I have lately had two cases under my care—one a male, the other a female—both perfectly temperate, in which this sleeplessness was the cause of great distress; the patient sorely needed and longed for sleep, but "tired Nature's sweet restorer" would not come. The general health was very tolerable, and no cause could be detected for the insomnia, except great excitability of the nervous system. If I have thought it worth while to cite such examples as the above, it is not of course that I suppose them to be of unusual occurrence, but simply that I see no better way of picturing the state I wish to allude to. Real occurrences have, moreover, in my mind, a positive advantage over abstract descriptions, which can never be so true to nature. A further reason for my wishing to illustrate my view is this, that I think many of us are too prone to set down these common affections of worn and weary brains as "nervous" or semi-hysterical, and that we do not sufficiently consider how much of actual bodily disorder exists and gives rise to the distress. A sufferer from a sciatica or a gastralgia is apt to be regarded as more really ill than one who labours under a quite analogous affection of the organ of the intellect which expresses its troubles in a more perplexing manner. Dr. Dumont has given a highly interesting and graphic account of his sufferings from a cerebral neurosis in his recently published "Testament Medical." The whole nervous system is more or less involved; but the brain is evidently the chief focus of disorder. A heated atmosphere brings him to the verge of maniacal excitement (transport cerebral), while a highly electrical condition of the air or an eclipse produces syncope. Sensation, both special and common, memory, and ideation are more impaired than voluntary power; the mind and internal consciousness are not affected, even during his severest paroxysms. The condition seems extremely similar to hyperæsthesia of a nerve, and the retinæ appear to be actually in this state, in consequence of which visual power is seriously enfeebled. Da Costa(a) relates a very interesting case which he entitles "Cerebral Neuralgia proving Fatal by Serous Apoplexy." The patient was a female, aged 30, who had been suffering four months with neuralgia and pain in the head when she came under his care. The attacks of the disorder were of varying duration, and were separated by longer or shorter intervals. They mostly came on between 9 p.m. and 2 a.m., and were marked by violent frontal pain, great restlessness, an inclination to talk and to cry out; so that they much resembled hysterical paroxysms. Quinine and iron were beneficial, but after fifteen days a severe relapse occurred, and the attacks came on nightly as before. After some days of more tranquillity, the disorder returned in an aggravated form, the pain in the head was agonising, and death ensued in the way of coma. At the autopsy, the arachnoid and pia mater were found injected; the substance of the encephalon was everywhere healthy; but both ventricles, especially the left, were distended by clear serum. Da Costa believes that the serous effusion was the result of the cerebral hyperæmia induced by the paroxysms of pain, and compares with his case one related by Andral, in which a female, aged 35 years, suffered for some time with tic douloureux of the face. This suddenly ceased, but was succeeded by a violent pain of head, and a giddiness so intense that the patient could no longer stand up. She had at the same time very painful nausea, and vomited much bile. This lasted two hours; after which a very copious flow of serous liquid took place from the nasal fossæ, and continued some hours. When it ceased, the cerebral symptoms disappeared. If, in the former case, there may exist some doubt whether the neuralgia was not symptomatic of inflammation of the walls of the ventricles, none such can be felt with respect to the second, where the extra-cranial disorder was evidently replaced by the cerebral. In both instances, it seems to me very probable that the effusion was the result of vaso-motor nerve paresis itself occurring as a part of the neuralgia, just as it is sometimes seen to do in the outer tegument, where the part which has been the seat of pain becomes swollen, red, tender, and, in fact, is in a quasi-inflammatory condition.

I will relate here one more case which has recently occurred in my own experience, and which appears to me to have much resemblance to those cited from Torti and Andral. A gentleman, aged 47, returned in very fair health from a trip to Italy at the end of last year. He had been suffering during some years, at least the two last, with urethral stricture, the urine being pretty constantly alkaline and depositing triple phosphates. Early in February, while in the country, he had an attack of retention of urine. No catheter could be passed for some time. An eminent Surgeon who saw him with me after I had brought him to town succeeded, and after some days the stricture was split by Mr. Holt's method. For two days all appeared to go on well; the stream of urine was much more free. On the third day there was difficulty in introducing the catheter, and he felt a good deal of uneasiness in the perinæum afterwards. This, however, was subsiding, and he went out two days later for a walk, though it was severely cold. On returning he sat down to dinner, but could take little, and soon was attacked by sharp rigors, his face was very pallid, and he seemed for a time in a rather alarming state. Warmth and brandy and water rallied him, he was got to bed, and became more comfortable; took Dover's powder gr. xiii., and passed a good night. His pulse was notably accelerated and his skin hot after the rigor. Some urine passed this day was quite turbid, and deposited on standing a good deal of pus, and was albuminous. The microscope showed larger granulous cells mingled with pus globules. The day following this attack he had less uneasiness in the perinæum, and passed urine more freely. His appetite was, however, bad, and he was unwell. He had been taking citrate of iron and quinine some days; as his bowels were costive, this was now omitted, and calomel gr.v. was given at night. No healthy bile was passed, and the dose was repeated the following morning. About noon of this day he was taken worse; his right hand dropped and was semiparalysed for a time; he mumbled, and could not speak intelligibly; his pulse was not affected. A stimulant was given, after which he retched a good deal and vomited some bile-tinged mucus. Subsequently he spoke plainly, and there was no marked indication of paralysis; he was dull, but conscious the rest of the day. At night, however, I began to feel seriously uneasy about him, as he seemed to be getting more stuporous. I roused him, however, about 2·30 a.m., though with some difficulty, and he took from me and drank a glass of beef-tea and brandy, using, I am almost certain, the left hand. At 5 a.m. I tried to rouse him, but in vain. Soon after his breathing became stertorous, irregular, varying much in frequency, sometimes very rapid (as much as 70 per minute), and then again ceasing for several seconds. All remedies were fruitless, and he died in profound coma at 2 p.m. The day before his death and up to the time of complete coma ensuing his scalp had been abnormally hot; after a stream of cold water had been poured on it for some time the heat disappeared, but no improvement resulted. The calomel produced several loose stools, dark and offensive, but containing scarce any trace of bile. This, as well as the evident distaste for food, flatulence, and nausea, which appeared much more like that of primary gastric disorder than that of cerebral origin, led me to regard the head symptoms at first as depending on deranged action of the liver, and to believe that they would pass off as the normal biliary flow was restored. I was the more inclined to this view because the patient had always had an hypochondriac tendency, and I thought I perceived some indications of quasi-hysterical exaggeration of his symptoms. During the last few hours of life the left arm and leg were completely paralysed, but the right hand was frequently moved to and fro in an apparently voluntary manner. The autopsy was not made until five days after death; but there was no appearance of decomposition. Rigor mortis was well marked. The head was opened first; the scalp was bloodless; the veins of the dura- and pia-mater were both full. There was no flattening of the convolutions; there was some clear fluid under the arachnoid; the brain was "wet;" there was a little fluid in the ventricles, but very little, and it appeared clear. The fornix was not softened, but it separated rather too readily from the corpus callosum; the walls of the ventricles appeared quite normal, and so did every part of the brain, cerebellum, crura cerebri, pons Varolii, and medulla oblongata. On microscopic examination, I could find nothing abnormal in the fornix; the vessels were not coated, or only one here and there very slightly; there were no glomeruli. The vessels of a piece of pia mater from a small part of the convolutions appeared healthy. The right corpus striatum presented nothing abnormal except some coating of one or two vessels with granulous matter; there were no glomeruli. The right thalamus opticus presented nothing that I could consider abnormal; there was no coating of the vessels and no glomeruli. The liver was of a dark reddish colour; appeared healthy. There was palish green bile in the gall bladder; the liver cells were normal, but contained dark pigment. Kidneys appeared quite healthy. Spleen was rather large; normal otherwise. The stomach was thin-walled, but showed no evidence of disease. The lower end of the ileum was examined; but Peyer's patches were not in the least enlarged. The bladder was large; its walls rather thickened; its mucous membrane, especially towards its lower part, presented numerous red spots, some of which at least were certainly produced by recent extravasation of blood. No pus was seen anywhere. Lungs and heart not examined.

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(a) De Costa, Charleston, J. XIV., 2; Schmidt's *Jahrb.*, vol. cvi., p. 32.

The etiology of this remarkable case must be admitted to be very obscure. Some conditions, however, may, I think, be excluded from the list of possible causes. Among these I may mention uræmia, pyæmia, and ordinary continued fever. Uræmia cannot, I think, have existed, because the kidneys were found healthy, and because, to the best of my belief, there was no notable diminution in the secretion of urine to the last. It was, indeed, albuminous, and contained some pus one day; but how often does such a state continue for a long period without any trace of head symptoms? Moreover, uræmia would not be ushered in with rigors. The occurrence of these, indeed, made me suspicious of pyæmia, but neither the symptoms nor the autopsy warrant the view that any such state existed. The same may be said of the hypothesis which would regard the disorder as the result of any of the exanthemata miasms. To my own mind, the most probable motors of the morbid process were either a malarious taint contracted in Italy or a remote action of the operation on the nervous centres. The case already cited from Mr. Smith shows what a serious "*retentissement*" on the nervous centres urethral operations may have; but I feel much difficulty in regarding this as the real cause, on account of the long time which elapsed between the operation and the outbreak of the symptoms. Still, it is possible that the shock, unfelt at first, was really the death-blow. On the other hand, I am much inclined to view the case as one of pernicious, ill-developed ague with cerebral affection, and the state of the liver and spleen is rather corroborative. The locality of the patient's residence in the country was by no means exempt from ague, though he himself had never been attacked manifestly by it. There was a trace of periodicity in the course of the disease: its first onset was on a Thursday, about 2 p.m., and the remission was followed by a considerable aggravation on the following Saturday about noon. But whatever may have been the cause, I think the history affords considerable evidence that fatal palsy of the great nervous centres may occur without demonstrable organic lesion that can be considered adequate to produce such an effect; and that this palsy may be produced either as the result of inhibitory shock, or of a direct action of an imponderable toxic influence. In either view the case appears to me one of great interest. The history becomes the more striking if we compare it with the records of cases where extensive mischief has existed for a length of time without producing any symptoms. From this contrast one cannot but conclude that the dynamic alterations in an organ may be far more important than the structural.

It may not be out of place to introduce here an observation of Schönlein:—Rheumatism (a kindred influence, I believe, to malaria) may occasion, he says, a true nervous apoplexy, in which after death no trace of alteration in the brain is discoverable. A girl under his care, during scouring, got paralysis of the lower extremities, from which she was restored, in thirty-eight hours, by potash, hot baths, and ammon. pyro-oleosum. Returning to her work too soon, contrary to order, she was attacked in a few days with all the symptoms of apoplexy, and died. At the autopsy not the least trace of morbid change was found in the brain.

That other encephalic nervous centres suffer in a like way, as do the hemispheres, seems to me eminently probable. Schrœder van der Kolk says of epilepsy that there is sufficient reason to conclude that its first cause consists in an exalted sensibility and excitability of the medulla oblongata (v. p. 250). This state, I believe, is not a true increase of sensory power, but is the same hyperæsthesia that we have seen to exist in the nerves and hemispheres. The gentleman whose case I alluded to in Lecture I., a sufferer from the sequelæ of sunstroke, has at times some sudden and intense seizures of giddiness compared to an electric shock, which compel him to cling to the nearest object for support; these evidently have an affinity with the minor forms of epilepsy, but are not attended with unconsciousness. In hydrophobia many of the symptoms are indicative of extreme hyperæsthesia, doubtless of cerebral origin. The nerves of the skin, the mucous lining of the pharynx and of the air passages and the auditory and optic nerves are all exquisitely irritable, and continue so until the increasing asthenia—the co-product of the hyperæthesia—brings the heart to a standstill. The ἦθος and etiology of hysteria plainly declare how largely hyperæsthesia enters as a morbid element into the disorder, and though it be difficult to determine precisely what centres are principally affected, yet we cannot doubt that the emotional and intellectual are both involved, and that the medulla oblongata is often drawn into the range of the morbid action. Romberg states that hyperæsthesia of the spinal cord occurs in two forms,—one is the ordinary tetanus, which is independent of consciousness; the other is characterised by different varieties of pain and constitutes the state to which the name of spinal irritation has been given. He cites an illustrative case of this kind from Sir Charles Bell, where a middle-aged man suffered from an agonising pain in the whole back unattended with any motor disorder. Tetanus and chorea seem to be instances in which a morbid excitability affects the motor rather than the sensory nerve apparatus; the condition has much analogy with hyperæsthesia, but its locale is diverse.

These general remarks may be sufficient to show that the view I have propounded of the resemblance between affections of nerves and of nervous centres is not without foundation. Of course the centres, as much more complex and highly-organised structures, and endowed with higher functions, are likely to present graver, more complicated, and more diversified morbid phenomena. It seems to me, however, a real advantage, tending to give stability and precision to our conceptions of morbid action, if we can divest ourselves of the notion always too prevalent, that the groups of symptoms we term diseases are specific morbid entities, and can see how we may trace in a multitude of ever-varying conditions the prevalence of the same kind of morbid action. The *modality* (to use Trousseau's term) varies *ad infinitum* in different species of disorder; but through all this diversity there may be traced a most real affinity, and the recognition of this is most important in all endeavours after rational treatment.

(To be continued.)

## ORIGINAL COMMUNICATIONS.

## A NOTE ON THE ZITTMANN TREATMENT.

By TILBURY FOX, M.D. Lond.

It is to be regretted that opportunity has not afforded us more acquaintance with the treatment designated the Zittmann. I first saw it fairly carried out with success in the case of a patient of Mr. Wilson suffering from old constitutional syphilis of some twelve years' standing—miscarriages, nocturnal pains, enlarged glands, deep stains of the skin, and induration of the tongue of three and a half years' duration having been the greatest troubles. All modes of cure had been tried without success, and I was surprised at the end of ten days from the commencement of treatment to see a remarkable amelioration, especially as regards the hard swelling and ulceration of the tongue. The patient's mouth had been so sore that she could only swallow with much pain and discomfort. This case placed my attention on the *qui vive*, and on my visit to Hebra's Clinique last year I observed the Zittmann plan being carried out in the cases of many patients in his wards. It is applicable in those cases of old-standing disease in which there are an obstinacy to reparative action and ulcerative tendencies. So far as skin diseases are concerned, cases of tertiary syphilis, with foul ulcers, derive most benefit. I was particularly struck with the peculiar ulcerative aspect displayed in Vienna by diseases of the skin in general, the special preponderance of what we in England should call the strumous habit, but have not seen my way clear to explain this by the mode of life of the lower orders in general. The mode of therapeute now referred to is modified in detail by different authorities, and is a compound of mild purgation, low dieting, and sweating. One has to alter the details somewhat to suit the English habit. The patient keeps his bed the whole time, in a warm room of the temperature of from 60° to 70° F., he takes a purge to begin, repeating it every second or third day. As to diet, in the morning he takes a cup of tea and some toast, at midday a chop and a potato or biscuit, and in the evening dry toast and tea again, biscuit *ad libitum*. In the way of medicine he takes before 12 noon two pints of a stronger decoction, and after 12 noon two pints of a weaker decoction of sarsaparilla. In the course of a few days the skin relaxes, perspiration is set up, the bowels generally act freely four or five times a day, and an offensive odour is perceptible about the patient and his secretions. In about fourteen days he may be allowed to get up, but still to continue some of the decoction. The *modus operandi* of this treatment is clearly "eliminative." After this tonics or other remedies may be given. I have seen sufficient to convince me that in this "Zittmann" we have oftentimes a curative process, and more frequently, perhaps, an essential help or preparation for the more necessary exhibition of tonics or such drugs as iodide of potassium. A course of alkaline waters acts most efficiently after its use. Unfortunately, we have little opportunity in England of putting it fairly to the test. As many of the decoctions contain mercury, I would just add that this should be omitted entirely; it is unnecessary. The formulæ are as follows:—

*Decoction No. 1, the Stronger.*—Sarsaparilla, ℥ xij.; water, O. xxiv.; boil for two hours, and then suspend in the liquor, by means of a linen bag, ℥ iss. of alum, ℥ iss. of liquorice, ʒ j. of oxysulphuret of antimony, ℥ ij. of senna leaves, and ℥ ss. of aniseed; remove it from the fire, allow it to infuse awhile, and then strain off O. xvi.

*Decoction No. 2, the Weaker.*—Take the residue of No. 1; sarsaparilla, ℥ vj.; water, O. xxiv.; orange-peel, cinnamon, cardamons, of each ℥ iij.; and of liquorice, ℥ vj.; infuse for several hours, and strain off O. xvi. for use. The addition of guaiacum is often desirable.

43, Sackville-street, W.

## NOTES ON SYPHILIS, WITH SPECIAL REFERENCE TO ITS TREATMENT BY SYPHILISATION.

(Extracted from the *Norsk Magasin for Lægevidenskaben*, xix. Bind, 11 Hefte, Christiania, November, 1865.)

By WILLIAM DANIEL MOORE, M.D. Dub., M.R.I.A.,
Honorary Fellow of the Swedish Society of Physicians, of the Norwegian Medical Society, and of the Royal Medical Society of Copenhagen; Examiner in Materia Medica and Medical Jurisprudence in the Queen's University in Ireland.

(Concluded from page 119.)

Affections of the eye occurred not so very rarely. In 21 patients, of whom 18 were not subjected to treatment, with fresh syphilis, 5 had a very short time previously been treated with mercury, and 1 had four years ago been syphilised. In 16 of the 18 fresh cases the affection of the eye occurred on an average about three months after the breaking out of the first general symptoms; in 2 it was the first distinct secondary phenomenon. The iritis was often complicated with cyclitis and chorioiditis. Both eyes were attacked in 8, the right alone in 7, the left in 6. It must be considered a chance that of these 18 fresh syphilitic patients with affection of the eyes, only 4 were found under treatment by derivation; 14, on the contrary, by syphilisation; while the proportion between those treated by derivation and syphilisation on the whole was as 53 to 97. As to the result, this was in general favourable, except in some cases where instillation with atrophia was not used. In these instances troublesome synechiæ and exudations on the pupil occurred. In 2, almost total blindness ensued—namely, in H. P. O., above mentioned, and in O. C. L., the latter of whom had, before admission, been treated with mercury, and in whom the affection of the eyes had already lasted some time. On admission the journal noted:—

"Great subconjunctival congestion; greyish obscuration of the cornea of the left eye, so that nothing of the anterior chamber can be seen; this eye can distinguish light from darkness. The right cornea is likewise obscured; the iris is prolapsed into the anterior chamber. No perception of light. Both bulbs soft."

This condition did not alter during the patient's stay in the Hospital—at all events, not for the better.

Of the syphilitic women, 14 were pregnant on admission, and were delivered in the Hospital (the 15th, who is mentioned in the following note, and who was delivered immediately before, is included, only because the child was admitted at the same time, and affords a very instructive case). Notwithstanding that the statements of such persons as to the periods of infection and conception cannot always be looked upon as perfectly accurate, I shall in a brief abstract mention the principal points connected therewith in their respective histories, as among other things these notes afford some information as to the doubtful question respecting the fate of the offspring of mothers infected during pregnancy.

1. S. F. O., admitted April 30, with tolerably recent secondary symptoms (time of infection not stated); in the fourth month of pregnancy, delivered on July 19 of an immature, putrid fœtus of the seventh month. Infection and conception in this instance perhaps coincide, unless the infection was subsequent, which is very possible, nay even probable.

2. M. G. O., admitted on May 12, with secondary symptoms of a slightly earlier date, "probably infected six months ago." Nothing is stated respecting pregnancy. Delivered on August 2 of a putrid fœtus. There is no statement of the supposed age of the latter. In this case infection took place probably either contemporaneously with conception or before it.

3. A. K. A., admitted August 14, with sores on the genitals. "Menses had not occurred for seven weeks." Secondary symptoms on September 4; delivered on December 23 of a boy in the 7th month, which lived one hour. Infection either contemporaneously with conception or subsequently to it; the latter more probable.

These three patients were admitted before my period of attendance began.

4. S. M. G., was dismissed on August 3 after a seven month's course of derivation; admitted again on the 22nd with relapse, and on the 29th gave birth to a living girl at full term—which, however, on November 12 showed indubitable signs of hereditary syphilis. The child was transferred on the 13th with her mother to the Municipal Hospital, where she died of convulsions after having been one month under treatment by syphilisation (Dr. Gjör). Infected in the first half of pregnancy.

5. P. P., admitted October 2 with secondary symptoms, observed fourteen days previously in the sixth month of pregnancy (more probably in the seventh) delivered on January 1, 1864, of a "mature healthy" boy, whose subsequent fate has already been mentioned as No. 1 of the patients dead of "angina."(a) Infection occurred in the latter half of pregnancy.

6. A. M. H., admitted on November 8, with old primary symptoms; on the 20th exhibited distinct secondaries; delivered on March 3 of a dead fœtus in the seventh month. Infection occurred in the first half of pregnancy.

7. A. H., admitted on November 20 with secondaries, of which mucous tubercles were said to have been observed for four or five weeks in the sixth month of pregnancy (must have been at least in the seventh), delivered on January 31, 1864, of a healthy boy, of whose further history see "Angina," patient No. 3. Infected in the first half of pregnancy.(b)

8. M. G., admitted on January 12 with recent secondaries, in the eighth month of pregnancy, on January 31 gave birth to a girl, already mentioned among the "angina" patients as No. 2.(c) Infection dates from the latter half of pregnancy in October.

9. A. A., admitted on February 6 with tolerably recent secondaries. "Menses seven weeks ago," which is, however, incorrect if the Journal Report of April 27 is true. It is there stated that she was delivered of a still-born child in the seventh month.(d) Infection must have occurred in the first half of pregnancy.

10. M. D., admitted February 24 with secondaries of about two months' standing in the eighth month of pregnancy, delivered on April 2 of a healthy girl, already referred to among the patients with hereditary syphilis subjected to syphilisation as No. 5. Infected in the first half of pregnancy.

11. M. O. O., admitted on March 21, with secondaries after infection three months previously; menses not present for six months; delivered on May 5 of a putrid fœtus. Infected in the first half of pregnancy.

12. B. K. O., admitted on March 22 with not very recent secondaries, infected in October or November, delivered on May 21 of a girl in the eighth month, who lived one hour. Infected at the time of, or after, conception.

13. L. J., admitted on April 1 with tolerably recent secondaries, infected rather more than three months previously in the seventh month of pregnancy, delivered on May 21 of a semi-putrid fœtus in the eighth month. Infected in the first half of pregnancy.

14. M. K. O., admitted on September 16 with primary symptoms of one month's standing in the eighth month of pregnancy, secondary symptoms became developed, the patient gave birth on October 20 to an apparently healthy boy, whose fate has already been reported under No. 5 of the "Angina" patients.(e) Infected in the latter half of pregnancy.

15. S. L. A., admitted on March 17 with secondary symptoms of one and a-half month's duration; fourteen days before admission she had given birth to an apparently sound girl, mentioned above as No. 4 among the "Angina" patients.(f) Infected in the latter half of pregnancy.

From these cases it is true that no perfectly certain result is deducible with reference to the children of women infected during pregnancy; but thus much appears at all events certain that the offspring is infected when the mother becomes universally syphilitic during pregnancy, whether the infection take place in the first or second half of the pregnancy; the later (the nearer to birth) the infection of the mother the less is the offspring affected, but yet always with the infection in it, though this may not appear on the surface immediately at birth. The premature delivery, the immature, frequently semi-putrid fœtuses, the feeble, often atrophic condition of the children, the speedy eruption of various syphilides without preceding local symptoms, sufficiently prove this.

Von Bärensprung's observations, "that syphilis in the mother arising during pregnancy never passes over by inheritance to the children without the previous appearance of a primary affection," finds no support whatever from the above cases, which are also directly opposed to von Rosen's experience, that "the child is not born with syphilis when the mother's disease dates from the first half of pregnancy, while on the contrary, the offspring of women infected in the latter half is always born with signs of the disease;" nor does the expression attributed to Professor W. Boeck in the number of the *Bibliothek for Læger* for October, 1864, "that it is shown by experience that when the mother becomes syphilitic first in the latter months of pregnancy the disease is not communicated to the child," derive any confirmation from them—which expression, moreover, I have not succeeded in finding in the report of the meeting of Scandinavian Naturalists in 1860.

The proposition laid down by Ferrier respecting this question, that "the mother who during pregnancy becomes infected with syphilis communicates through her vitiated juices the disease to the child," must, moreover, be certainly looked upon as correct.

CASE OF

# CYSTIC DEGENERATION OF THE KIDNEYS IN AN ANENCEPHALOUS FŒTUS, CAUSING DYSTOCHIA.

By Assistant-Surgeon GEORGE F. DUFFEY, M.B. Dublin,
1st Battalion 24th Regiment.

On the morning of November 3, 1865, I was asked by the midwife of my regiment to visit the wife of a soldier then in labour. On seeing the woman I ascertained that she was twenty-two years of age, that this was her third pregnancy, and that the first child was living, but that the second was a miscarriage. The waters, which were not excessive in quantity, had come away during the night. On examination I found that the feet were presenting through the external orifice, with the toes towards the pubis, and the left leg a little in advance of its fellow. She had comparatively frequent but short pains. The bowels had been opened and the bladder emptied. Little progress being made, the uterus was excited to stronger action by friction, and during the pains gentle traction was made by the feet; but although there was considerable delay in the delivery of the breech—notwithstanding that the pains got better—the expulsion of the abdomen was attended with great difficulty, and eventually was not effected—although all possible pains were taken to prevent it—without slight laceration of the perineum. The head and upper extremities came away simultaneously with the body. When the feet were touched during the time they protruded through the vagina, they retracted quickly; but when the child was born it did not respire. The placenta came away in about fifteen minutes, and was apparently healthy.

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(a) As I have not given the report on "Angina," I quote the following from it to complete the case:—"1. Born in Hospital on January 1, 1864, of a constitutionally syphilitic mother. The child exhibited no sign of disease until the 18th of the same month, when pemphigous vesicles appeared in the sole of each foot, and in the palm of the right hand. 25th.—Pemphigous vesicles in several parts of the body. February 2.—Frequent vomiting. 4th.—Diarrhœa. 5th.—Death. On post-mortem examination there were found catarrhal pneumonia and atelectasis; intestinal catarrh; swelling of the retro-peritoneal glands."—W. D. M.

(b) "Apparently healthy until February 20, when some erythema appeared on the nates, in the flexures of the thighs, and on the lower extremities. Died on the morning of the 24th after repeated convulsive attacks. Post-mortem: Enteritis follicularis, anæmia cerebri, and swelling of the lymphatic glands."

(c) "Healthy until February 19, on which day she was seized with convulsions, &c., lasting until morning visit next day. The child then appeared in a state of collapse and died in the afternoon. Post-mortem.—Catarrhal pneumonia in the left lower lobe with lobular atelectasis; in the right only lobular atelectasis; the anterior parts emphysematous; nodular extravasations of blood in the substance of the mitral and tricuspid valves. The intestines down to the rectum filled with a white and whitish-yellow chyme."

(d) For cases of the occurrence of menstruation during pregnancy, a fact observed so long since as by Hippocrates, see Dr. Montgomery's "Signs and Symptoms of Pregnancy." Second edition. London. 1856. Pp. 65 and 85 *et seq.*—W. D. M.

(e) "Born in the Hospital on October 20 of a constitutionally syphilitic mother. 22nd.—Blenorrhœa of the right eye. 30th.—Diarrhœa and vomiting. November 3.—Died. Post mortem: Universal atrophy, Atelectasis and hæmorrhagic foci in the lungs and kidneys."

(f) "April 1.—During the last few days an intensely red eruption with segregated, small, uneven, watery excoriations, has become developed upon the genitals and anus. 3rd.—Some spots of roseola on the face and extremities. The child is greatly emaciating. 7th.—The roseola-exanthema is more distinct on the face, and is partly desquamating. The strength is steadily declining; the body is rather convulsed and rigid. The child died in the evening. Post mortem: Interstitial hepatitis, parenchymatous nephritis, and intestinal catarrh."

On examining the fœtus, which was very well nourished and of the full time, I observed that it was anencephalous; its face had that hideous appearance which the French term "Tête de Crapaud," (the appropriateness of which description was borne out by the midwife, who exclaimed that it was "like a toad,") its neck and chest were very short, and, as it were, fused into one piece. The bones of the vault of the cranium were undeveloped, and the integument of the face and neck was continuous with a reddish coloured structure, composed chiefly of areolar tissue, which immediately covered the rudimentary encephalic ganglia lying on the base of the skull, to which ganglia were connected a perfect medulla oblongata and spinal chord.

There were curious malformations of the hands and right foot. The fourth and fifth fingers of the right hand were united by a web up to the distal end of their second phalanges, and there was an additional or sixth finger, with a distinct nail, similarly united to the entire length of the fifth finger. The left hand and right foot had corresponding malformations, viz., an intimate union of their respective third and fourth digits, which appeared as one, but had each separate nails. The left foot was normal.

The abdomen was greatly distended, of a globular form, and dull on percussion; it measured eighteen inches in circumference. On laying open the peritoneum, two large tumours were found, one on either side, almost entirely filling the abdominal cavity; the liver was pushed upwards, and the intestines greatly displaced; the stomach could not then be seen.

On examination, these enormous tumours, to which the size of the abdomen was owing, were found to be the kidneys, and lying on and adherent to their surfaces were the ovaries and fallopian tubes, which led to a bifid uterus. A small gelatiniform polypus, attached by a long filamentous peduncle to the labium minus of the left side, hung down between the œdematous lips of the vagina. The bladder was empty. The supra-renal capsules appeared normal; there was no fluid in the abdomen. On removing the capsules from the kidneys their surfaces presented the usual lobulated appearance of the fœtal organ; but on making a section they were found to be composed of numerous small transparent cysts, visible to the naked eye, of about the size of peas, lying in a matrix of a light greyish colour, from which they could not be detached, and containing a clear serous fluid. The distinction between the cortical and medullary portion was totally obliterated, but the outline of the calyces could be indistinctly traced. The ureter was pervious.

In consequence of the wish to have a drawing of the parts taken *in situ*, the kidneys could not be weighed until after their section and exposure to air for some days; even then the weight of the right kidney—both being apparently of the same size—was six ounces. In length it measured six inches and three-quarters, in width five inches, and in thickness two inches.

The fœtus itself weighed ninety ounces; the proportion, therefore, of the weight of the kidneys to that of the entire body, would be about 1 to 7·5, instead of as in the normal fœtus 1 to 80.

This case, as well as being illustrative of the independent liability of the fœtus to disease, is, also, if one may judge from the scanty literature on the subject, interesting as an example of a remarkably rare degeneration, interesting alike to pathologists and accoucheurs.

Not laying much stress on the anencephalic condition of the fœtus, except as regards its connection with hyper-development in other parts, which I think is unique in this case, I may mention that there are but few examples on record of a similar degeneration. Rayer, in his splendid plates, delineates a case of atrophy and cystic degeneration of one kidney in a fœtus. In this case the cysts were larger but not so numerous as in mine, and the other kidney was healthy. In Vol. III., page 514 of his book, he states, that examples of this degeneration in the kidneys of newly-born infants are very rare, and he only alludes to three somewhat similar cases.

Virchow, also, in a paper on "Congenital Dropsy of the Kidneys, (Verhandl.-der Phys. Med. Gesel. in Wursburg, 1855,)" relates some instances of cystoid degeneration, with complete atresia of the pelves and papillæ, and refers to this affection as a cause of obstruction to labour.

In a case reported by M. Siebold, of Gottingen, in the *Rev. Med. Chir.*, Janvier, 1855, the head presented, but the expulsion of the child was arrested by the size of its abdomen. Repeated tractions were required. The circumference of the abdomen was seventeen inches. On inspection two enormous tumours were found in the abdomen, these were the kidneys; the two weighed two pounds, each was six inches long, four wide, three thick. On removing the capsule small cysts, containing a transparent serosity, were seen scattered about. On section, the cortical substance could not be distinguished from the pyramids; the greater portion, consisting of small cysts, visible to the naked eye.

In Virchow's and Siebold's cases, and I think in mine also, these cysts were dilations of the urinary canals.

Beggars' Bush-barracks, Dublin.

# REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

## ST. BARTHOLOMEW'S HOSPITAL.

### ON THE REMOVAL OF THE ENTIRE TONGUE FOR CANCEROUS DISEASE.

Recent experience in the results of operations on the tongue has brought to light a fact as interesting and important as it was unforeseen. It is found that a person who has had the whole tongue removed retains all the functions that are usually assigned to that organ in a degree which is amply sufficient for all the purposes of ordinary life. He can talk with a distinctness which completely averts the suspicion of what his loss has been; he can swallow fluids readily, and, although with less ease, masticate and swallow solid food. Mr. Syme has lately published an account of the condition of a person in whom twelve months before he had removed the whole tongue for cancerous disease. No return of the disease had occurred, and the patient, after recovering from the operation, and while travelling in the highlands, had dined at *table d'hôtes*, and entered into conversation without betraying the deficiency under which he laboured: he could swallow fluids and finely-divided food as well as ever, and could masticate solid substances, although a difficulty was sometimes experienced from their getting into awkward parts of the mouth. In ordinary speech his words were wonderfully clear and distinct, and he could sing without difficulty. The two cases which we subjoin correspond so closely in their results with that of Mr. Syme that we think the three together may be taken as fair illustrations of the condition in which patients will be placed after suffering removal of the tongue.

The condition of persons who have lost their tongues assumes additional interest when we remember that it is connected with the question of miracles. It is well known that a favourite method of torturing heretics and others was to cut their tongues out. In some instances it was discovered that those who had been so treated could talk as plainly as before, and their being able to do so was ascribed to the fact that a miracle had been wrought in their favour. A very interesting notice of this subject is found in Dr. Newman's "History of My Religious Opinions." In a former "Essay on Ecclesiastical Miracles" that gentleman had adduced as a fact that was strictly miraculous, that the African confessors in the Vandal persecution had their tongues cut out, and yet could speak as plainly as before. Subsequently to the publication of the essay, however, additional evidence upon the point came to the knowledge of Dr. Newman, which caused him so far to modify his opinion that he says in his later work,—"Meanwhile, I fully allow the points of evidence brought in disparagement of the miracle are, *primâ facie*, of such cogency that till they are proved to be irrelavent, Catholics are prevented from appealing to it for controversial purposes."

We regret that want of space prevents our transcribing the evidence to which the author refers in full. The following are some of the most striking details:—There is mentioned "a girl born without a tongue, who yet talked as distinctly and easily as if she had enjoyed the full benefit of that organ" (Middleton). Colonel Churchill, in his "Lebanon," speaking of the cruelties of Djezzar Pacha in extracting the tongues of some Emirs, adds,—"It is a curious fact, however, that the tongues grow again sufficiently for the purposes of speech." "In answer to your inquiries about the powers of speech retained by persons who have had their tongues cut out, I can state from personal observation that several persons whom I knew in Persia who have been subjected to that punishment spoke so intelligibly as to be able to transact important business.(a) The conviction in Persia is universal that the power of speech is destroyed by merely cutting off the tip of the tongue, and is to a useful extent restored by cutting off another portion as far back as a perpendicular section can be made of the portion that is free from attachment at the lower surface. I have never met with a person who had suffered this punishment who could not speak so as to be quite intelligible to his familiar associates." (b) The belief that the power of speech is destroyed by merely cutting off the tip of the tongue is a strange one. The results of the ordinary operations in this country afford no ground for it.

With these points before us, we are reminded of an error into which we are likely to fall in thinking loosely about the functions of the tongue. Popularly, the tongue is considered as the chief organ of speech; it is called "the unruly member," as if it were alone responsible for all speech and its results. In reality, however, it is known that the tongue holds a position in the mechanism of speech far subordinate to the larynx, and also below the lips. All the vowels can be pronounced without its help, so can many of the consonants.

Passing from these collateral considerations, however, the fact remains, as proved by results obtained in the practice of the first Surgeons of the day, that the tongue may be removed and yet the patient enjoy, unimpaired to any material degree, the power of speech and of deglutition. This is a fact upon which a Surgeon may well congratulate himself; for there is scarcely any condition of disease in which the patient's existence is one of such complete and hopeless misery as that which is present in cancer of the tongue, or one from which any humane person would be more thankful to rescue, although it were only for a time, one of his fellow-creatures.

### *Case* 1.—*Removal of the Whole Tongue by Means of the Ecraseur for Epithelial Disease—Recovery.*(c)

(Under the care of Mr. PAGET.)

A man, aged 50, was admitted for cancerous disease of his entire tongue; his difficulty in swallowing and speaking was so extreme that he was advised to have the organ removed. This was done under chloroform, and without any great difficulty. The mouth was drawn open, and firmly fixed so, and the tongue was drawn forward. To facilitate this latter step, the mucous membrane and the soft parts on the floor of the mouth, including the attachment of the genio-hyo-glossi muscles to the inner side of the symphysis, were cut through close to the bone. The tongue was thus in great measure released from its anterior and inferior attachments, and could readily be drawn forward, so that the wire of an écraseur was, without difficulty, passed around its root, including the entire organ to its connexions with the larynx. The wire was tightened by degrees, and there was some free but not dangerous bleeding when the mass was detached.

The man's recovery was uninterrupted and very rapid; indeed, he regained his power of swallowing in so short a time that he soon ceased to require special attention in feeding, and before the end of a week he could make himself intelligible by imperfect speech, so much so that it would have been hard without actual inspection to have believed that the entire tongue had been removed. The patient continues well, with tolerable articulation, and it is now (October, 1865) twelve months since the operation was performed.

### *Case* 2.—*Extensive Epithelial Disease of the Tongue—Removal of the Entire Organ by means of the Ecraseur—Recovery.*

(Under the care of Mr. PAGET.)

For the notes of this case we are indebted to the kindness of Mr. Bloxam.

S. N., aged 49, a fairly nourished woman, of dark complexion, and otherwise apparently healthy, living in the country, came to the Hospital on January 4, suffering with pain and enlargement of her tongue. On examination there was found situated on the right side, and towards the centre of the tongue, an ulcer with a hard excavated base and elevated edges; fissures extended from the margin of the ulcer in various directions; the induration passed across the middle line and backwards to the base of the tongue. The whole organ was impaired in its movements; and the patient was in great inconvenience from the constant dribbling of saliva; the neighbouring glands were not involved to any extent.

Her history was, that nine months previously she first noticed a spot on the right side of her tongue. She took little notice of this, but it steadily increased; latterly she had suffered great inconvenience and pain; she was married and had several healthy children. There was no history of cancer or of "tumours" in her family. Mr. Paget pronounced the disease to be epithelioma of the tongue, and advised entire removal of the organ by the écraseur. The operation was performed on January 6, in the following manner:—The patient being under chloroform, the mouth was widely opened, and the tongue drawn forwards. Mr. Paget divided the mucous membrane and structures connecting the sides of the tongue with the jaw, and also the attachments of the genio-hyo-glossi to the symphysis, close to the bone; the tongue being thus freed was well drawn forwards, and the steel wire of an écraseur passed so far back as to include the whole of it close to its connection with the hyoid bone. The wire was then slowly tightened, and the tongue divided, though not quite vertically, through its entire thickness. The patient lost but very little blood, the chief bleeding coming from the structures at first divided by the knife. The operation lasted only a few minutes. 3 p.m. (an hour and a-half after the operation)—The patient soon recovered from the chloroform; the mouth was kept open to expose the wound to the air. Ice ordered if necessary. 9 p.m.—No hæmorrhage; the patient was asleep.

January 22.—The woman made a most rapid recovery,(d) being able to swallow fluids after the third day, and after the sixth she could make herself intelligible. At the end of three weeks she left the Hospital able to swallow either fluids or solids, and with such good speech, that except upon examination of her mouth one could scarcely believe she had lost her entire tongue.

30th.—She came to the Hospital to-day looking extremely well; she could swallow perfectly; the divided surface of the tongue had completely healed; she was free from pain and from the annoyance arising from the constant dribbling of saliva. The floor of the mouth was considerably raised. There was no hardness in the cicatrix, nor any present indication of a return of the disease.

In remarking upon the operation, Mr. Paget said that he believed that which he had just done was suitable in the very great majority of cases in which it was necessary to remove the tongue for cancerous disease. Two points, however, must be attended to in performing it. (1.) The attachments of the tongue to the jaw, both in front, where there were the genio-hyo-glossi muscles, and at the side, where it was connected by the mucous membrane, must be thoroughly divided, so that the organ could be well drawn forward; and (2) care must be taken that the tongue was divided perpendicularly through its thickness; unless there was a definite provision to prevent it, the section would pass obliquely from behind downwards and forwards, and thus parts that had better be removed might be left. An efficient plan was to transfix the tongue perpendicularly with stout needles at the part at which the division was to be made, and to place the écraseur-wire behind these, so that it was made to cut vertically. There might doubtless occasionally be found cases in which the disease was situated so near the hyoid bone that it would be advisable to perform the larger operation recommended by Mr. Syme. Nevertheless, the écraseur operation allowed of complete removal of the sides and upper part of the tongue, and was therefore appropriate in the greater number of cases. The operation besides was attended with scarcely any slight risk to life.

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(a) From *Notes and Queries*, No. for May 22, 1858.

(b) Sir John McNeill.

(c) This case is published in *St. Bartholomew's Hospital Reports*, vol. 1, p. 55.

(d) Mr. Hilton, in his lectures on "Rest and Pain," page 72, says:—"I do not know any tissue that repairs itself more rapidly [than the tongue]. It is abundantly supplied with capillaries filled with arterial blood and has enormous distribution of nerves, and these are the two elements that contribute most to rapid reparation."

The following is an extract from a clinical lecture lately given, on the subject of cancer of the tongue, at the Hospital by Mr. Paget:—

The motive to operate here, as in other cases, is either to prolong life, or, without shortening, to comfort what remains. For the first there is, I believe, some advantage—not a great prolongation of life, yet enough to justify an operation which is attended with very little suffering or risk. But the chief motive is in the hope of comfort, and the comfort that may be gained is, in many cases, so great as to justify a greater risk of life than is incurred in any of the ordinary operations for the removal of cancer of the tongue. The risk is really very small. I have not had a fatal case or witnessed one—there are few of even the minor operations of which I could say so much—and the comfort given is that the patient is delivered for the time from all the misery of one of the most distressing and disabling conditions of disease, and, till the cancerous growth is renewed, may enjoy complete health, and do all his work. Doubtless the disease will return after operation, but it is as unreasonable to refuse a painless operation, and one free from risk of life, because the disease will return at some time soon after it, as it would be to refuse a course of medicine because it gives only temporary relief. When a man has only, suppose, two or three years to live, it is no small advantage if at least half the time can be spent in comfort rather than in misery, and in profitable work rather than in painful idleness. Looking back on the many cases of cancer of the tongue that I have had to do with, I should be disposed to say that there is no organ on which operations for cancer are more justly performed, or are more to be urged, even in extreme cases.

For the method of operating, the choice lies between cutting and the écraseur. Caustic is not to be thought of, unless in a case of the very smallest extent; and the cases in which the ligature should be used must be extremely rare. I have never employed it, for the only advantage which it offers, that of avoiding hæmorrhage, is just as well, and much less offensively, obtained by the écraseur. The risks and troubles of hæmorrhage are, however, much overrated, and I believe the knife may be preferred to the écraseur in all but the largest operations, such as those for the removal of the whole tongue.

## SAMARITAN HOSPITAL.

### CASES OF OVARIOTOMY.

(Under the care of Mr. SPENCER WELLS.)

(Continued from page 64.)

*Case 74.—Large Non-adherent Cyst—Never Tapped—Ovariotomy—Recovery.*

An unmarried woman, 45 years of age, was sent to Mr. Wells by Mr. Gregory, of Rusholme, near Manchester, and was admitted on November 26, 1865. The abdomen was greatly distended by an ovarian tumour. The girth at the umbilical level was forty-four inches. It was twenty-two inches from sternum to pubes, and twenty-nine inches across the front of the abdomen, from one ilium to the other. There was no evidence of adhesion; but there was crepitus, as of recent lymph, below and to the right of the umbilicus. She had complained of pain in that spot, more or less, for three months. The tumour could be felt through the posterior wall of the vagina, above and behind the uterus, pushing and flexing the uterus forwards. The cervix uteri was freely moveable. Enlargement of the abdomen was first noticed nearly two years before admission. The catamenia became less in quantity about the same time, and she had "seen nothing" for the last nine or ten months.

Ovariotomy was performed on December 13, 1865. Dr. Quincke, of Berlin, and Dr. Meryon were among the visitors. Dr. Ritchie gave chloroform. An incision six inches long was made downwards from one inch below the umbilicus. A non-adherent cyst was exposed, tapped, and withdrawn as it became empty and flaccid. A pedicle as broad as three fingers was secured in a middle-sized clamp, about four inches from the right side of the uterus, and the cyst was cut away. There was scarcely any bleeding. The left ovary was healthy. The clamp was fixed outside without any pull on the uterus, and the wound was closed as usual by deep and superficial silk sutures. The fluid removed measured twenty-nine pints, and the cyst walls weighed a pound and a-half. The progress after operation was good from the first. The only peculiar symptom was a rather copious and offensive leucorrhœal discharge on the second and third days. All the stitches were removed on the fourth day. The clamp came off on the ninth day. The bowels did not act till the fourteenth day; but no inconvenience was felt. They acted daily afterwards, and the patient returned to Manchester twenty-eight days after operation. She has been heard of since as getting quite well.

*Case 75.—Adherent Multilocular Cyst—Once Tapped—Ovariotomy—Recovery.*

An unmarried Jewess, 19 years of age, applied to Mr. Spencer Wells in May, 1865, with an ovarian tumour which filled the whole abdomen. It had been of very rapid growth, only having been noticed during the previous four months, although she recollected some slight fulness for about eight months. The catamenia were regular and normal. The uterus central and freely mobile. The general health good. The patient was advised to apply again if the tumour increased. In about two months she began to suffer from distension, and was admitted to Hospital on July 18. She was tapped on the 20th. Eleven pints of fluid were removed, and a multilocular cyst was felt below the umbilicus. She left on July 25, and called a month later in good health, but the cyst had filled so as to reach three or four inches above the umbilicus. For the next two months there was not much increase. The catamenia continued regular. In December increase became more rapid, and she was admitted on January 4, 1866, menstruation having ceased on the 2nd.

Ovariotomy was performed on January 10. Mr. Clover gave chloroform. Dr. Skoldberg, of Stockholm, and Dr. Stafford, of New Zealand, were present. An incision four inches long was made from the umbilicus downwards, some rather firm adhesions to the right of, and above, the umbilicus were separated, as was a piece of adhering omentum. One large and several smaller cysts were tapped, and the empty tumour was easily withdrawn. A pedicle as broad as three fingers was secured in a small clamp between two and three inches from the left side of the uterus. The clamp was fixed outside without any tension. The right ovary was healthy. There was scarcely any blood lost. The wound was closed as usual. The fluid removed measured twenty-one pints. The cyst walls and small cysts weighed twenty ounces. They consisted of two large and several smaller cysts. The inner coat was very vascular, and ecchymosed in two or three spots, but there were no signs of inflammation. On the peritoneal coat of the tumour some yellow, non-vascular patches were observed. These were beyond the ecchymosed spots, and it seemed that the vessels which had supplied the yellow patches had given way, the blood had been extravasated, and the supply to the parts beyond had been thus cut off.

A good deal of pain followed the operation, and three opiate enemas were given (twenty drops of laudanum in each) within two hours. The pain then ceased, and full reaction was established. She was sick three or four times during the night, but not afterwards. Three opiate enemas were given during the first day, and two on the second day, on account of flatulent, colicky pain. Some of the sutures were removed on the third day, and the rest on the fourth. Uterine epistaxis went on freely from the fourth to the eighth day. The clamp was removed on the sixth day. The wound was entirely healed by the thirteenth day, except the lowest stitch point, from which a little pus exuded. On the fourteenth day the face, and afterwards the whole body, became covered by a rash, which was at first suspected to be measles, as a little girl had been to see her who afterwards fell ill with measles, and the patient had never had them. But it soon appeared to be urticaria. It gradually went off after free action of the bowels, and was not attended by any unpleasant constitutional symptoms. The patient left the Hospital, looking and feeling remarkably well, twenty days after operation.

## TAUNTON AND SOMERSET HOSPITAL.

### REPORT OF A CASE OF CEREBRAL INJURY, WITH ANALYSES OF THE URINE.

(Communicated by F. W. Gibson, M.D. Lond., House-Surgeon.)

Charles G., aged 15, admitted July 27, 1865, at 6.30 p.m, At 5.30 p.m. he fell out of a dog-cart, striking the back of his head on a stony road. He lost a good deal of blood at the time, and was stunned.

*State on Admission.*—Skin cold, face pale, quite unconscious. A scalp wound about an inch long at the back of the head leading down to the occipital bone, just below its tuberosity.

A linear fracture of that bone, at same site, with slight depression. 7 p.m.—Temperature $99\frac{2}{5}$; pulse 111, feeble; respiration 24.No paralytic symptoms. Pupils equal; act to light; bladder empty. 8.45 p.m.—Temperature $99\frac{2}{5}$; pulse 120; respiration 36. Skin cold; has been once sick; no blood in vomit. He cannot swallow. Beef-tea 6 oz., brandy 1½ oz., as an injection. 10.30 p.m.—Temperature $100\frac{2}{5}$; pulse 110; respiration 36. Skin warm; enema retained. 11.35 p.m.—Temperature 101; pulse 120; respiration 36; skin hot and dry; still unconscious.

July 28, 9 a.m.—Temperature $100\frac{1}{5}$; pulse 110; respiration 36. Face pale. He is very restless, cries out continually, and throws his arms about. Vomited once during the night. Cannot swallow. Ice applied in an india-rubber bag to shaven scalp. Enema repeated thrice since last report. 6.30 p.m.—Temperature 101; pulse 94, feeble; respiration 26. Skin dry. Urine retained since accident; drawn off by catheter; amount 500 cubic centimetres; specific gravity 1035; reaction acid; deposit of urates; no albumen; urea 14·0 grammes.

29th, 9 a.m.—Temperature $99\frac{4}{5}$; pulse 85; respiration 28. Still unconscious and unable to swallow. Enema repeated thrice since last report. 6·30 p.m.—Temperature $100\frac{1}{5}$; pulse 100, feeble; respiration 26. Skin moist. Urine drawn off; amount 560 cubic centimetres; specific gravity 1033; neutral; deposit of urates and phosphates; no sugar; no albumen; urea 21 grammes; phosphoric acid 2·8 grammes.

30th, a.m.—Temperature $99\frac{2}{5}$; pulse 75; respiration 20. Skin dry. Paralysis of right facial nerve. Emaciation great and increasing. Can swallow and is less unconscious. Ice discontinued. Three enemata and six ounces of beef (by mouth) since last report. P.m.—Temperature $100\frac{1}{5}$; pulse 94; respiration 22. Skin warm and dry. Urine retained; amount 650 cubic centimetres; specific gravity 1030; alkaline; no sugar; no albumen; deposit of phosphates; urea 25·4 grammes; phosphoric acid 3·77 grammes.

31st, a.m.—Temperature $99\frac{3}{5}$; pulse 88; respiration 22; skin dry. Is still very restless and irritable. Head hot. P.m.—Temperature $99\frac{1}{5}$; pulse 70; respiration 16. Thirty ounces of beef-tea taken since yesterday evening. Urine still retained; is drawn off twice a day. Amount 480 cubic centimetres; specific gravity 1032; deposit of urates; no sugar; no albumen; urea 18·7 grammes; phosphoric acid 2·36 grammes.

August 1, a.m.—Temperature 98; pulse 64; respiration 20. Emaciation increases. Is much more sensible. P.m.—Temperature 99; pulse 60; respiration 20. Has taken 30 oz. of beef-tea and 4 oz. of brandy since yesterday evening. Urine retained; amount 700 cubic centimetres; deposit of urates; no sugar; no albumen; specific gravity 1033; urea 28 grammes; phosphoric acid 2·32 grammes.

2nd, a.m.—Temperature $98\frac{3}{5}$; pulse 70; respiration 20. Lies still, with legs drawn up. Puts out tongue when asked so to do. It is protruded straight. P.m.—Temperature $99\frac{1}{5}$; pulse 84; respiration 20. Bowels, confined since admission, open once to-day. Food as on 1st. Urine drawn off twice daily; amount 660 cubic centimetres; specific gravity 1032; deposit of urates; no albumen; no sugar; urea 26·4 grammes; phosphoric acid 2·838 grammes.

3rd, a.m.—Temperature $99\frac{2}{5}$; pulse 80; respiration 24. P.m.—Temperature $99\frac{2}{5}$; pulse 80; respiration 20. Urine: Amount 450 cubic centimetres; urea 18·4 grammes; phosphoric acid 2·043 grammes. Food as on 2nd.

4th, a.m.—Temperature $98\frac{1}{5}$; pulse 80; respiration 16. Passes urine involuntarily. Seems, however, much more conscious. P.m.—Temperatute $99\frac{1}{5}$; pulse 80; respiration 20. Food as on the 3rd.

5th, a.m.—Temperature $98\frac{1}{5}$; pulse 80; respiration 16. Emaciation not increasing. Spoke for first time to-day since admission. Urine retained. P.m.—Temperature $99\frac{1}{5}$; pulse 84; Respiration 24. Food as on 4th. Urine (from 3 p.m., August 4, to 10 a.m., August 5): Amount 660 cubic centimetres; deposit of urates; specific gravity 1031; no sugar; no albumen; urea 20·4 grammes; phosphoric acid 2·93 grammes.

6th, a.m.—Temperature $98\frac{1}{5}$; pulse 80; respiration 16. Is much more sensible. Answers questions rationally. P.m.—Temperature 99; pulse 80; respiration 20. Food: Beef-tea 40 oz.; milk 40 oz.; brandy 4 oz.; an egg. Urine retained; amount 580 cubic centimetres; specific gravity 1030; deposit of urates; no sugar; no albumen; phosphoric acid 2·447 grammes.

10th, p.m.—Temperature $98\frac{3}{5}$; pulse 80; respiration 20. Seems much better.

11th, a.m.—Temperature 98; pulse 80; respiration 20. Emaciation much less. Bowels open once a day since August 2. Food: Meat 2 oz.; two eggs; beef-tea 20 oz.; milk 20 oz.; brandy 4 oz. P.m.—Temperature $98\frac{4}{5}$; pulse 68; respiration 20.

12th, a.m.—Temperature $98\frac{4}{5}$; pulse 60; respiration 16. Complains of being very hungry; emaciation still very great, but not increasing; wound has not yet healed; bowels confined for two days. Food as on the 11th. P.m.—Temperature $98\frac{3}{5}$; pulse 68; respiration 20. Complains of hunger. Urine no longer retained; amount 455 cubic centimetres; specific gravity 1021; deposit of urates; no sugar; no albumen; urea 15·9 grammes; phosphoric acid 1·469 grammes.

13th, p.m.—Temperature $98\frac{3}{5}$; pulse 80. Urine: Amount 550 cubic centimetres; specific gravity 1020; no sugar; no albumen; urea 16·5 grammes.

14th, p.m.—Temperature $99\frac{4}{5}$; pulse 80; respiration 12. Bowels open twice; urine lost.

15th, a.m.—Temperature $99\frac{1}{5}$; pulse 80; respiration 12. P.m.—Temperature $98\frac{3}{5}$; pulse 68. Urine: Amount 300 cubic centimetres; urea 14·8 grammes.

16th, a.m.—Temperature $99\frac{1}{5}$; pulse 80; respiration 20. Wound healed. Is still thin, and complains of hunger. Bowels open; paralysis of facial nerve continues. P.m.—Temperature $98\frac{3}{5}$; pulse 80; respiration 16. Urine: Amount 420 cubic centimetres; urea 14·7 grammes.

17th.—Is more sensible; lies in a semi-dozing state, save when roused. Has had since the 15th four ounces of meat, half a pound of potatoes, twenty ounces of milk, two eggs, four ounces of wine daily. Urine: Amount 550 cubic centimetres; urea 15.9 grammes. He cannot hear watch applied closely to right ear, but can hear it distinctly with left. P.m.—Temperature $98\frac{1}{5}$; pulse 60; respiration 20.

21st.—Complains much of hunger; would eat all day long if allowed.

September 3.—Has been up to-day. He can stand, but is very weak; drags right leg slightly.

12th.—Removed from Hospital to-day. He attends as an out-patient. The nervous symptoms continue. His intellect is not materially affected.

*Remarks.*—This case I have considered to be worthy of record partly on account of the comparative rarity of recovery after so severe a cerebral injury, but mainly on account of its interest from a physiological point of view. The average amount of urea excretion per kilogramme during the five days, from July 30 to August 3, notwithstanding the absence of any notable fever and the relatively small quantity of food taken, was, as shown in the table, considerably above both the normal quantity and the mean amount of excretion during the five days from August 12 to August 17. Bischoff gives 0·408 grammes per kilogramme as the normal amount for boys of 16, under ordinary circumstances. The mean amount excreted by C. G. during the first period was 0.776 grms. per kilo.; the maximum 0·938 grms. per kilo. The mean amount during the second period, 0·518 grms. per kilo.; the maximum, 0·55 grms. per kilo. The mean amount of phosphoric acid excretion during the first period was 0·0875 grms. per kilo.; the maximum, 0·1256 grms. per kilo. Owing to unavoidable circumstances, the amount of phosphoric acid excretion was only once ascertained during the second period. It amounted to 0·0489 grms. per kilo.—about the normal quantity. It will be observed, therefore, that the mean amount of phosphoric acid excreted during the first period was nearly double, the maximum nearly treble, the normal quantity. May this abnormal amount of the urea and phosphoric acid be attributed to nervous lesion? The absence of any notable fever proves that the increase was not due to inflammatory action. Still, the non-existence of sugar and albumen in the urine appears to be an argument against the suggestion just thrown out.

*Table.*

| | Date. | Urea (per kilogramme). Grammes. | Phosphoric acid (per kilogramme). Grammes. |
|---|---|---|---|
| 1. | July 30 . | . 0·836 | 0·1256 |
| | ,, 31 . | . 0·624 | 0·0786 |
| | Aug. 1 . | . 0·933 | 0·077 |
| | ,, 2 . | . 0·86 | 0·0904 |
| | ,, 3 . | . 0·613 | 0·0681 |
| 2. | ,, 12 . | . 0·53 | 0·0489 |
| | ,, 13 . | . 0·55 | — |
| | ,, 14 . | . 0·493 | — |
| | ,, 15 . | . 0·49 | — |
| | ,, 16 . | . 0·53 | — |

The boy's weight on September 6 was 31 kilos.

My best thanks are due to Mr. Alford, the Surgeon under whose care the case was, for his permission to publish the foregoing report.

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Medical Times and Gazette.

SATURDAY, FEBRUARY 10.

## THE GOVERNMENT AND THE CATTLE PLAGUE.

Both Houses of Parliament have commenced their deliberations by discussing the action—or, rather, inaction—of Government under the great calamity which has befallen the country. The political aspect of the debate betokens but little inclination to condone the shortcomings of the Home Office. With but one or two exceptions, the whole of the speakers on both sides of the House united in charging the Government with having shirked their responsibility, and with having been guilty of criminal indifference and childish vacillation. The Profession of Medicine have no political bias to serve, no political party to strengthen, but the invasion and devastation of England by Steppe murrain constitutes an era in Medical history, and as many of the speakers threw considerable light on the circumstances under which it has been allowed to take place, we may be permitted to call the attention of our readers to some of the facts brought out in the debate.

In the first place, it is useless to allege that the Government were unwarned of the real nature of the disease, or of its probable importation. Full information as to the nature of Rinderpest was given before a Committee of the House of Commons in 1854 by Professor Symonds; and again in 1857 the same authority reported to the Government the existence of the plague in Galicia, and that it was then spreading in the direction of Western Europe. Government was, or ought to have been, fully acquainted with the means taken by Russia and Bavaria to extinguish the plague; and, with the increased facilities for cattle traffic afforded by steam and railways, their vigilance should have been aroused, and at least the precautions of appointing certain ports for the reception of cattle from abroad, and of a proper system of scientific inspection, should have been taken. In place of this, when the disease made its appearance in June last, the Government were in most complete ignorance as to its nature, as to the means by which it spread, and as to the best mode of combating it. But not only did they not know anything of the disease which was spreading so rapidly and fatally, but they neglected the most natural and ready means of learning. The country possesses, in the Medical Officer of the Privy Council, a functionary whose business it is to advise the Government on all matters relating to contagious diseases. But Mr. Lowe, one of the members of the Royal Commission, informed the House that the Government did not take the trouble to apply to Mr. Simon for his opinion or advice on the matter. Professor Symonds, the Veterinary Surgeon, was consulted, and then a Royal Commission was appointed to find out whether the disease was really Steppe murrain or no, and whether it was contagious. If the disease were in truth Rinderpest, there was no further need of inquiry as to its character, for the Steppe murrain was as well known to the pathologists of Europe as is any other contagious disease. The very person to whom the Commissioners turned for the solution of this question was, according to Mr. Lowe, the Medical Officer of the Privy Council, who had made Steppe murrain a particular study, and whose evidence mainly guided the Commission in the opinion they adopted, and has been entirely borne out by the course of events. But the Government might have had the benefit of that evidence at least two months before. The disease commenced in the middle of June, and it was not until the publication of the Report of the Commissioners on the 31st of October that the country was definitely informed that the disease which was decimating its herds was the dread Russian cattle plague.

It would be waste of time to discuss the merits of the various Orders in Council with which the Government have sought to satisfy their own consciences and the exigencies of the nation. The first, according to Professor Symonds' evidence before the Royal Commission, simply had the effect of spreading the disease more quickly than it otherwise would have been. The appointment of inspectors without any real guarantee of their fitness, and arming them with power of indiscriminate slaughter, was a spasmodic effort which not only totally failed to produce any good effect, but merely multiplied the means of contagion. The Commission published their recommendations in the first week in November, and, however the public hesitated to accept the advice of the majority at the time, there was no difference of opinion on the matter by the end of that month. The Government were urged by the Royal Agricultural Society and by various deputations from different parts of the country to stop peremptorily the transit of cattle. Instead of this, they issued orders, first to the magistrates of Petty Sessions, and then to those of Quarter Sessions, to stop traffic wherever they might think it necessary. Of course, no uniformity of action was thus obtained; in fact, in many instances the orders were simply disregarded, or an antagonism was set up between the town and county authorities, the former refusing to act in defiance of the latter. Besides, the Government were thoroughly aware that the magistrates had no power whatever to interfere with the transit of cattle on any railroad in the kingdom. Whilst, therefore, they might fine heavily a farmer who drove his bullocks across a turnpike road from one field on his farm to another, they could not interfere with the transport of infected beasts from the Metropolitan Cattle Market to Cumberland or Cornwall. It is useless to say that they had no evidence of the efficacy of the plan recommended them. They had tested it in the case of Ireland, and they had seen it tried in that of Argyllshire, and in both cases it had succeeded perfectly. When the Irish deputation waited on the Minister to beg that the import of cattle into Ireland might be stopped, they were met with the assertion that it was impossible to enforce such a measure. The deputation, however, persevered, and the Minister, doubtless with an eye to future divisions, yielded. The result is that Ireland is yet free from the Rinderpest. The defenders of Government urge that they had not the legal power to enforce such a measure as the stoppage of cattle traffic, and that the public would not have submitted to it. It seems, however, probable that they overstepped their power in the appointment of inspectors to enter any premises they chose, and to slaughter any beasts they were not bribed to spare. That the people would not have submitted to the temporary inconvenience, under the pressure of so dire a calamity, we do not believe. But at any rate, if the Government had not the power, and did not feel strong enough to assume it, they had but one course open to them. In the face of so enormous a calamity, they might have appealed to the nation. Instead of summoning Parliament together, and laying the case before them, in November last, they actually postponed its meeting a week past the usual time, whilst in the same time we lose 10,000 beasts a week from the disease. They certainly manage these things better in France.

It is understood that the Royal Commission will shortly publish another report, but that they will abstain from offering the Government any further recommendations. Considering the way in which their former advice was received, we think this course will be the only one consistent with their dignity and position. Stoppage of traffic might have arrested the pestilence in November; but it is very doubtful whether it would avail now. We hope that the next Report of the Commission will embody the results obtained by the labours of Drs. Marcet, Beale, Sanderson, and Murchison, who have been employed in investigating the disease under their direction. We are certain that the results of their inquiry will amply vindicate the scientific and practical value of the advice which our rulers have thought proper to neglect.

## PHASES OF VARIOLOUS ERUPTION.

We recently noticed, under the head of "Polymorphism in Disease," a few facts tending to the supposition that the range presented by the naked-eye appearances of the eruption of variola is considerable. Our attention has specially been recalled to the book published in 1820 by Dr. John Thomson, entitled "An Account of the Varioloid Epidemic which has lately (1817-18) prevailed in Edinboro and other parts of Scotland," containing much information, especially of a clinical kind, of interest at the present time.

Firstly. It would appear that in the epidemy referred to the eruptive fever was not unfrequently mistaken "in its commencement for typhus," a circumstance worthy of consideration in discussing the opinion of those who hold that the cattle plague is essentially a typhus of malignant aspect.

Secondly. Dr. Thomson entered largely into the question of the occurrence of secondary small-pox, a point which demands the most careful scrutiny; and it would seem that cow-pox and other forms of modified small-pox, often followed in the wake of vaccination, and even caused death.

Now, one of the arguments made use of against the identity of variola and Rinderpest is that mentioned by us in connexion with Dr. Fairmann's name—viz., that cows take Rinderpest in all its severity after suffering from cow-pox, and are therefore, in consequence, not protected by vaccination. Such in reality is the case occasionally with the human subject in the matter of vaccinal and variolous disease. The inoculation of vaccine, as at present practised, is not absolutely protective against small-pox, though it probably always modifies the severity of the latter; and therefore, upon analogical grounds—supposing, for the sake of argument, that variola and Rinderpest are allied—we might have expected that vaccination would, to a greater or less extent, fail to be protective against Rinderpest. The fact, then, that a cow may take Rinderpest and die of it after vaccination, or even cow-pox, is no ground *per se* for denying the identity of cattle plague and small-pox. A man may have typhus or scarlet fever more than once, though the first attack to some extent secures him against a recurrence.

Dr. Thomson observed that in the Edinburgh epidemic "the eruption itself has always first appeared in the form of papulæ, and many of these have decayed *without becoming either vesicular or pustular.*" Here, then, is in the human subject a certain departure from the original, and apparently an approach to the appearances presented by the eruption of other diseases. A good deal of information is also given by Dr. Thomson in reference to this variability, or polymorphism, in his subsequent work published in 1822, as exemplified by the history of epidemics witnessed about the same period by different observers in France, Germany, and other countries. At page 37 of the former issue we read that in the greater number of these cases the crusts or scabs often fell off without leaving behind them any tubercles, blains, or pits. In our previous notice of this subject we mentioned the fact that Dr. Bristowe attributed very considerable importance to this, amongst other circumstances, that he "never had seen the destruction of surface of the skin which in small-pox leads to pitting." If Dr. Thomson's observations can be depended upon,—and no one will for an instant throw a doubt upon the doings and care of this most competent authority,—then even the argument of the absence of pitting is valueless. But it must be remembered that a distinct destruction of tissue has occurred, and been recognised in the tanned hides of Rinderpest beasts. At the meeting of the Epidemiological Society on Monday, evidence of the same kind was detailed in the account given by Drs. Bowerbank and Anderson of an epidemic of varicella (?) in Jamaica, preceding the outbreak of small-pox. Complete transitional forms or stages were observed linking together the papule, semi-globular and umbilicated vesicles, and the pustule of variola, whilst doubts were entertained as to the exact nature of the outbreak. Well, then, taking the above remarks as a guide, we should be justified in asserting that the eruption of small-pox has at different times so far deviated from its usual aspect as to have presented difficulty in diagnosis, and though the *structure* of the skin may to some extent have an influence in favouring or retarding vesicular and pustular changes, yet different epidemics vary as to the features of their cutaneous expressions, to some extent, independently of such an agency, and supposedly in relation to some peculiarity in the degree or kind of the poison and the general condition of the attacked. We are no supporters of the small-pox theory of Rinderpest. In some respect, errors have crept in with reference to the behaviour of variola, and we draw attention to the above facts solely from a desire to encourage the most thorough ventilation of all sides of the question, and secure impartial examination. It has occurred to us more than once that the wide prevalence of doubts and uncertainties in the matter of cattle plague eruption has only endorsed the general opinion in regard to the neglect of the study of diseases of the skin in England. Equally good observers in the general field of Medicine have differed wholly as to both the grosser and minuter characters; on the one hand affirming that the scabs, scales, and contents are only sebaceous, on the other, that true pus formation is present, or if not always this much, at least its antecedent—cell degeneration. Our shortcoming in dermatological matters is disgraceful.

## THE CURE OF BARRENNESS.

So much curiosity has been excited by our comments last week on Dr. Marion Sims's new book (a) that we proceed to give our readers some notion of its contents as soon as possible. We may say at starting that the author's position and antecedents are such as to entitle him altogether to respect; for he had made himself famous by his ingenuity in devising various methods of operation for vesico-vaginal fistula; and then the fact that he had been obliged to leave his native country on account of political troubles would have procured him the warm sympathy of all liberal persons had his name ended in "owski," or had he been Pole, Hungarian, Italian, or, in fact, anything but an English-speaking native of the Southern States of the North American Republic.

The book in question does not profess to be a complete treatise on uterine Surgery, but to deal with those conditions which are opposed to conception, which all have this in common, that they prevent the free passage of living spermatozoa into the cavity of the womb. The conditions essential to conception are stated to be these eight:—"1. It occurs only during menstrual life. 2. Menstruation should be such as to show a healthy state of the uterine cavity. 3. The os and cervix uteri should be sufficiently free to permit the free exit of the menstrual flow, and also to admit the ingress of the spermatozoa. 4. The cervix should be of proper form, shape, size, and density. 5. The uterus should be in a normal position—*i.e.*, neither anteverted nor retroverted to any great degree. 6. The vagina should be capable of receiving and of retaining the spermatic fluid. 7. Semen with living spermatozoa should be deposited in the vagina at the proper time. 8. The secretions of the cervix and vagina should not poison or kill the spermatozoa."

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(a) "Clinical Notes on Uterine Surgery; with Especial Reference to the Sterile Condition. By J. Marion Sims, A.B., M.D., etc. London: Hardwicke. 1866." See *Medical Times and Gazette*, 1866, vol. i., p. 133.

These eight paragraphs indicate the order in which the writer deals with his matter; and it is but just to say that although the cure of barrenness is, as it were, the key note of the book, or the thread by which the parts are linked together, yet that the amount of information conveyed is by no means narrowly restricted, and that many a systematic treatise is less rich in details and far less graphic and comprehensible than are these "Notes."

Having laid down, then, these foregoing eight physiological postulates, Dr. Sims digresses for a moment to describe the best method of making an examination of the womb, both by touch and sight; and of this part it is difficult to speak too highly as regards its common-sense practical character and the useful rules of conduct which it lays down for the young Practitioner. The method of expanding the vagina and filling it with air, by opening the vaginal orifice at a time when the weight of the abdominal viscera tends to draw the vaginal parietes asunder, is one which we ourselves became acquainted with years ago, together with the use of a one-valve speculum, made like the bowl of a spoon; we think they only need be known to be adopted generally.

The first section, on the text that conception occurs only during menstrual life, is very short, and contains a few cases of very early and very late pregnancy (from 10 up to 52 years of age), and a few cautions on the necessity of thorough careful exploration in all cases where the doubt is between pregnancy and tumour.

The second is very much longer, and comprises about a fourth of the whole book, and is in reality a treatise on unhealthy menstruation considered as a cause or concomitant of barrenness. Scanty menstruation is very soon dismissed; not so its more important opposite, profuse menstruation. In speaking of this, and in fact throughout the book, the writer ignores, or passes over with hardly disguised contempt, all internal remedies, and for every case of confirmed menorrhagia demands an exploration of the womb, for where this condition is inveterate he says there always will be some organic cause for it. Then he enumerates the organic causes and gives the treatment of each, including granular erosion, engorgement of the cervix, fungoid granulations in the cervical canal or in the uterine cavity; polypi of os, cervix, or cavity; fibroid tumour, whether intra-uterine or intra-mural; inversion of the uterus, hæmatocele, and cancer. Hence, as we have said, the Surgical treatment of a vast variety of uterine affections is described *apropos* of the barrenness which may incidentally accompany them.

For the granular erosion, Dr. Sims prescribes a mitigated caustic application, and prefers chromic acid. Respecting the fibroid engorgement of the neck he gives one case in which he believed the ingress of spermatozoa to be impeded by the swelling, and conception followed a bilateral incision. For the fungous granulations he recommends sponge tents, and here we meet with a minute and careful account of these instruments, of their preparation and effects, which would be valuable to any young Practitioner. He tells of the effect of compressed sponge in expanding within a narrow canal; of the peculiarly fetid, dirty, irritating discharge which it sets up; of its adhesion to and interpenetration of the granular or villous surfaces in contact with it; of its power of drying or soaking up granulations and mucous polypi, and the difficulties of detaching it. The uses of glycerine, too, not only as a soothing dressing, but as a means of draining a congested mucous membrane and abating fœtor, are well told. The sea-tangle tent also is not omitted. Polypus comes next, with all its varieties, and with the modes of getting at the tumour in the cavity of the womb, and the use of the écraseur to amputate it. Fibroids, with the various feasible and infeasible methods of exterpation, follow next, and inversion of the womb; and, lest this last should seem a singular topic for a book on sterility, he gives Dr. Tyler Smith's case of repeated conception after reduction of an inverted womb of twelve years' standing. On the subject of painful menstruation, as may be expected, he has no half views. He says that it arises from physical obstruction to the egress of fluid, and by far most frequently that the cause of obstruction is purely anatomical and mechanical. It may be complicated with inflammation, or may not, but "there can be no dysmenorrhœa, properly speaking, if the canal of the neck of the womb be straight and large enough to permit the free passage of menstrual blood."

"The operation of enlarging the canal by incision is not always successful, but it is the only procedure from which I have derived the least benefit." He looks upon it as much safer than the bougie and tent, and immeasurably less liable to be followed by pelvic cellulitis; but in America it appears that it is far more liable to be followed by dangerous hæmorrhage than in the old country. But even incision is not a perfect simple cure. "I have often," he says, "been amazed to find the os contracted in a month to one-fourth of the size of the original incisions. I have frequently seen it cut open large enough to admit the index finger up to the os internum, and then close in a few weeks to such a degree as not to admit a No. 4 or 5 bougie, and this in spite of persevering efforts to prevent the contraction. I have been frequently compelled to repeat the operation, and I remember several patients upon whom I have operated as often as three times in the course of a few months, and even then the result was not wholly satisfactory. . . . . I would recommend the occasional passage of a bougie after the first week." He goes on to speak of occasional failures in incision, in such a way as to make it appear that "unnecessary exposure or fatigue" —or, in other words, "constitutional causes"—are not really such unimportant sources of dysmenorrhœa as Dr. Sims had previously stated. Certainly if with a patulous os and cervix cold and fatigue can cause dysmenorrhœa, the mechanical causes are put out of court. At any rate, where a No. 4 or 5 bougie can pass, spermatozoa may. But to return. If incision fail, the cause of dysmenorrhœa may be found in a small polypus obstructing the os internum; or in flexure of the womb; and these may admit of further proceedings. But considering what Dr. Sims says of his own failures, and what he says of the mischiefs of too large metrotomes in other hands, and of the incapability of a too largely incised os to withstand causes of abortion—knowing, too, as we do, and as Dr. Sims naïvely admits, that the *first* menstrual period after any operation whatever is generally comfortable, we think that if the history of cases were followed up for a few months after they have been recorded as "cured," Dr. Sims would find plenty more materials for "amazement" at the results. The whole treatise on dysmenorrhœa is that of a firm and exclusive believer in the *mechanical* school, but still of a man honest enough to speak of failures which neutralise his own doctrines.

Section III. treats of cases in which the os is large enough to allow the free *egress* of the menstrual fluid, but not the *ingress* of spermatozoa. Such narrowness may be natural or acquired. If natural, and the tube is straight, there may be no dysmenorrhœa, though there be sterility. To this category belong cases in which the posterior lip overlaps the anterior in a valvular manner, so as to oppose the upward passage of liquid, and which may be relieved by splitting the posterior lip longitudinally. But the chief interest of this section lies in the testimony which Dr. Sims bears to the abuse of caustics, and especially of the potassa fusa, or the Vienna paste for the cure of so-called "ulcer of the uterine neck," and to the stricture which follows.

Section IV. treats chiefly of the elongated conical cervix, a condition liable to cause retroversion of the womb, and itself to operate unfavourably on the penetration of spermatozoa. For this, amputation of the elongated cervix is unhesitatingly recommended, and a guillotine of ingenious construction has been devised for the purpose. Dr. Sims says he has not as yet had many cases of pregnancy to follow amputation of the cervix, but he is well satisfied that if amputation had been performed in many cases in which he simply cut open the cervix, conception might have occurred where it has not. We cannot share his satisfaction.

Section V. is a treatise of nearly a hundred pages on anteversion and retroversion of the wound. It begins, by the way, as several other chapters do, with a certain amount of information on the normal place, size, and functions of the womb, which is given quite unpretendingly, but which might have been expanded in some hands into an "anatomical and physiological proem." We will not linger on this section further than to say that it treats of its subject matter fully; but the chief point of interest are the observations on the uterine sound. He regards this as a valuable means of diagnosis and exploration, but represents its use as a redresser of the retroverted womb as dangerous and painful, and objects very strongly indeed to the absurdity of replacing a displaced womb by the sound, and expecting it to remain in its place. "I have known," he says, "Physicians to replace a retroverted uterus day after day for months, but I never knew a case cured by it." Equally is he averse to the intra-uterine pessary. He has an operation for contracting the vagina in cases both of inveterate anteversion and retroversion; but in ordinary cases falls back upon pessaries, and recommends one of Hodges and Meigs' form modified by himself; at the same time, he speaks well of a plug of cotton (soaked or not in glycerine or glycerine and tannin), and has devised an instrument for introducing it effectually. For procidentia, he favours an operation on the upper part of the vagina.

Section VI. starts with the double proposition that the vagina must be capable of receiving, and not only so, but of retaining the spermatic fluid. Want of capability of reception may depend on imperforate hymen, atresia vaginæ, or absence of that canal; but chiefly on *vaginismus*, or that spasm of the vaginal orifice which corresponds with spasm of the eyelids in *photophobia*, spasm of the glottis, of the sphincter ani, etc. We gather from Dr. Marion Sims that the essence of the affection is, in his opinion, an extremely hyperæsthetic state of the outer surface of the hymen, so that the slightest touch produces intense spasm. This condition may exist, spite of the fact that the vagina is dilatable to its fullest extent under ether; and it has persisted even after repeated—though painful—connexion, conception, and labour at full term with laceration of the perineum. Dr. Sims's remedy is to clip away the hymen, which is generally thickened; and to follow this by incisions through the sphincter vaginæ muscle, and the use of a glass bougie. Yet even in one of these cases a cure was not effected till a small tubercle at the mouth of the vagina, the size of a grain of wheat (corresponding, probably, to Wood's painful sub-cutaneous tubercle) was excised. In one case we read (p. 342) "that it became the business of the Physician to repair regularly to the residence of this couple, two or three times a week to etherise the poor wife, . . . hoping that she would become pregnant, and that delivery would cure her. This etherisation was continued for a year, when conception occurred. But during the whole period of utero-gestation, etherisation was necessary to coition. After the birth of the child there were a few copulations without ether, but it was exceedingly painful, and soon the pain became so severe that they were compelled to resort to ether again. At the end of *another year of ethereal copulation*" (! ! !). "there was another conception, which resulted in an abortion at the third month." This is the case above spoken of in which the perineum was lacerated during labour, and the cicatricial tissue and remains of the hymen were extirpated before a complete cure was effected.

We cannot help remarking here that cases of vaginismus in slighter degree are not by any means uncommon, and that allowing that the Surgical operation spoken of may be necessary when any thickened and unhealthy tissue or hypersensitive nodule exists; yet that English Physicians no more resort to excision in slight cases than they would cut off the eyelids in blapharo-spasm, or cut out the chordæ vocales in laryngismus stridulus. On the contrary, they apply to vaginismus rules of search for such reflex and constitutional causes as, if existing, might set up spasm. For instance, the neighbouring organ, the rectum, not seldom may be the starting-point. We should have liked to have heard Dr. Sims's experience on this topic.

We must also protest, with due deference, against the idea that it ever can become the "business of the Physician" to administer ether for the purpose and in the manner which Dr. Sims details in so matter-of-fact a way. We recollect a Biblical commentator who defended the multiplicity of wives enjoyed by one of the Patriarchs on the plea that the venerable personage desired offspring, and not pleasure. Such a plea cannot be used in the present instance to shield the "couple" nor the Physician whose *business!!* it was to etherise the wife. We should treat this matter most seriously, and check any disposition to sarcasm; still, to gratify a natural curiosity, we would ask whether the man of business was ordered to come on fixed days? or was he sent for on the spur of the moment? Did a little amiable toying in the evening between this persevering couple ever lead the husband to ask leave to send for the Physician with his bottle of ether? All this quite opens up a new world of ideas to which Monsieur Feydeau ought to turn his attention. A good deal might be made out of that adjective "ethereal." This *mot* would make the fortune of a lesser man than Dr. Sims.

Now come we to a part of the work in which Dr. Sims is (so far as we know) quite original:—"Only about three or four years since," he tells us, he "found out that some vaginas would not for a moment hold a drop of semen." He gives a case: A young woman, married for five years and barren, consulted him. Her cervix uteri was indurated, and the os small. This was cut open, but no conception followed. The uterus was all that could be wished, but the vagina rather short. Dr. Sims desired her to come to him some morning after sexual intercourse. She came; and he, on examination, found no spermatozoa in the vagina or cervix uteri. She said everything passed off instantly; whereupon Dr. Sims decided to lay aside "all false delicacy," and informed her that he must see her just after sexual intercourse. This was done by appointment, and he saw her in four or five minutes after the act. He says he discovered none of the fertilising fluid in the passage, plenty outside; the vagina short, but distensible in the cul de sac behind the neck of the womb, and contracting the moment the pressure was discontinued so as to eject any liquid. Something was done—we are not told what—to prevent forcible impingement against this posterior cul de sac, and conception followed. Dr. Sims adds that he thinks the operation of splitting the uterine neck had not been necessary.

He believes that retroflexion of the uterus also has the effect of driving out all the fertilising fluid directly after connexion, and thus of hindering conception, and describes the case of a patient whom, to verify this hypothesis, he visited fifty or sixty seconds after the act, and on examination found no traces of the fluid in the vagina. On this point we fear that Dr. Sims will find the great body of English Practitioners at issue with him. Still more we doubt whether many a one will be found to undertake the "business" he describes. Fancy a respectable husband quitting his bed hastily, and leaving his palpitating spouse to be examined with finger or speculum in less than a minute after the nuptial mysteries! How is such a thing to be managed? Do the husband and man of business meet in the vestibule? or does the one rush out at one door whilst the man of business rushes in by another? The "arrangements" for such a visit would be strange to most of us. Where did it take place? At the patient's, or elsewhere?

Pass we on to Section VII., which states that "semen with living spermatozoa should be deposited in the vagina at the proper time." This involves three propositions. First, as to the necessity that live spermatozoa should exist, which may readily be granted. Secondly, that the semen must be deposited in the vagina, which is completely nullified by the cases quoted by Dr. Sims himself of conception without penetration; and thirdly, that there is a proper *time* for this deposition, which he infers from a purely imaginary assumption that the cervix uteri, compressed and emptied by the act of congress and by some undiscovered muscles in the vagina, expands and sucks up liquid from the vagina immediately that the male member is withdrawn, just as an india-rubber bottle does after being squeezed. This, we need scarcely say, is a mere hypothesis. No such pressure or suction is proved or probable, and experience shows it to be needless. But supposing it to be true, then it simply stultifies all the elaborate statements in Dr. Sims's book. For if the cervix uteri act in this way, it would suck up the fertilising liquid readily enough in almost any case except those in which it had been divided and made patulous. We repeat it: if the cervix uteri by compression and expansion act like a syringe, then it matters not whether it be too long or in what position it be; and certainly it will be false philosophy to split up the suction tube of a syringe.

Considering, as Dr. Sims believes, that the standing difficulty of conception lies in difficulty of entrance of semen into the neck of the womb, the question next occurs of "throwing the fructifying agent right into the cavity of the uterus." The author seems to have made fifty-five separate injections, on half-a-dozen different patients, in the course of two years, the patients being women in whom he believed a mechanical impediment existed, and who would not submit to operation. In one case, after the tenth trial, conception followed, but, unluckily, abortion cut short the existence of this squirt-begotten embryo. Dr. Sims says he has given up this branch of practice, owing to its difficulty and unsatisfactory nature; but he gives the details and precautions, and describes the necessary instruments, for the benefit of any one else who may "be able to apply the principles sought to be established by these experiments, with more exactitude than" he has. If, he says, we understood more about the proper period for conception, mechanical fertilisation might become exact enough to depend on it,—a kind of knowledge, by the way, that would be much appreciated by ladies who did not wish to conceive.

The last section treats of the various derangements of vagina and cervix uteri which pass under the name of leucorrhœa, more especially with regard to their property of killing spermatozoa. It contains directions for removing and examining seminal fluid from the vagina and cervix uteri, and, besides, some useful but fragmentary notes on the treatment of leucorrhœa.

We have thus given a full and fair summary of Dr. Sims's work, and may add that, in our judgment, it displays the highest practical Surgical ability, dexterity, and resource, conveyed in language remarkably clear. We may object, as a minor fault, that the language, though clear, is not always good; for there are such words as "utorrhœa," and a confusion of "will" and "would" for "shall" and "should" such as might have been easily corrected by some person more at home with the pen. We do not hesitate to say, however, that all mental, or moral, or hygienic, or medicinal influences are ignored. It is open to the objection that it is too purely Surgical. The author assumes at will the mechanical impossibility of the entrance of the requisite liquid into the cervix uteri, and treats woman as a mere subject for mechanical impregnation, and not as a moral agent. We are not supplied with lists of failures; we know not how many operations have not been followed by conception; whilst the fact that in such and such cases conception followed operation is assumed as cause and effect in a way which modern science does not allow. Lastly, with regard to the discovery of the total expulsion of the fertilising liquid from the vagina, and to the dabblings in that canal with speculum and syringe under the circumstances described, we can but express our unfeigned regret that Dr. Marion Sims has thought proper to found an odious style of practice on such (im)pure assumption. At any rate, if such practices were to be considered the "business of the Physician," there are a good many of us who would quit Physic for some other calling that would let us keep our sense of decency and self-respect. Better let ancient families become extinct than keep up the succession by such means. "Nec propter vitam, vivendi pudere causas."

## THE ARREST OF CATTLE PLAGUE.

"It is one thing to stop a disease in its nascent state; it is another thing to stop it when it has acquired 14,000 centres of infection, when it has spread to every county in England, and when the air has become loaded with volumes of polluted matter." These are the words (as reported) of Mr. Lowe, himself one of the Cattle Plague Commissioners, in his speech in the lengthy debate which took place in the House of Commons on Tuesday. He was speaking of the recommendations in the Report of the Commissioners that isolation of cattle should be carried out. Had this important recommendation been acted upon at first, he showed that we might have succeeded in checking the disease, but that the prospect of staying it now, by such means, is a very gloomy one.

Every day makes it more evident that rigid isolation must now only be expected to diminish the rapidity with which the disease is spreading, and that is all. Even at the time that the Commissioners made out their Report Dr. Bence Jones felt that it was too late to rely solely on stopping the movement of cattle, and declined to join in the recommendation that it should be enforced; and we learn that the supposition made in our columns last week that this Commissioner has since changed his opinions as then expressed, is not correct. He still holds that isolation without some means of destroying the poison would be ineffectual. Had the present condition of things existed in November, it is probable that other Commissioners might not have been contented with recommending the stoppage of cattle transit alone. At least it is not fair to conclude that the recommendations which the Commissioners made in their November Report are just what they would have made under circumstances vastly differing from those which existed then.

We fear that the one great measure to be calculated on, and the only one, is the speedy destruction of every animal in which the disease manifests itself, and every healthy animal which has been in proximity to it. The immediate sacrifice of property would be great, but not so great as it appears, for the healthy animals, slaughtered as a precautionary measure, would of course serve for human consumption. Those who object to the destruction of diseased cattle on the ground that they may recover, do not consider what is the problem for solution. It is, how to prevent the disease, not how to cure it; because even if a method of cure were established the disease would still spread, and large numbers of our cattle would always be suffering from it.

We hope soon to have before us the report of the investigations carried out by the experts employed by the Royal Commission. Some of the results they have obtained have become known, but we feel assured that much is yet forthcoming. We believe, indeed we are certain, that in their respective departments they have each done a vast amount of careful work; and we cannot but feel assured that the researches of these gentlemen, so highly qualified for the task entrusted to them, will prove to have been executed with all the skill and attention that could be bestowed on them, and with all the completeness that the limited means provided for the purpose permitted. But the study of the pathology of Rinderpest has not been left exclusively to the Commissioners. Much has been done by others; and of this we are reminded by a photograph, which lies before us, illustrating the Rinderpest eruption. It is No. X. of the second series of "Coloured Photographs of Diseases of the Skin," by Dr. Balmanno Squire. Those who have seen the admirable photographs of diseases of the human skin already published by Dr. Squire will be aware of the excellence of the representations they afford. They will find the present fall nothing short of its predecessors in life-like characters.

"The photograph presents one of the teats with part of the udder of a cow at the seventh day of the disease. The udder of this animal exhibited near the roots of the teats several well-marked crusts of about the size and thickness of a split-pea, distinct from one another, of a brown colour, of a cheesy consistence, and of a greasy character; in fact, possessed all the qualities of the berry-like crusts produced by small-pox in the human subject. In the illustration four such crusts may be seen. Portions of the erythematous skin in the neighbourhood of some of the crusts were the seat of a flaky desquamation. In other cows that I examined the eruption presented the same characters."

To this description by Dr. Squire of the photograph we may append his opinions as to the nature of the eruption.

"No human skin affection that I know of resembles the eruption of the cattle plague on the udder so closely as does the eruption of small-pox, and if a vaccine be compared with a human eruption, it is on the udder that the comparison should be made, for it is in this situation that the skin of the cow approximates most closely in consistence and suppleness to the skin of man.

"It may perhaps be thought that more would have been shown of the nature of the eruption had the pustules been represented instead of the crusts left by them, but it has been a matter of debate whether the so-called 'pustules' of this disease are really deserving of the name. This question, I think, may be decided by the scabs, since scabs presenting the characters here represented and described can, if we may argue from human pathology, originate only in pustules of corresponding size."

## THE WEEK.

### GOVERNMENT CHANGES.

CHANGES in the composition of her Majesty's Government interest us, as journalists, only according to the manner and degree in which they may affect the Medical Profession; and regarded from that point of view, we fear that but little good is to be looked for from the appointment of the Earl de Grey as Secretary for India, and the promotion of the Marquis of Hartington to the Secretaryship for War. Lord de Grey has, as Secretary for War, shown, or has at least lain under the imputation of showing, too much subserviency to the Horse Guards to allow of our hoping that he will in his new office venture on thinking and acting for himself in favour of the Medical service in India. The Marquis of Hartington has a greater reputation for talent, but it is to be feared that he may prove himself too much wedded to the traditions of the office in which he has served as subordinate, and too well trained by his late chief, to attempt to emancipate himself from Horse Guards' influence. Medical men must still trust to their own independence and spirit for obtaining any improvement in the condition of the army Medical service, and not to any hoped-for action of the new brooms.

### AMENDMENT OF THE NUISANCES REMOVAL ACT.

ON Wednesday, the 7th, a deputation of the Metropolitan Association of Medical Officers of Health, consisting of Drs. Aldis, Barnes, Ballard, Lankester, Liddle, Lord, Sanderson, Druitt (President), and Dr. Vinen (Secretary), introduced by Mr. Locke, M.P., had an interview with the Right Hon. Mr. Bruce, Vice-President of the Privy Council, at Whitehall, on the subject of the amendment of the Nuisances Removal Act. The Right Honourable gentleman devoted more than an hour to the various points urged for his consideration by the members of the deputation. It seemed to be the general opinion that the forms of procedure ought to be made more summary; that greater power ought to be entrusted to the Medical Officers of Health, and that the kind of remedy provided against inveterate nuisances should be one *in rem* rather than *in personam*; or that there should be some kind of hold obtained over dirty and unwholesome premises, the owners of which, if men of straw, now set the law at defiance.

### THE COMMISSION AT THE ADMIRALTY.

THE last rumour afloat will be not a little disheartening to our Professional brethren by sea and land. Nothing will be done. If it be true, it is another proof of that total disregard which the Government always manifests for our Profession. The Committee must be aware of the feeling of the Profession in England towards the public services, whatever may have been expressed in the evidence before it. The *Gazettes* have contained a goodly list of resignations during the past three months. It was only last week we noticed the retirement of an Assistant-Surgeon who had spent more than five years in the army. As regards the navy, there are few Assistant-Surgeons to retire. We suppose men do not quit a service for nothing, and it is clear, therefore, that these Medical officers had little or no hope of anything being done for them. How young men can be so blind to their own interests, to say nothing of the interests of their Profession, as to enter a department when those having experience are quitting it we cannot conceive. We have received many communications expressing strong opinions about the constitution, the private nature of the Committee, and the kind of witnesses examined before it. The matter is in the hands of the Profession itself. If the supply equals the demand, the Government will be perfectly satisfied for the present, of course, and it will leave the men who enter to find out, when too late, who has the best of the bargain.

### THE END OF A STORY OF SICKNESS AND DEATH FROM OFFICIAL MISMANAGEMENT.

THE arrival of the sailing transport *Gresham* at Spithead on the 1st inst. brings the sick soldiers, women, and children of the 9th and 11th Regiments from Hong Kong, and closes, let us hope, this tale of suffering and disease. We have heard that the 11th Regiment, or what may remain of it, has been ordered to India. The *Gresham* left Hong Kong on October 13 last. We read that 45 invalided soldiers were landed at the Cape, too ill to proceed, and the deaths during the voyage were unusually numerous—38 soldiers, 2 seamen, 3 women, and 8 children having perished. The larger number of deaths occurred at an early period of the voyage. This excessive mortality was due to the dysentery and fever which prevailed at the date of embarkation, and not to any defective sanitary arrangements on board the ship. The vessel—we gather from the *Times*—was minutely inspected by a board of officers at

Portsmouth, including the principal Medical officer there (Dr. Innes), and there can be no doubt that every attention was paid to the sick on board the ship; but at the time of their embarkation they were in too enfeebled a condition to derive any benefit from the change. Now, we are tempted to ask—How was this? Surely there were ships in China fit for the transport of troops. Then, why did not the authorities secure one for the removal of the sick while there yet remained the chance of benefiting them? The more we learn, the more assurance do we find for our opinion that the whole affair involved a series of disastrous and miserable blundering from beginning to end. We perceive the name of Surgeon Black, of the 11th Regiment, among the list of officers. There can be no difficulty now in procuring evidence for a Commission to inquire into the causes of the sickness and mortality affecting our troops at Hong Kong. The affair has become too notorious to permit of its being burked by our home authorities.

### TESTIMONIAL TO DR. BURROWS.

The grand old hall of St. Bartholomew's was filled on Thursday, the 1st inst., by a number of the past and present students of the Hospital and their friends, who had assembled for the purpose of assisting at the presentation of a testimonial to the President of the Medical Council in commemoration of his high character as a Physician, and for his valuable services for thirty years on the Medical staff of the Hospital, and as a teacher in the school. The ceremony was graced by the presence of several ladies. The testimonial, consisting of a full-length portrait of Dr. Burrows, by Mr. Knight, R.A., of a silver salver, admirable as a work of art, and a very elegant time-piece with candelabra, was formally presented by Mr. Paget in a speech, the elegance and finish of which were worthy of the speaker, whilst its tone of affection and heartiness could not but add to the value of the gift. Mr. Paget said that the motives which led to the presentation were a desire to recognise the eminent position of Dr. Burrows in the Profession, and as the "elect of the elect" in the Medical Council; to acknowledge on the part of his numerous pupils their debt of gratitude to him for having taught them how to learn and how to practise their Profession; and, finally, as a sincere and lasting expression of hearty friendship for a most true friend. Dr. Burrows, in returning thanks, expressed the great gratification it had been to him that by his nomination as the first Consulting Physician ever appointed to the Hospital he still remained one of their Medical officers, and retained the right of aiding, if necessary, in the labours of its staff. It was a great source of satisfaction to him that his labours had met with the approval of those with whom he had worked. He acknowledged that if anything could have added to the pleasure he had in receiving such a testimonial from his friends, it was the selection of Mr. Paget to express their kind feelings towards him. While it might be hardly courteous in him to say that his friend in speaking of his services had transcended the limits of truth, he must say that at least he had told the truth most lovingly. In the name of himself and his wife, he begged to present the portrait to the Hospital, and ventured to hope that it might be deemed worthy of a place in the room already adorned by the portraits of Abernethy, Lawrence, and his lamented friend, William Baly. Mr. Forster White, the treasurer of the Hospital, accepted the portrait on the part of the governors, and said that it should be placed in company with the portraits of the donor's father-in-law, John Abernethy, Percival Pott, Lawrence, Vincent, and Baly.

### FROM ABROAD. — DISCUSSION ON VACCINATION AND RE-VACCINATION.

Paris seems to have taken to animal vaccination and re-vaccination with a perfect *furore*, especially among the higher classes, so that the cows and heifers employed for this purpose by M. Lanois, the introducer of the practice from Naples, are in such request that they have to be bespoke several days beforehand. An application for some of the virus has been made by the English Embassy, in order that it may be transmitted here for use in the cattle plague; and M. Bouley states that he has induced the Government to purchase some of M. Lanois' heifers, who are well impregnated with cow-pox in order to transmit them to England, so that they may be inoculated with the virus of cattle plague and exposed to the immediate action of the epidemic influence. He is, indeed, at the present time over here superintending the performance of these experiments.

The Société Médicale des Hôpitaux has recently been engaged in a prolonged discussion on the subject, from which it appears that very different results have been obtained by different observers. M. Lallier observed that of between thirty and thirty-five vaccinations made at the St. Louis from the heifer only one has succeeded, and M. Hillairet has very frequently found them failing, yet other Practitioners have obtained as much success as from the ordinary mode of vaccinating. M. Empis has found in the animal vaccinations practised at the La Pitié that to prove successful they must be performed before the fifth day. If used from tubes the lymph must be very recent, for it coagulates very rapidly, forming on the lancet a little gelatinous mass which does not enter the puncture.—M. Bucquoy observed that as every one was now requesting to be re-vaccinated the question arose whether this demand should be indiscriminately acceded to. Is it demonstrated that persons in whom re-vaccination has proved successful were apt to contract variola? Should we re-vaccinate persons also who have had variola or varioloid? Are the pustules which become developed in persons who have been vaccinated other than a local production, and is the liquid they contain capable of giving rise to the same effects as the genuine vaccine virus?—M. Bergeron, in reply, observed that in his opinion re-vaccination is indicated in all the cases specified. Under the name of "flying small-pox" (*petite vérole volante*), the public often confounds varioloid and variola with varicella, this last conveying no immunity whatever. It is safer, therefore, to re-vaccinate, and severe variola has occurred sufficiently often after the 50th or even 60th year of age to justify the precaution being taken.—M. Moutard-Martin observed that, as to the absolute preventive power of re-vaccination, this cannot at present be absolutely determined, and such a power does not even belong to variola itself. Then, again, exceptional cases will offer themselves, of which he gave a remarkable example. A man, aged 19, having very distinct vaccine cicatrices, was attacked with variola, which left evident marks. Two years afterwards, on entering the army, he was re-vaccinated with success. At the age of 32 he entered the Beaujon for bronchitis, and was re-vaccinated by M. Lanois. At the very time when the pustules of this third vaccination had begun developing, he was seized in the Hospital with a confluent variola, which proved fatal. M. Moutard-Martin believes that a proposition has been laid down without sufficient proof—viz., that re-vaccination succeeds oftener in aged than in young subjects. According to his own numerous observations, the reverse of this is the truth.—M. Guéneau de Mussy stated that he had recently practised about 100 revaccinations with the heifer virus, and about one-half of the cases succeeded. An important consideration is the effect the number of pustules produced at first vaccinations may exert on the aptitude for variola or renewed vaccinia. He always now makes ten punctures. The duration of the vaccinal immunity may much depend upon individual peculiarities, the same virus producing different effects upon different persons. As an example of exceptional aptitude for variola may be mentioned the case of the woman who died in her 109th year of a ninth attack of small-pox.—M. Féréol could not but feel astonished at the statement of M. Moutard-Martin as to the greater frequency of successf re-vaccination in the young. He thought that the contrary position was quite established, and in a great number of re-vaccinations which he has performed he has always found them rarely succeeding in the very young, and proving successful above 20 in proportion to the increasing age of the subject.—M. Bergeron called attention to the fact that besides the false vaccinia, which is, in fact, a mere local affection, and the legitimate vaccinia, we may have a variety which has been termed *vaccinella*, which differs from typical vaccinia by presenting itself (the initial papule appearing on the fourth or fifth day) as a globular pustule, which the slightest friction lacerates, giving rise to the sudden discharge of all the fluid it contains. It leaves only a smooth, narrow cicatrix, and furnishes a less durable immunity.—M. Blache entertains doubts as to the advantages in making many punctures, and referred to the practice prevalent in America of producing in women only one pustule on each arm.—M. Lailler drew attention to the fact that while in private practice the re-vaccinations succeed in about one-half the cases, the success obtained in the Hospitals is infinitely lower,—a fact, he thinks, which cannot be explained away by the state of health of the subjects.—M. Hervieux reported the results of the trials which he has made at the Maternité. Of 84 vaccinations made on new-born infants, 59 only were quite successful; but then he also found that of 95 vaccinations made at the Maternité in the ordinary mode the results were much the same, about one-fifth of the cases failing. After animal vaccination the development of the pustules is slower, and they are not so large. The animal re-vaccinations performed on lying-in women and attendants at the Maternité, subjects under 40 years of age, amounted to 156, and of these in only 26 was the normal evolution of true vaccinia produced; and, speaking without precise figures for comparison, M. Hervieux does not believe that these results differ much from those observed after ordinary re-vaccination. He also protests against the disposition which now seems prevalent to distrust the ordinary vaccination, chiefly on the ground of the possibility of the transmission of syphilis. How absurd this fear is, may be judged by comparing the millions upon millions of vaccinations with the some twenty alleged cases of transmission, several of which are not even authenticated. Let the investigation of animal vaccination be thoroughly pursued, but let not the services of ordinary vaccination be forgotten; and especially do not expect an immunity from it which is not conferred by small-pox itself.

The experience of M. Hervieux is entirely in accordance with that of M. Guéneau de Mussy and the London Small-pox Hospital that greater security is attained by multiplying the number of punctures—the practice of making only one or two having become almost inveterate in Paris. During an epidemic of variola at the Cochin, and on many occasions since, he always found that the worst cases were those which had fewest cicatrices. Another result of his experience is, that true and excellent vaccine pustules may be produced by vaccinating with the virus of what is termed "false vaccinia." There is, in fact, no such thing as true and false vaccinia, inasmuch as any vaccine pustule, whether it have the vesicular or pustular form, whether it be pointed or flattened, projecting or depressed at its centre, may furnish a perfect virus. This is no more strange than is the production of a variola from varioloid.

As to the age at which infants should be vaccinated, M. Hervieux believes that during the prevalence of epidemic small-pox not more than the delay of a week or two should take place. In the absence of an epidemic, he prefers waiting for some months. In fact, vaccination is not always an inoffensive operation in young infants. The pustules easily inflame and ulcerate, and may give rise to erysipelas and adenitis. Moreover, on the ninth or tenth day a general vaccinal eruption may appear, taking on a miliary or vesicular form, and lasting for a variable period. Then, again, very fine children become sometimes sickly and ailing for several months after vaccination; and whether this may be due to the lymph employed or to the influence of the vaccination in general, it is impossible to decide—although the parents seem to have a justification in the reproaches they never fail to give vent to. Certain it is the vaccine had injuriously affected the infants in these cases, and they would have better supported its employment had they been allowed to reach the third or fourth month before resorting to it. Moreover, variola, when not prevailing epidemically, is not so very serious an affection in new-born infants, as they frequently recover from it; while, by a remarkable peculiarity, the disease at this age leaves no appreciable cicatrices on the face or trunk.

### PARLIAMENTARY.—THE DEBATE ON THE CATTLE PLAGUE.

PARLIAMENT was formally opened by her Majesty in person on Tuesday, February 6.

In the House of Lords, the Address to the Throne was moved by the Marquis of Normanby, and seconded by the Earl of Morley.

The Duke of Rutland wished strongly to call the attention of their Lordships to the last portion of her Majesty's Speech, which referred to the cattle plague. All that was yet known about that terrible disease was that they had no remedy for it, and that the only chance was trying prevention, for trying a cure seemed hopeless. He contended that the Government had full information of the approach of the Rinderpest, and also of its dreadful nature, yet they took no steps against its coming here, nor had they taken any proper precautions since it had come. Even at this late hour, however, it might not be too late to induce her Majesty's Government to wake from their slumbers, and, by utterly prohibiting the movement of cattle, either stop its spread, or at least confine and limit its ravages to places already infected.

The Duke of Richmond also condemned the supineness of the Government in the same matter, and showed by the Report of the Royal Commission that the Government were aware that the plague was steadily coming as far back as 1859. Since it broke out in the country, Professor Symonds thought that the Orders in Council had tended to spread the disease more rapidly than it would have naturally progressed had it been left alone.

Lord Faversham blamed the Government in very severe terms for not having taken a more decided course in dealing with the cattle plague. It was a grave national question, and he felt bound to move a resolution declaring that it was the duty of the Government to assume the responsibility of enforcing uniformity of action on the subject throughout the country.

Lords Essex and Winchilsea added their censure on the inactivity of Government.

Lord Granville vindicated the course taken by the Government. Did any one mean to say that it was possible as early as last July to stop both the importation and traffic of cattle? It was not until late in July that the existence of the Rinderpest was known in this country. From that date the Government and the Home Office took the most stringent precautions to prevent the spread of the disease, and every step they took was heartily approved by the late Lord Palmerston, who, up to within one week of his lamented death, employed all the energies of his active mind in considering various schemes and measures to avert the spread of the calamity with which they were threatened. The example of foreign Governments had been held up to her Majesty's Ministers, but Austria had utterly failed in stamping out the disease. Prussia, it was true, had succeeded, and so had France, but under the Constitution under which we lived no Government or body of Ministers had the power which was exercised individually by the Emperor of the French or the King of Prussia. With regard to the course which the Government intended to pursue, he might state that at the earliest period they meant to bring in a Bill which he thought would meet all the requirements of the case as to the traffic in cattle, though, of course, he did not feel at liberty to anticipate the disclosure of the enactments it was intended to propose.

Lord Carnarvon thought that the defence of the Government was worthless. If they lacked constitutional powers to enforce such rules as might have checked the course of the disease, they should have called Parliament together to apply for them. Instead of that, however, Parliament had been called later this year than it had been assembled for many years before. The cattle plague was the greatest national calamity which had fallen on the country for years, and the Government had done absolutely nothing to check or mitigate it.

Lord Abercorn, Lord Grey, the Duke of Argyll, and Lord Derby united in blaming the Government for their laxity in not taking greater precautions against the spread of the disease.

Lord Faversham withdrew his motion.

In the House of Commons,

Sir G. Grey gave notice that on Monday next he should move for leave to bring in a Bill relating to contagious and infectious diseases in cattle.

Mr. Doulton gave notice that on the 13th inst. he should ask the Home Secretary if it were the intention of Her Majesty's Government to introduce early in the present Session a Bill having for its object the preservation of the commons and open spaces round London.

In the debate on the Address a number of speakers, amongst whom were Mr. B. Stanhope, Lord R. Montague, Mr. Lowe, Mr. Henley, and Lord Cranbourne, united in censuring the Government. All their speeches were worthy of attention, but those of Mr. Lowe and Lord Cranbourne, who are both members of the Royal Commission, carried with them perhaps most weight. We regret that we have only space to give a portion of Mr. Lowe's speech referring to an attempt made by the Under Secretary of State for the Home Department to justify the inaction of the Government on the ground of the different recommendations made by the majority and minority of the Commissioners:—

"My hon. friend states that the Report shows that there was a difference of opinion among the Commissioners, and after exaggerating that, tries to shelter the Government behind it. That, however, will be of little avail. The state of opinion was this:—The majority and the minority both agreed that the real remedy for preventing the progress of the disease was the stoppage altogether of removing cattle from one locality to another. There was no difference of opinion on that point, and I am speaking in the presence of a noble lord (Lord Cranbourne) who was a distinguished member of the minority. The second point in which we were all agreed was, that whatever was to be done—whether a larger measure or a less stringent one should be adopted—the action of the central Government was necessary, and nothing ought to be left to the local authorities. What we really differed about appears at this distance of time to be a very small matter. It could perhaps best be described as a matter of temporary expediency. The majority thought it expedient to recommend what we all agreed was the real remedy, though some of us may have felt not much confidence in its being carried out. The minority thought that it was best to modify the proposition so as to make it more acceptable to the public, not because they liked the modified proposition better than the other, but because they deemed it more calculated to please the public mind. The House, therefore, will now be able to judge how far my hon. friend is justified in sheltering himself behind the minority. The course adopted by the Government is entirely condemned both by the majority and by the minority of the Commission, and there was no one on the Commission at all who does otherwise, except Mr. Maclean, the engineer, who thought it unnecessary to do anything at all. Well, what did the Government do? We reported on October 31, and after a waste of three weeks of infinitely precious time they give jurisdiction to petty sessions, and shortly after they extend that jurisdiction to quarter sessions, and so in substance the subject stands now. I did not come here to-night to criticise the conduct of the Government, but I have been urged to say what I think on the subject. I say, then, that the Commission was right in their recommendation that a central authority ought to act in the matter, not because I have fallen in love with despotism, but because there is nothing despotic in delegating power to the only persons competent to act. The rule is simple. Matters of public interest, in which the whole community is directly interested, ought to be left to the central authority, whereas matters in which the general public is not directly concerned ought to be left to the local authorities. Now what was this cattle plague? Had it been an epizootic merely, spreading in certain districts, and influenced by climate and local circumstances not likely to go beyond those districts, I can quite understand that it would be perfectly right to leave it to be dealt with by the local authorities. But is this disease of such a nature? Why, it is exactly the contrary. Every part of England is interested in the suppression of the disease in every other part of England. One day it is at the Land's End, and the next at John o'Groat's. I believe I may say that the London market is one day infected, Edinburgh and Plymouth the next. Have Edinburgh and Plymouth, then, no interest in the conduct of the local authorities in London at that time? And if so, how can we reconcile it to ourselves that these things should be left to the discretion of local authorities?"

## REVIEWS.

*A Manual of Materia Medica and Therapeutics.* Being an abridgement of the late Dr. Pereira's "Elements of Materia Medica," arranged in conformity with the British Pharmacopœia. By Frederick John Farre, M.D., Cantab., F.L.S., assisted by Robert Bentley, M.R.C.S., F.L.S., and Robert Warington, F.R.S., F.C.S. London: Longmans, Green, and Co., 1865.

Taylor and Rees's edition of "Pereira's Materia Medica" extended over 2543 pages, while Dr. Farre's abridgement extends only over 592 pages. The curtailment of the large work has been accomplished by omitting the parts on mental, on physical but imponderable, and on hygienic remedies; most of the division on general pharmacology, except the author's physiological classification of medicines; the tabular view of the history and literature of the materia medica; all notes and marginal references; the articles on medicine not officinal in the British Pharmacopœia; and the history of most of the medicines retained, their effects upon plants and animals, and much of the descriptive details and other matters concerning them. Of the opinions expressed by the author, Dr. Farre tells us in his preface that he has avoided as far as he could interfering with them, while he has not hesitated to alter whatever was decidedly erroneous. He further tells us that he has added much new matter, in order that the abridgement may represent more correctly the present state of our knowledge, this new matter being only occasionally indicated (viz., by the letters ED.). The author's classification of medicines has been modified and removed to the end of the work, a posological table introduced, and the matter of the British Pharmacopœia given in place of that of the others, with explanations of the processes and tests.

Having thus briefly indicated the contents of the abridgement, we proceed to a consideration of its merits, so far as our space will permit. This we may do from three points of view; in one regarding it as an abridgement of Pereira's large work, in another as a revision of it, to bring it down to the present time, and in a third as a modification of it, to bring it in conformity with the British Pharmacopœia. As an abridgement of Pereira's "Elements of Materia Medica," the "Manual" does not seem to us a very satisfactory production. In a work the real value of which lies in the vast store of varied information it affords about remedies, little *condensation* is possible, so that abridgement of it is only practicable by omitting some of the facts. Since, however, all the facts are so arranged in it that reference to any particular set of them is made without inconvenience, there is but one advantage, so far as we can see, in cutting it down in this way, which is that its cost is diminished by so doing. Excepting this one not unimportant use, we feel that the depreciation of the value of the work is almost proportionate to the diminution of its matter. Believing this of any abridgement like the present, we feel that Dr. Farre has had an unenviable task to perform, so that we more regret that we cannot congratulate him on the manner in which he has executed it. One great objection we make to it is that, of the matter omitted, that consisting of the articles on several medicines might well have been retained. In a work on Materia Medica, however limited in extent, all substances which are stated to be medicinal ought to receive notice, unless it has been conclusively proved to the satisfaction of the Profession generally that they are really inefficacious. If the writer of such a work believes himself that a medicine of some repute is in reality of no value, he can say so, and then leave the matter to Practitioners to try it or not, as they think best, on the authority of those who have recommended it.

Dr. Farre has omitted all medicines not in the British Pharmacopœia. Such an omission may be well in framing a text-book to enable a student to pass an examination on the officinal medicines, but it is quite otherwise in preparing a work on medicines professedly for the use of the Practitioner. The latter ought to know of every reputed means of meeting disease, in order that he may best do so; and is certainly not supposed to confine himself to the use of those medicines only, and in those forms, which he finds in a Pharmacopœia. The only legitimate object of a Pharmacopœia surely is to indicate exactly the nature of the drugs and their preparations in general use, to which certain names refer, in order that the prescriber may accurately convey by these names to the compounder of medicines the knowledge of what he wants the patient to get. In doing this the compilers, properly enough, insert just those medicines which, in their opinion, are in sufficiently general use to require defining. If we were to decide by the text of a pharmacopœia what medicines only we may employ, and what forms of them, we should be putting ourselves in Professional subjection to its compilers. We regret, therefore, to see Dr. Farre adopting such a principle in selecting the matter to be contained in his book. If his opinion of the efficacy of medicines is that all in the list of the British Pharmacopœia call for consideration, and none else, he should say so, and give that as his reason for selecting these and excluding all others. If this is not his opinion, which we believe, then he should have noticed all those medicines which in any way merited it, or else have denominated his work a manual of the materia medica contained in the British Pharmacopœia. Since, however, he surely has not "strictly adhered" to this rule when he retains articles on oxygen, nitrogen, commercial carbonate of potash, neutral carbonate of magnesia, anhydrous potassa, anhydrous nitric acid, etc., etc. —articles, too, with the exception, perhaps, of the first, about substances which have neither medicinal nor pharmaceutical use,—we have the more reason to complain that he has not broken the rule a little more, and in a more useful manner, by admitting a number of other substances of some interest as *reputed* medicines, to say the least of them. We notice, also, some undesirable irregularities in the abridgement, such as the omission of the descriptions of hepatic and Cape aloes, and other non-officinal varieties of medicines, while those of non-officinal English rhubarb, Egyptian opium, etc., are retained; the omission of the historical account of each medicine as a rule, but its retention without obvious cause in some cases, as in that of ricinus communis; the similarly exceptional retention of the commercial account of croton eleuteria; and again, the omission of the chemical account of castor oil, although that of most other medicines, important or not, is, retained.

Independently of the changes which are made in the matter retained in the present edition to bring it in accordance with our present knowledge, it has in many places been modified, evidently with a view to its improvement; but the attempt at improvement has, we think, not always been very successful. We give some instances. Pereira says of the source of hydrogen: "Hydrogen is usually procured by the action of zinc on diluted sulphuric acid." Dr. Farre has changed this accurate and comprehensive, yet simple, statement into the following, which has none of these characters:—"Hydrogen is always procured from water by means of some metal (and an acid) which combines with the oxygen of the water—*e.g.*, by means of zinc and sulphuric acid, in the preparation of *reduced iron* of sodium and sulphuric acid, in *hydrochloric acid*, and of potassium, and sulphuric acid, in *hydrocyanic acid*." Again, in describing the action of caustic potash on *ammoniated mercury*, Dr. Farre has replaced Pereira's practically accurate statement of its nature by an incorrect one. In the account of the tinctures of iodine, we are correctly told by Pereira that the one containing iodide of potassium is miscible with water without decomposition, while that which does not contain it is not thus miscible. Dr. Farre does not mention this (the real object of adding the iodide of potassium), but says, instead, that the iodide is chiefly useful in facilitating the solution of the iodine—a very doubtful statement as regards the utility of the iodide, since the iodine will dissolve in the spirit by itself without difficulty. Pereira truly represents the action of hydro-sulphuric acid on liquor ammoniæ thus: $NH_3 + 2HS = NH_3,2HS$, or $(NH_4S + HS)$. This has been changed by Dr. Farre to $NH_4O + 2HS = NH_4S,HS, + HO$,—the substance, $NH_4O$, being an unknown body. In the preparation of oxide of zinc, Pereira describes the process as being the expulsion by heat of the carbonic acid and water from the basic carbonate. Dr. Farre alters this, and incorrectly represents the process as being the expulsion of carbonic acid from the normal carbonate of zinc. After describing the physiological effects which tartarated antimony has been observed to cause, Pereira, under the section headed *Modus Operandi*, tells us by what real or supposed powers it produces these effects. Dr. Farre, omitting some of the matter, has rearranged the rest in this way. Much of what Pereira said as to the mode of action has been set down as physiological effects, while the paragraph on the mode of action is formed of this remnant of its former self:—"Tartarated antimony, when swallowed, becomes absorbed, and may be detected in the blood and viscera, especially the liver. It is eliminated by the urine, in which secretion it can readily be recognised." Not one direct statement as to how the medicine acts do we find in this mutilated paragraph! Pereira, after describing the *physiological effects* of medicines, gave what he called their *uses*. Dr. Farre substitutes for "uses" the word "*therapeutics*," which, granting its admissibility, is still a substitution wholly uncalled for. But therapeutics is the "branch of medicine which has for its object the treatment of disease" (Pereira), by medicines only according to some, by any agents according to others; and the *uses* of medicines are applications of a knowledge of their curative effects—that is, applications of medicinal therapeutics, not therapeutics itself. Another of these trivial and objectionable alterations of Pereira's text is made in the definitions of the classes of medicines. Pereira defines each class as "acting on" a certain system of organs, circulatory, secreting, etc. Dr. Farre has thought fit to change this to "influencing" the particular system, an elliptical expression for *influencing the action of*. Alterations like those we have noticed are not even indicated to the reader.

Dr. Farre has modified Pereira's classification of medicines for reasons stated in the preface; but he has done so through a thorough misconception of the grounds of this classification. Dr. Farre says that Pereira's classification is rather anatomical than physiological; Pereira himself said that it was physiological, and arranged on physiological principles. Dr. Farre's reason for his assertion to the contrary is, that the classification is constructed on the organs, and not on the functions of respiration, etc. We reply that to influence respiration, or to act upon the organs of respiration, is the same thing differently expressed; that Pereira defined the class "acting on the respiratory organs" as "acting as therapeutic agents by their influence over the functions of respiration and calorification;" and that a class in which the author includes medicines acting on the nervous, muscular, and secernent systems, as well as upon any or all parts of the body, so far as they are dependent upon a duly aërated state of the blood as the cause of their actions, or so far as they are concerned in keeping up the temperature of the body, is certainly a thoroughly physiological class, and not one formed on anatomical grounds. Dr. Farre has changed Pereira's six classes into ten. He has also modified and added to the orders which they contain. Pereira classified medicines according to their physiological effects exclusively. Dr. Farre has, however, added to these several orders framed according to the therapeutic effects of medicines, and in doing so states that he is only carrying out the plan of the author. He has added, for instance, among others of this kind, the orders *antemetics*, *stomachics*, *anodynes*, and *antispasmodics*. 'Tis true we find "antispasmodics" in Pereira's classification, but only as a term, for want of a better, to denominate certain metallic salts included among medicines acting on the blood. They are *named* antispasmodics for distinction sake; but they are only *described* as a group of spanæmics, or blood-impoverishers. Dr. Farre has also removed stimulants and sedatives from the class of medicines acting on the nervous system, and made some other alterations which will hardly gain approval. We look upon these alterations and "improvements" as wholly out of place. They might be excused were they alterations called for by the progress of knowledge since the classification was framed; but they are not; and are made only in consequence of a difference of opinion between the author and his editor. Statements as to facts an editor may, and evidently should, correct when necessary; but we think it is otherwise with an author's views. These we consider an editor is bound to respect so far as to leave them unmodified; and in expressing others differing from them, to clearly distinguish them, in order that they may not be confounded by the reader with those of the author. In connexion with this, there is another matter we have to complain of. Dr. Farre has made his abridgment from Taylor and Rees' edition of Pereira; but he has usually retained the extensive additions to the work made by these gentlemen without distinguishing them from the matter written by Pereira himself. Only in some cases has the important work of these editors been indicated, which we hold to be neither fair to them nor to the readers of the present volume.

As a revision of the "Elements" bringing the work to the present time, we have little to say of it. Being an abridgement, and a work in which only officinal medicines are contained, we suppose we must not expect much in the way of notice of recent additions to our knowledge—whether or not, we have not found much. We notice that not a word is said about any use of saccharated lime, or of the use of hydrochloric acid in fevers. We also notice that the incorrect expression *bark* of the root is employed by Dr. Farre in some remarks which he has added on rhubarb, although in Pereira's text the term *cortical portion* is employed.

Lastly, we come to consider the book as a modification of the "Elements," to bring it in conformity with the British Pharmacopœia.

The processes, descriptions, tests, etc., in this Pharmacopœia have been substituted for the corresponding matter concerning the last London, Dublin, and Edinburgh Pharmacopœias. Even an erroneous statement as to a simple matter of fact, we see, has been copied—viz., that about the relative strengths of the British and Dublin tincture of the perchloride of iron—that the former is only a fourth of the strength of the latter, the fact being that it is really a third. Very seldom are the processes criticised, and when they are, not always very learnedly. Thus, of the process for Liquor Ferri Perchloridi, we are told that the hydrochloric acid is not ordered in quite sufficient quantity to prevent the formation of basic (*sic*) chloride on the addition of water. This is a mistake; in theory and in practice the quantity is sufficient, if we use hydrochloric acid of the officinal strength and dissolve the iron in it before we add the nitric acid, as we are directed to do. Again, in the process for preparing Potassæ Sulphas we are directed in the Pharmacopœia to convert the acid sulphate (nitric acid residue) into the neutral by treatment with slaked lime, and subsequent filtration; then to convert some dissolved sulphate of lime into sulphate of potash by the addition of a few grains of carbonate of potash; to filter a second time, and to neutralise with a few drops of sulphuric acid. Dr. Farre says that it would be better to use carbonate of potash in place of the lime. We ask, Why? It would certainly save one of the two filtrations; but it would make a product less pure, at a much greater cost. For a pound of the "residue of the nitric acid process" would require to convert it into sulphate the addition of about two-thirds of a pound of officinal carbonate of potash, so that the product would be contaminated with the impurities of that quantity of this admittedly impure substance, and at the same time derive a cost from this addition far beyond its marketable one, or that which the use of the almost valueless materials ordered in the officinal formula would give it.

Explanations of the processes are generally given, which, however, we feel certain, are too meagre to be readily understood by many students. Sometimes, however, explanations are wanting where most needed. For instance, we are not told why lime water is used instead of the apparently much more convenient solutions of soda, potassa, or ammonia, in preparing oxide of silver, nor why the product should not effervesce when dissolving in nitric acid. Again, we are not told that the lime ordered in the "Pure Ether" process serves to remove the acid usually present in common ether. No explanation also of the quantitative test for opium has been given.

So far as the explanations go, they seem in most cases to be correct, but certainly not so in all, whether new ones or only abridgements of Pereira's explanations of the processes of the London Pharmacopœia. As instances of their occasional incorrectness, we may mention that Pereira's explanation of the red-oxide-of-mercury process of the London Pharmacopœia is partly applied improperly to that of the British Pharmacopœia. In the former, the nitric acid, in which the mercury is ordered to be dissolved, is in quantity (compared at equal strengths) less than half that ordered in the latter, and is nearly three times more dilute than it is after the addition of the water. This difference in the formulæ, and the absence of any injunction in the British Pharmacopœia to dissolve at a *gentle heat*, makes the reaction different, and therefore Pereira's explanation inapplicable. Under the volumetric solution of iodine, we are told that, in estimating the quantity of sulphurous or of arsenious acid, it is added to the liquid until *free* iodine (known by its *brown* colour) begins to appear in the solution; whereas we add it until the *blue compound* of iodine and starch is permanently formed with starch paste previously mixed with the acid. The product of the distillation in the preparation of valerianate of soda is described as valerianate of amyl, instead of valerianic acid (with a small quantity only of other products). The quantity of sulphuric acid ordered is just sufficient to form chrome alum with all the bichromate of potash after removal of some of its oxygen by the fousel oil; and the quantity of oxygen in the bichromate capable of removal is more than sufficient to oxidise the whole of the fousel oil into valerianic acid, and this forms the principal product; but before the action is completed, a small quantity of intermediate products distils over with the valerianic acid.

The formula for morphia has been corrected, to make it accord with that given in the British Pharmacopœia; but the formula for codeia is left unchanged, because this substance is not officinal. If we ought to adopt the corrected formula for morphia, then ought we also to adopt the corrected formula for codeia. An innovation, too, is made in the spelling of the name of this substance, which is to be deprecated—the word being written "codia" instead of "codeia," by which the quantity of the second syllable will be apt to be incorrectly given, as it generally is in the similar word *conia*.

We here terminate our criticisms. The Manual does not at all please us; but in justice to Dr. Farre we must add that Pereira's large work also, valuable as it is for its comprehensiveness, and stores of information not to be easily found elsewhere, is, to our mind, not at all a satisfactory *text-book*. Dr. Farre has evidently devoted much time and attention to his troublesome undertaking, and has produced a work which contains much valuable matter from that of Pereira, together with the materia medica and pharmacy of the officinal medicines, in most parts of which, to the reader's advantage, the marks of his editorial pen are manifest. Our admiration of Pereira, and our sense of the authority which Dr. Farre's position as lecturer at one of our principal schools and London editor of the British Pharmacopœia gives him, have combined to make us more stringent in criticism than we should otherwise have cared to be.

## GENERAL CORRESPONDENCE.

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### DR. B. W. RICHARDSON'S NEW METHOD OF PRODUCING LOCAL ANÆSTHESIA.

LETTER FROM MR. H. T. KEMPTON.

[To the Editor of the Medical Times and Gazette.]

SIR,—The report published in your journal last week of Dr. Richardson's interesting researches upon the production of local anæsthesia by means of the vapour of ether, must necessarily have excited a strong interest in the minds of your readers in respect to a method of annulling pain in Surgical operations which, if it should only prove as efficient as it is devoid of danger, must constitute one of the most valuable additions to this class of our Materia Medica that has been made during the present century.

I had the satisfaction of hearing Dr. Richardson give a full and lucid account of his method of proceeding, and of the philosophical mode of reasoning and experiment by which he was led to so happy a result, at the meeting of the Odontological Society on Monday last. Having expressed myself interested in the inquiry, Dr. Richardson kindly invited me to test the efficiency of his proposed method by operating upon a patient who was desirous of having two very sensitive and painful stumps of the upper bicuspids and a lower molar tooth removed. I gladly availed myself of his offer, and will now give a simple statement of the result, leaving it to my fellow-Practitioners to draw their own conclusions; only trusting they will thoroughly examine for themselves a remedy which I confidently believe will prove of the highest value generally, and of especial value in Dental Surgery.

A gentleman about thirty years of age had suffered for several weeks from severe pains on the right side of both the upper and lower jaws alternately. In the upper jaw the pain was caused by the irritation excited by the stumps of the first and second bicuspids; in the lower jaw by the first molar, which was much decayed having the pulp exposed. Both of the upper stumps, as well as the lower molar, were highly sensitive to the slightest touch, showing that the disease had extended to the dental periosteum. The elevator was used in extracting the upper stumps after the diffused ether vapour had been applied for a period of not more than thirty seconds; no pain was experienced, and although the bleeding was tolerably free it became arrested at the ordinary period after similar operations. The current was then applied to the lower molar, and here I would remark that on entering the cavity of the tooth and acting on the exposed pulp it gave rise to acute pain; on observing this, the application of the ether was suspended, and the cavity plugged with cotton wool so as to prevent the spray coming in contact with the exposed pulp. The ether vapour was then re-applied for a period of forty seconds, and the tooth extracted with an equally satisfactory result as in the previous operations.

Further experience is required to determine the absolute and relative certainty of this mode of producing local anæsthesia in dental operations, and although a single instance may be of comparatively slight value in determining the reliance to be placed on Dr. Richardson's proposal, it is at least sufficient to encourage others to carry out the investigation to its ultimate results. I am, &c.

H. T. Kempton, L.D.S., F.L.S.

17, Cavendish-place, February 7.

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## CASE OF TETANUS AFTER CONFINEMENT.

### Letter from Mr. Henry Viant.

[To the Editor of the Medical Times and Gazette.]

Sir,—If you think the following case worthy of a place in your columns, I should feel greatly obliged by your inserting it:—

On Friday, January 5, I was called to see a woman who had been delivered on the Saturday previous of a healthy child; the midwife who attended her stated that the labour was quite natural; there was no post-partum hæmorrhage to any extent, the placenta coming away about fifteen minutes after the child.

On Wednesday, the 3rd, the patient got up and went downstairs, where she remained the whole of the afternoon and part of the evening. She went to bed quite well.

On Thursday, whilst out of bed, she was suddenly seized with trismus, of which slight notice was taken at the time, as the nurse supposed that she had taken cold and consequently had a stiff neck.

The symptoms becoming aggravated, they applied to me on Friday, January 5, when I found the patient suffering from tetanus in a severe form, no doubt brought on whilst the nervous system was in a weakened state by exposure to the cold.

She had convulsions every two or three minutes, during which there was complete opisthotonos; the trismus always remaining persistent. There was no pain in the region of the abdomen, nor had the lochia ceased, being rather abundant than otherwise. Fortunately the patient had lost two front teeth both in the upper and lower jaws, leaving a space through which fluids might be passed, which she had great difficulty in swallowing.

The bowels having been freely opened with Ol. Ricini the day before, I ordered Tinct. Opii. ♏xv., Æth. Chloric ♏x., ex Mist. Camphoræ every three hours. Also a simple liniment combined with chloroform to be rubbed in along the spine.

On Saturday I found the patient more free from pain, but evidently becoming much weaker from the frequent convulsions and her inability to take nourishment. I administered chloroform, and found that there was a cessation of the convulsions whilst under its influence, but they again recurred when its effects had gone off. I repeated the mixture as before, but she gradually sank and died on Sunday, 5 a.m., the convulsions never having entirely left her.

If any of your readers should have met with a similar case, I should be glad to hear of it and the treatment they adopted with success. I am, &c.

Henry Viant, M.R.C.S., etc.

Southampton, January 15.

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## MEDICAL EDUCATION IN LONDON AS IT LOOKS TO A PROVINCIAL PROFESSOR.

[To the Editor of the Medical Times and Gazette.]

Sir,—Whilst the subject of Medical education is so much discussed, a few observations on the training afforded to London Medical students may not be altogether inappropriate, coming as they do from one who has had considerable experience of that class, and who has also seen the style of instruction adopted in most metropolitan Hospitals.

In a Medical education there are two very distinct parts,—the one is the acquisition of theoretical knowledge, mostly obtained by means of lectures or reading, the other is the application of the knowledge thus acquired at the bedside or in the out-patients' room. In both of these, as seen in London, there is a marked deficiency of the tutorial method, as already pointed out in the *Medical Times and Gazette*, nor can I say in which department the deficiency is the more marked.

Turning first to the clinical teaching seen in London, I must, however unwillingly, slightly differ from the views of Dr. Beale, stated in his letter lately published in this journal, as to the necessity of the tutorial method in clinical teaching; indeed, of the two we think it more, rather than less necessary, in this department, for by no other method can the student be properly taught to recognise and cope with disease. Unfortunately, however, this element appears to be almost equally deficient in both departments of Medical study in London, though perhaps to a less extent in the practical than in the theoretical. In all my wanderings through the London Hospitals I do not recollect seeing a student set to examine a case under the eye of his teacher, to give his diagnosis or to indicate a line of treatment. I am aware that there are exceptions to this rule, still I maintain that they are the exceptions, not the rule, and that the student is too often left to grope his way in the dark.

In most cases I have seen the teacher go round followed by his pupils, occasionally pointing out something for their observation, but never testing their knowledge by questions as to any peculiarity in the case before them, nor, in fact, by any other means. Nor can I help thinking that in most cases London teachers are too crotchety and too much of specialists to be good instructors in general Medicine. Very many of them are men who have obtained eminence in some one or other department of Medical science, and they may be pardoned if they incline to it rather than to any other. Still this is disadvantageous to the student, who thus requires to follow a multitude of teachers, and perhaps ends by not discovering how much one class of diseases is related to another. Another objectionable feature I have observed is the tendency to run after unusual cases, and to study them, while overlooking the more common maladies with which they will be compelled to contend every day of their lives.

In some of the Hospitals there may be said to be an entire absence of clinical instruction, for the only thing that represents it is the Physician's dictating certain notes, after he has examined the patient, to be entered in a case-book by the clinical clerk. Sometimes the students enter these notes in their private case-books, and attempt to verify them by examining the patients, but in too many instances no further notice is taken of them. Occasionally, even this is denied, and the student has the melancholy satisfaction of learning from his teacher that "this a case of dropsy," and "that one of fever," without any further comment.

If now we turn to the more formal instruction afforded the student in the schools, we find matters in an equally unsatisfactory condition. Most of the teachers value their appointments more for the status they give and the Hospital duties which usually accompany them than from any love of teaching *per se*, and cannot therefore be expected to devote themselves to it so completely as those who love it for its own sake. Nevertheless, it might be expected that a little more pains would be taken in many instances were it only for the teacher's own satisfaction.

I do not here complain, however, so much of the teachers themselves as of the method of instruction prevalent in London. Those who are acquainted with students know well how apt they are to carry away wrong impressions of what has been said to them, and in London there are usually no means of correcting these. The lecturer comes in, talks for an hour on the subject appointed for the day, and at the end of that time leaves without knowing—we had almost said without caring—whether his pupils have been at all benefited thereby. In some instances, and of these I believe Dr. Beale to be one of the best, the teacher remains for some time after lecture to permit any student to ask such questions as may be necessary for clearing up his notions; but in other cases, he puts an effectual check on all such troublesome practices by leaving the room as soon as he has closed his manuscript. Altogether, I say, the student is left too much to his own resources, not without happy effects in some, but usually with quite the contrary result. Nor can I help thinking that those men who have done well under such a system would have done much better under a more fostering one; their success has rather been in spite of, than in consequence of the conditions under which they laboured. Neither can it be denied that the opportunities afforded by a large metropolitan Hospital are thus wasted, when I find such a man as Professor Beale complaining of the difficulties he labours under in having to instruct students as to things they ought to have known before they entered his wards.

What, then, is the remedy for such a state of matters, and how is the difficulty to be met? To this I would reply, either let the teachers devote themselves more strenuously to their work, and let them by frequent examinations, written and *vivâ voce*, ascertain the progress of each student under their care, or as their time in most cases is too valuable to be given up to work which can as readily be done by another, let competent men be appointed for the purpose—in other words, let each school have one or more Medical tutors.

Now a few words as to the duties of a Medical tutor may not come amiss from one who has seen the system wrought in what, compared with London schools, might be called perfection. In the first place, he ought to devote himself rather to instruct the student than to enable him to pass certain examinations with *éclât*; and this really constitutes the only essential distinction between a public Medical tutor and a private grinder. To enable him to do this more effectually the class under his care should never be a very large one, or if too large to be readily manageable, should be broken up into two sections. The subjects of examination should be given out some time before the students' knowledge is to be tested, in order that time be given for the mastery of those subjects to the best of their ability. Interrogation and explanation should go hand in hand, and the grand aim in all cases should be a correct appreciation on the part of the student of the subject under discussion.

A question of some little importance is, What subjects should be thus handed over to the Medical tutor supplementary to the regular lectures delivered on them? To this we would answer, All except those that are strictly practical, such as regional anatomy and practical chemistry, which should be taught by the demonstrators of the respective subjects. All the fundamental principles of Medicine, as well as the preliminary scientific studies, would be far more efficiently taught on this plan than on any other. I have seen its good effects exemplified in men who have repeatedly taken the highest places in competitions which, had it not been for their training, they would have shrunk from altogether, or, at best, made only a mediocre appearance. Nor do I consider this method of less value when applied to clinical teaching; all the drudgery which is so distasteful to many otherwise excellent teachers might be handed over to a tutor specially relegated to this department, or to the tutor who, at the same time, superintends the higher studies of the pupils. The routine of Hospital practice might thus be learnt in a far shorter time and more satisfactory manner than is ordinarily done.

But a still more important consideration remains. Who are the men best adapted for such duties as I have enumerated or hinted at? And here I would enter my protest against the manner in which all Hospital appointments are usually made in London, for in many instances all other claims are overlooked, except the fact of having been educated at a particular school. There should be free trade in teaching as in commerce, and that school would do well for itself which instituted the practice. Nepotism, I repeat, is the bane of London schools, and some of them owe their almost effete condition to no other cause. But I am to some extent wandering from my point. I conceive, then, that the grand qualification for a Medical tutor is experience of students, and the best modes of drawing their attention. Just as it has often happened that the most famous Practitioners have been but poor teachers, so do I conceive that the very highest academical honours may not be the best surety of a successful tutor. The knowledge he requires is rather of many things than much of any one thing; by all means, let the two be combined if possible, but I repeat that the former is more essential than the latter. Facility of exposition, with a ready appreciation of the difficulties of students, are no less necessary. All these things render it somewhat difficult to obtain one exactly suitable in all points, still I have no fears of the result if any London Medical school of standing only show the example by throwing open its doors to the best man, be he who he may, wherever he comes from. His emoluments might be easily secured by adding a small sum to each student's entrance fee—small in comparison with the benefits which might thus accrue. This deficiency or absolute want of the tutorial system I consider the grand defect in the London schools, and the institution of such a system would do more to advance the interests of the students than would collecting all the best metropolitan lecturers into one great school of Medicine.

I am, &c., A PROVINCIAL PROFESSOR.

## REPORTS OF SOCIETIES.

## ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JANUARY 23.

DR. ALDERSON, F.R.S., President.

A PAPER, by MR. C. H. MOORE, was read on

### AN ARTERIO-VENOUS CYST IN THE POPLITEAL NERVE—AMPUTATION—RECOVERY.

A woman, aged 31, received a blow with an iron pump-handle in the middle of the ham. In a fortnight a painless, moveable swelling, of the size of a hazel nut, was found in the situation of the injury, and but for its distance from either hamstring, would have been pronounced to be an enlarged bursa. In sixteen months' time the tumour had increased, and seemed partly solid, and she first felt pain, which was referred to the foot. Three months afterwards, and twice subsequently in the following three months, the swelling was punctured, and on each occasion a yellow fluid, tinged red, first escaped, and as it flowed gradually deepened in colour, and continued to issue freely as blood from an open vein. The tension of the swelling was but temporarily reduced by these operations, and it increased in size so as completely to fill the ham, and protrude backwards in two prominent lesser swellings. The pain in them and along the leg and foot, the exquisite tenderness of the tumour, and a peculiar sudden pang shooting to the foot, while the canula was held motionless in the tumour, showed the nerve to be in some way mixed up with the swelling. After putting on a tourniquet, Mr. Moore made an incision into the tumour. Serum, black clot, loose fibrin, and some small clusters of white corpuscles were dislodged, partly with the finger and partly with a copious rush of blood from a vein at some deep part of the large cavity which had been opened. This proved to be a thin cyst, with a shining interior membrane, expanded into alternate ridges and sacculi, and traversed, like an auricle or right ventricle, by many firm cords. It being impossible to dissect it out, and improper on account of the state of the woman's health to leave the sac to suppurate, Mr. Moore at once amputated the limb. The patient recovered. Upon examining the limb the disease was found to be a vast cyst within the popliteal nerve, shaped like a double cone, one continuous with the higher, and the other with the lower end of the nerve. The expanded and hypertrophied textures of the nerve constituted the cyst, and the cords passing through it and along its walls were disparted nerve-bundles. A large vein, having no valves between it and the popliteal vein, opened obliquely like the ureter, on the front of the cyst; and in the upper cone, where alone firm lymph was collected, an artery equal in size to the superficialis volæ opened into the cyst. The disease thus proved to be an arterio-venous aneurism, but unlike those which are more commonly observed in the small size of its artery, in the possible fact of venous blood having sometimes regurgitated into it, and in the unruffled quiescence of its contents, which had even separated into their natural constituents, almost as when blood coagulates after its withdrawal from the living body.

MR. GASCOYEN eulogised Mr. Moore's treatment of his case, and thought it preferable to tying the femoral artery. He related a case in which a patient suffered from bronchitis, and a tumour in the popliteal space, which was of an aneurismal character. He tied the femoral artery. The patient lived a year, and then died of heart-disease. The tumour in the popliteal space was found to be coated with the posterior tibial nerve, which completely encased it. The tumour was filled with coagula.

Mr. Holmes Coote was inclined to think, looking at all the circumstances of the case, that the tumour was of a malignant character. He had seen and heard of several cases in which a tumour, supposed to be a blood-cyst, turned out to be malignant.

A paper, by Mr. Septimus W. Sibley, was read on

### A CASE OF MULTIPLE NEUROMATA AFFECTING THE NERVES BOTH WITHIN AND EXTERNAL TO THE SPINAL CANAL, SOME OF THE TUMOURS BEING OF A CYSTIC NATURE.

This case was submitted to the Society as being a remarkable example of the cystic form of nerve-tumour, and as an illustration of the extraordinary multiplicity which is sometimes observed in this form of disease. The subject of the disease was a coach-painter, who died at the age of forty-five in the Middlesex Hospital under the care of Mr. Henry. The patient had enjoyed good health till seven years before his death, when he became less strong, but had no definite symptoms till four years ago, when the use of his lower extremities became impaired, and by degrees he lost all power of movement. He had also suffered from sloughing of the back. When admitted into the Hospital, he had no power over the voluntary muscles of the lower half of the body, the legs being contracted and drawn up. He retained some power of motion over his upper extremities, being able to feed himself if his food were first cut up for him. Cutaneous sensibility was quite absent in the lower extremities; but he was able to feel to a certain extent with his hands. The urine and the fæces were passed involuntarily. A large tumour was observed below the elbow, and another below Poupart's ligament on the left side. He died after he had been in the Hospital a month. At the post-mortem examination there was no disease of the viscera of the chest or abdomen. The brain and the cranial nerves were healthy. On opening the spinal canal a number of tumours were observed connected with the nerves within the membranes of the cord. In the cervical region there were several tumours, and the largest of these (about the size of a large nut) had pressed upon the spinal cord, which at this point was extremely constricted and softened. There were also many neuromata in connection with the nerves in the lower part of the cord. In some places these were so numerous as to present the appearance of beads strung on a thread. The large tumour which was observed during life below Poupart's ligament was found to be connected with the anterior crural nerve. It was enclosed in a fibrous capsule, and on section presented the appearance of a fibro-cellular tumour interspersed with cysts. These cysts were of various sizes, the largest being about the size of an egg, and partly filled with imperfectly organised blood-clots. A second smaller cyst was filled with gelatinous material. The remaining small cysts were filled with clear serous fluid.

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## THE PATHOLOGICAL SOCIETY.

Tuesday, January 16.

Dr. Peacock, President.

Dr. Hermann Weber exhibited

### SPECIMENS OF SYPHILITIC AFFECTIONS OF THE LIVER, LUNG, BRONCHIAL GLANDS, CRANIUM, AND DURA MATER.

C. F., 28, carpenter on a merchant ship, taken ill on Dec. 14, with pains, supposed rheumatic, in the right hip and both knees. Admitted into the German Hospital on December 21, with pains in both knees, which were but slightly or not at all swollen, and a moderate amount of fever. On December 29 he complained of headache, and had less pain in the knees. The headache increased, and on January 7 patient became drowsy, and had a kind of fit, after which, a semi-comatose state supervened, which was followed by a complete coma on the 9th, and death on the morning of the 11th. *Post-mortem.*—There was a thick layer of very vascular exudation on the inner surface of part of the frontal, parietal, and temporal bones of the right side, thickening of the corresponding firmly-attached dura mater, which on its arachnoid surface exhibited a similar layer of exudation abundantly supplied with new blood vessels and with small hæmorrhagic spots. The pia mater and arachnoid covering the adjacent portion of the right hemisphere were inflamed and slightly thickened in the circumference of a crown piece, but could be removed from the flattened gyri without loss of substance. A similar, but much less developed condition of the cranium and dura mater was seen on the corresponding region of the left side. The whole brain was congested, especially the pons and crura, in which were a few capillary hæmorrhages, but there was not much effusion of serum either into the ventricles or on the surface. There was a fresh node on the inner surface of the upper portion of the sternum. Both lungs were decidedly firmer than usual, all over the greater part of their surface, especially near the edges, the ramifications of the lymphatics were seen much distended and filled with creamy substance, which consisted of fat globules, very large cells, and large granular corpuscles; the sections of the lungs showed everywhere small greyish-white prominent spots, which to a superficial inspection had all the appearance of miliary tubercles, but which on closer examination proved to be caused by the exudation of creamy semi-coagulated lymph oozing from the enlarged lymphatics, of similar microscopic appearance to the contents of the lymphatics on the surface; there appeared to be also an increase of the intercellular tissue round the bronchi and lymph vessels. The glands near the bifurcation of the bronchi were much enlarged, some to the size of pigeons' eggs; from the greyish-white section of the largest, which were at the same time rather soft, a creamy fluid exuded which consisted entirely of fat globules, granular corpuscles, and an abundance of very large cells, with one, two, or three very large nuclei, more or less fatty. There were no traces of pus globules. The less enlarged glands were harder, and exhibited under the microscope a great predominance of large nuclei and nucleated cells, and a small proportion of fibres thickly studded with nuclei. The heart and great vessels were normal. The liver was of average weight and size, but had on its surface many roundish spots, from the size of a pea to that of a silver threepenny piece—greyish and depressed in the centre, yellowish red, and slightly elevated in the circumference; with rather fatty, but otherwise normal liver tissue between them. The fresh sections showed that these spots were also everywhere in the interior of the organ, and exhibited different stages of development; some of them, especially the smaller, being in the centre slightly prominent, and of deeper red than the healthy tissue, and having a yellowish circumference, paler than the normal tissue. Other spots, and especially the larger, were in the centre greyish red, and distinctly depressed, and in the circumference elevated, the inner zone of this circumference being darker and more red than the normal tissue, the outer zone of a pale yellow. The consistence of these spots differed but slightly from the surrounding substance. The depressed centre showed an increase of fresh connective tissue, and a diminution and shrinking of liver cells; the raised circumference augmented vascularity, an abundance of free fat globules, with liver cells gorged with fat globules, and some granular corpuscles. The kidneys had several cicatrices, but were otherwise normal. There was a cicatrix on the penis near the frænulum. The inguinal glands were not much enlarged, but hard. The lymphatic glands of both elbows and of the neck were enlarged and hard. There were hard cicatrices on both arches of the palate.

Dr. H. Weber said he had no doubt that the pathological alterations of the head, the liver, lungs, bronchial glands, and sternum, were due to constitutional syphilis, but that these affections were in so early a stage as had hitherto not yet been described in this country, and had altogether probably not often been seen, because patients rarely died at such a stage of constitutional syphilis. As the time of the meeting was advanced, he could not offer a more detailed description, but proposed to the President the appointment of a committee for the examination of the specimens.

A Committee was appointed to report on the specimens.

Dr. Hermann Weber next exhibited a specimen of

### RUPTURE OF THE AORTA.

The patient, a man cook, aged 45, had been under Dr. Sutro's treatment at the German Hospital for Bright's disease since August 1865. According to Dr. Bauember, the resident Physician's report, he complained of violent headache on January 7. At 11 p.m. he slipped out of bed with the head foremost, the head touching the ground while the legs were still in bed, the lower part of the back resting on the edge of the bed. Early in the morning of the 8th he had a kind of fit, when he lost his senses and turned blue in the face, without having convulsions. During the remainder of the day he was conscious, but drowsy. On January 9 he was as usual, when, while eating his dinner, he suddenly cried out, and fell back, becoming first pale, then red in the face, and died shortly afterwards. The pericardium filled with coagulated blood; the heart was hypertrophied (14 oz.), but the muscular tissue and valves were sound; the commencement of the aorta was not dilated, and but slightly atheromatous; almost immediately above the valves was a transverse rent about an inch long, part of which penetrated only the inner and a portion of the middle coat, while about half of it entirely penetrated the middle and formed a smaller opening in the external coat. There was some infiltration of blood into the tissue of the external coat around the slit. The specimen was, therefore, what Dr. Peacock in his report (*Pathol. Trans.*, vol. xiv.) called "dissecting aneurism in the earliest stage." The commencement of the rupture had most likely been caused by the fall two days before the death, the external coat, and probably some fibres of the middle, having resisted until the moment of death, which in these cases must be immediate, being effected by compression of the heart.

### PATHOLOGY OF THE CATTLE PLAGUE.

Dr. Crisp exhibited some fresh preparations taken the day before to illustrate the pathology of cattle plague in its first and latter stages, in reference to the identity of this disease with small-pox. They consisted of a part of the fourth stomach, a portion of the ileum, and parts of the skin of a cow that was killed thirty hours from the first appearance of the plague, and examined by Dr. Crisp immediately after death. There was no appearance of eruption on the skin, but one irregular shaped red spot was present on the inner part of the lower lip, and the subcutaneous layer of the nose was much congested. The endocardium did not present the usual appearance of red marking and staining from extravasation of blood described by Dr. Crisp in his first communication at the Society, Oct. 17. The lining membrane of the vagina was much reddened, and under the microscope presented the mottled, spotted aspect of the skin in scarlatina. The mucous membrane of the fourth stomach was reddened, and in various parts small spots of a deep lake colour, varying in diameter from the fifteenth to the fifth of an inch, were present, the epithelum being removed. Some parts of the bases of the intestinal ridges were intensely red. On the same day, Jan. 14, another cow(a) that Dr. Crisp had seen when labouring under cattle plague was killed seven weeks after the first appearance of the attack. She had the disease very severely; suffered much from diarrhœa (which was checked by opium and sulphate of copper); passed bloody urine and a portion of the lining membrane of the bladder. She was much emaciated, and, although the result of the examination showed that she would probably have recovered, it was thought better to kill her. No trace of eruption was visible on any parts of the skin examined. The epithelial lining of the three first stomachs was entire. Large brick-dust-coloured patches were present in the fourth stomach; but over the greater number of these the epithelium had been restored, but in a few there was partial abrasion. The intestines were not mottled externally, and those parts of them examined had recovered their normal state. Patches of a brick-dust colour were present on the prominence of the left cardiac ventricle; but they had lost the dark appearance they usually present in the first stage of the disease.

Dr. Crisp said he wished that he could agree with Dr. Murchison as to the identity of this disease and small-pox. There might be some resemblance, but he could discover no identity either in the symptoms or morbid appearances, and he anticipated that no good would result from inoculation with small-pox or vaccine matter. He had seen several cows that he had reason to believe had had the cow-pox, and yet several of them had died of the plague, and others had had the disease very severely. His experience told him that the only way to get rid of the pestilence was to stop all movements of cattle, sheep, and pigs; kill and bury all affected, and compensate the owners. There was one important fact in connection with this disease that he had alluded to in his first communication, Oct. 17—that he had an especial bearing upon the identity of this plague and small-pox. Men employed in flaying diseased animals had often an eczematous eruption upon the arms and thighs, which sometimes continued for three or four weeks. It evidently arose from the acidity of the virus, for these men were in the habit of placing the knife between the thighs, and hence the presence of the eruptions on these parts. It first appeared as a red pimple, then slight vesication and desquamation, followed with intense itching. Dr. Crisp said he had had it on his own arm.

Mr. Spencer Watson exhibited a

### CAST AND SPECIMEN OF EXOSTOSIS OF FINGER.

The patient was a woman, 40 years of age, who had lately suffered pain and inconvenience from the presence of the tumour. She wished for its removal, and would have submitted to amputation of the finger if necessary. Mr. Watson, however, decided that, if possible, he would remove the tumour without amputating. This he accomplished successfully. The tumour, which was of about the size of two filberts, presented the characters of cancellated exostosis, and had a thin layer of cartilage on its surface.

### SPURIOUS ENTOZOA IN CATTLE.

Dr. Cobbold exhibited drawings and microscopic preparations illustrative of the so-called entozoa or psorospermiæ, which he finds to be more abundant in the flesh of healthy sheep and oxen than in that of diseased animals. In this connection he quoted the labours of Dujardin, Hessling, Rainey, Virchow, Gubler, Leuckart, Lindemann, and others, and showed that the bodies in question were both ecto- and endoparasitically related to man himself.

Mr. Christopher Watts showed the fragments of a

### MULBERRY CALCULUS REMOVED FROM THE FEMALE BLADDER BY LITHOTRITY.

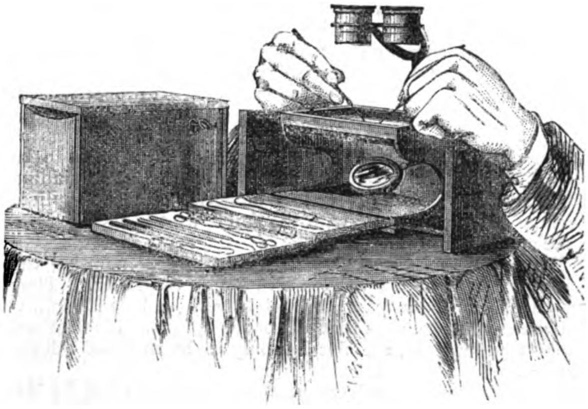
The fragments weighed 245 grains, and consisted of *débris* of triple phosphate which formed the exterior of the stone, and several large fragments of oxalate of lime calculus which formed the nucleus of a stone measuring when first grasped in the lithotrite one and a-half inches. The stone was removed, from the bladder of a lady who had suffered from symptoms of calculus for some time, in five sittings, and the patient made a perfect recovery.

## NEW INVENTIONS.

◆

### DR. LAWSON'S BINOCULAR DISSECTING MICROSCOPE.

We recommend this useful microscope to the attention of our readers; it has already become a favourite instrument with those engaged in dissections, although so recently brought out.



Dr. Lawson's Binocular Dissecting Microscope.

It belongs to the class of simple microscopes, and is adapted to binocular vision. The application of the principle on which it is constructed is novel. The arrangement of it is this:—For each eye there is a disc of glass, which corresponds to one of the halves of a large bi-convex lens, cut circularly, and mounted in a short brass tube. The two eye-pieces, fixed as in the figure, are so arranged as that the discs present the thickest portions of their borders towards each other—that is, the portions which formed the centre of the original lens.

The principle of their optical action is extremely simple.

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(a) A fœtus exhibited, weighing about 8 oz., was found in this cow in a partially decomposed state.

Each glass acts as an entire lens, and serves to render parallel the rays diverging from a point in an object. By its prismatic form and its position towards the other, each glass also serves to bend the direction of the axis of the rays of light passing through it from a point in the object, so as to make it less inclined than it was to that of the axis of rays from the same point passing through the other. Consequently, an object can, by means of this admirably contrived instrument, be placed very near the eyes, and thus magnified, and yet be viewed by both eyes at once without any unusual convergence of their lines of vision.

It is supplied with a gutta-percha trough, having a small piece of glass let into the bottom, so as to permit, when necessary, the transmission of light from a reflector placed beneath. This trough, containing water, forms the stage on which the dissections are made. The microscope is also provided with sliding arm-rests and the necessary dissecting instruments. It is fixed on a mahogany stand, which folds up as a box, including all parts of the instrument in a very small compass.

It is exceedingly well suited for its purpose; so that we feel confident that the Medical man will find it almost invaluable in the examination of morbid structures. It is the ingenious invention of the gentleman whose name it bears, Lecturer on Histology and Microscopic Anatomy at St. Mary's Hospital, and is manufactured and sold, at a moderate price, by Mr. Collins, the eminent microscope maker, of 77, Great Titchfield-street.

## SINAPINE TISSUE, OR MUSTARD PAPER.

*(Prepared by Mr. Cooper, Chemist, Abingdon-terrace, Kensington, W.)*

This is a thin, glazed, innocent-looking paper, but any one who touches it with the tip of the tongue will soon become conscious that it is coated with something of a very pungent character. Wetted with cold water and applied to the skin, it produces in about ten minutes a good deal of superficial irritation. Between it and a mustard poultice there seems to us this difference, that its effects are more persistent, and not quite so circumscribed, and that the sensations it produces are not the same. In fact, if we had to give a name to it, we should rather have called it *capsicine* than sinapine tissue. Be this as it may, it is so extremely portable, convenient, and clean that persons who are in the habit of using mustard poultices or other ready forms of counter-irritation—as for coughs, sore throat, deafness, etc.—may easily carry a supply in their card case. Probably a hot poultice *over* a bit of this paper would answer well in cases of pleurodynia, etc.

## LEATHER-FELT SPLINTS.

These very simple and admirable splints are the invention of Mr. J. G. Hides, of Mortimer-street. They consist of stout felt, lined on one side with wash leather. All that is necessary for their application is to place a splint (with the leather side downwards) upon a table, then paint the felt side with a liquid which is supplied with them, apply the splints to the injured limb, and bandage with an ordinary roller, leaving a little interval between each turn of the bandage. If properly used, the splint will harden almost like a piece of wood in about thirty-five minutes, taking the temperature of the limb at 100° F. The advantages over other appliances seem to be their lightness, perfect adaptability to parts, and, as no padding whatever is required, they are more quickly and easily applied, and the bandage uniting with the splint as the liquid dries more support is given.

They can be used again and again by merely painting the felt side afresh with a weaker solution of the liquid. They are cheap, the price for a set of eight arm and hand splints being about the same as that of wooden splints. If additional support be required, the felt has only to be made of thicker quality.

We believe that they have been much approved of by Mr. Partridge, of King's College, and Mr. De Morgan, of Middlesex Hospitals. We have ourselves tried them for a fractured arm, and had every reason to be satisfied with them. The fracture was rapidly put up, and had the appearance of lightness and neatness so delightful to a Surgeon's eye. We fancy they would be capital splints for field practice in the army.

**Proportions of Rejections in the French Medical Examinations in 1865.**—These were between 11 and 12 per cent. at the Strasburg Faculty, between 12 and 13 per cent. at that of Paris, and between 14 and 15 per cent. at Montpellier.

## MEDICAL NEWS.

**Apothecaries' Hall.**—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, February 1, 1866:—

Edwards Mills Grace, Downend, Bristol; Henry Charles Bury, Whetstone, N.; Henry Rundle, Plymouth; Josiah Oake Adams, Plymouth.

### APPOINTMENTS.

⁂ The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

**Bowstead, R. M.**, M.D., has been appointed Medical officer for the Saunderton Workhouse, Wycombe.

**Cook, Dr. Francis**, has been elected President of the Gloucestershire Medical Association for the year 1866.

**Dickson, John T.**, M.R.C.S. Eng., has been appointed Assistant Medical Officer to the City of London Lunatic Asylum, at Stone, near Dartford.

**Flinn, J. J.**, L.R.C.P., has been appointed Surgeon to the West Derby Union Workhouse.

**Norrish, John S.**, M.R.C.S. Eng., has been elected Assistant Medical Officer to the Cheshire Lunatic Asylum.

**Turner, John S.**, M.R.C.S. Eng., has been appointed Surgeon to the Penge General Dispensary.

### BIRTHS.

**Evison.**—On January 18, at Milnthorpe, Westmoreland, the wife of Hanson Evison, M.R.C.S. Eng., of a son.

**Grosvenor.**—On February 2, at 1, Buckingham-terrace, Kensington-park, the wife of G. Fox Grosvenor, M.D., prematurely of a son.

**Harmer.**—On February 5, at Pix-hill, Hawkhurst, the wife of Dr. W. M. Harmer, of a daughter.

**Hastings.**—On February 3, at 56, Curzon-street, W., the wife of Dr. Cecil Hastings, of a daughter.

**Hovell.**—On January 27, at Clapton, the wife of D. de Berdt Hovell, M.R.C.S. Eng., of a son.

**Jones.**—On January 28, at the Priory, Wrexham, the wife of T. Eyton Jones, M.R.C.S. Eng., of a daughter.

**Langston.**—On February 6, at Broadway, Westminster, the wife of Thomas Langston, M.R.C.S. Eng., of a daughter.

**May.**—On February 5, at Reading, the wife of George May, jun., F.R.C.S. Eng., of a son.

**Murchison.**—On February 5, at 79, Wimpole street, W., the wife of Charles Murchison, M.D., of a daughter.

**Picard.**—On January 30, at 24, Abbey-road, St. John's-wood, the wife of P. Kirkpatrick Picard, M.D., of a son.

**Savage.**—On February 2, at Bordesley, Birmingham, the wife of Thomas Savage, M.D., of a daughter.

**Stuart.**—On January 21, at Chirnside, Berwickshire, the wife of Charles Stuart, M.D., of a son.

**Taylor.**—On January 23, at Woodstock, Oxon, the wife of Frederic Taylor, M.D., of a son.

**Traquair.**—On February 3, at Pau, France, the wife of T. G. Traquair, M.D., of 1, Eccleston-square, of a son, stillborn.

**Watkins.**—On January 31, at 85, Guildford-street, W.C., the wife of Edwin T. Watkins, M.D., of a son.

### MARRIAGES.

**Brigstocke—Tomkins.**—On February 1, at St. Luke's, Cork, Richard W. Brigstocke, Surgeon, R.N., to Lizzie, youngest daughter of W. J. Tompkins, Esq.

**Cheadle—Murgatroyd.**—On January 31, at the Parish Church, Bingley, Walter B. Cheadle, M.D., to Anne, youngest daughter of the late William Murgatroyd, Esq.

**Elliot—Bradley.**—On January 20, at St. Stephen's, Coleman-street, George S. Elliot, M.D., to Elizabeth Dorothy, widow of the late William O. Bradley, Esq.

**Gale—Driver.**—On February 1, at St. Thomas's, Heaton Norris, A. Stanley Gale, M.B., to Miriam Driver, the adopted daughter of the late Samuel Benison, Esq.

**Gilbert—Tacon.**—On February 1, at Rodborough, Stroud, Edward G. Gilbert, M.R.C.S. Eng. to Selina Anne, eldest daughter of Robert Tacon, Esq.

**Henry—Delany.**—On February 1, at St. John's Church, Islington, James Henry, M.D., Surgeon R.N., to Nannie, eldest daughter of John Delany, Esq.

**Hills—Parker.**—On January 25, at Edlington, Roland Hills, M.R.C.S. Eng., to Harriet, daughter of Edward Parker, Esq.

**Maurice—Kindersley.**—On February 1, at St. Paul's, Knightsbridge, James B. Maurice, M.D., to Mary Agnes, only daughter of the late N. W. Kindersley, Esq.

**Peet—Giraud.**—On February 6, at St. Mary's Church, Dover, John Peet, M.D., Surgeon-Major Bombay Army, to Nind Laura, daughter of Herbert Giraud, M.D.

**Watson—Watson.**—On February 3, at St. Bartholomew's, Sydenham, George H. Watson, M.R.C.S. Eng., to Caroline Amelia, eldest daughter of the late Robert Watson, Esq.

### DEATHS.

**Allanson, Henry G. M.**, M.D. St. And., at St. George's-terrace, Sheffield, on January 28, aged 37.

**Barton, Dr. J. J.**, at Brighton, on January 29, aged 62, formerly of Bexley.

**Birkett, George**, M.D. Lond., at Northumberland House, Stoke Newington, N., on February 1, aged 47.

**Colman, Thomas E. T.**, M.R.C.S. Eng., at Wymondham, Norfolk, on January 24, aged 58.

**Fothergill, George**, L.S.A., at Moreland, Westmoreland, on January 16, aged 60.

**Leitch, James**, L.R.C.S. Edin., Surgeon, R.N., at Crieff, Perthshire, on January 16, aged 84.

**Mackee, Richard G.**, M.R.C.S. Eng., at Hushwaite, Yorks, on January 25, aged 29.

**McSorley, Edward**, Surgeon, R.N., Surgeon H.M.S. *Rattler*, at Nagasaki, Japan, on November 26.

**Monro, Andrew**, Surgeon, at Monkwearmouth, on January 18, aged 77, formerly of Ovingham.

## POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

### APPOINTMENTS.

*Atcham Union.*—Henry John Buck, M.R.C.S.E., L.R.C.P. Edin., to the Kenley District.

*Basford Union.*—John Hall, M.D., C.M. Glasg., L.S.A., to the Wilford District.

*Bramley Union.*—Francis Hudson, L.R.C.P., L.F.P. and S. Glasg., to the Bramley District; Thomas L. Craister, M.R.C.S.E., L.S.A., to the Workhouse.

*Dewsbury Union.*—Thomas Wade, M.R.C.S.E., L.S.A., to the Mirfield District.

*Watford Union.*—Roderick W. Henderson, M.R.C.S.E., L.S.A., to the Rickmansworth District.

*West Ward Union.*—Thomas Blades, L.F.P. and S. Glasg., L.R.C.P. Edin., L.M., to the Moreland District.

**Royal College of Surgeons.**—The annual course of lectures on Comparative Anatomy were commenced on Friday last by Professor Huxley, who will deliver twenty-four lectures on the Structure and Classification of the Mammalia, in continuation of his course of last year. The following is an abstract of his syllabus on the subject:—General remarks upon those mammalia which are wholly or largely inhabitants of the sea—viz.:—The *Sirenia*, or dugongs, manatees, and sea-cows; the *Cetacea Balænoidea*, or whalebone whales; the *Cetacea Delphinoidea*, or toothed whales; the pinnipede *Carnivora*, or seals and walruses. The anatomy and physiology of these mammals. The structure and affinities of the extinct genera *Zeuglodon* and *Toxodon*. The structure of the ordinary, or cursorial, *Carnivora*. The anatomy of the *Proboscidea*. The anatomy and affinities of the genus *Hyrax*. Remarks upon the relations of those mammals which are provided with zonary, deciduate placentæ to the rest. The anatomy of the Mammalia Didelphia, as exemplified by the order *Marsupialia*. The anatomy of the Mammalia Ornithodelphia, represented by the order *Monotremata*. A summary of the results arrived at in the three courses of lectures on the *Mammalia*.

**The Late John Gibson, R.A.**—We learn in a private letter from Rome that this distinguished sculptor was nearly meeting with the fate of Cavour and Sir Charles Eastlake, as his Italian Surgeon persisted in bleeding him, against the strongly-expressed wishes of an English Surgeon practising in Rome, Dr. Topham. This gentleman at once communicated his feelings on the subject to a lady in attendance on the distinguished patient, who immediately telegraphed all the symptoms to Mr. Samuel Solly, of St. Thomas's Hospital, who confirmed the opinion of our countryman, and urged the lady to be guided by him alone in the endeavour to prolong a life so valuable.

**Death of Dr. Reynolds, of Booterstown.**—Our obituary notice records the death of Dr. Reynolds, of Booterstown, an old and skilful Practitioner, thoroughly respected and venerated in his neighbourhood, and regretted by a large circle of admiring friends. Not only was he an able Medical man, but he contributed extensively to our periodical literature even to within a few days of his death, and had written several novels, which were pure in style and excellent in their moral tendency. He had also produced some dramas, which were highly successful. He was a charming companion, a genial and generous friend, and a most benevolent man. The gifted and skilful young gentleman, Dr. Emerson Reynolds, who has distinguished himself in the scientific branches of his profession, especially chemistry and chemical analysis, is the son of the amiable gentleman whose death we now record with unfeigned sorrow and the utmost respect for his memory.—*Saunders's News Letter*, Feb. 3.

**Royal Institution of Great Britain.**—At the general monthly meeting, on Monday, February 5, the Earl Percy in the chair, the Earl Spencer, K.G.; Joseph Brandeis, Esq.; Charles Lucas, Esq.; Frederick Mouat, M.D.; and Abraham Walter Paulton, Esq., were elected members of the Institution.

**The Cholera Conference.**—Since our last the following further appointments to the approaching Cholera Conference have been announced:—Dr. Goodeve, to be the English Medical colleague of the Hon. W. Stuart; Salih Effendi, director of the Medical school at Koombarhané; and Dr. Bartoletti, member of the Board of Heath, to represent the Porte; Drs. Pelikan and Bykow and Mr. Lintz to represent Prussia; Drs. Grissinger and Herch to be the Prussian representatives; and Dr. Salvatore, with the Chev. Vernoni, first dragoman of the Italian legation, to represent Italy. Dr. Goodeve, our own Medical representative, has had great experience in India, and was strongly recommended to Lord Clarendon by the India Office as of exceptionally high qualification for this mission. He is expected to reach Constantinople by the Trieste steamer of Friday. Count Lallemand, the French representative, arrived by the Marseilles packet of Sunday. The precise time for the opening of the Conference has not yet been fixed.—*Levant Herald*, Jan. 24.

**Cholera in Portugal.**—The last advices from Portugal are wholly silent on the head of cholera in that country, except as regards its existence in Freixo de Espada ã Cinta, a small town neighbouring upon Spain, and lying in a straight line between Salamanca and Oporto, just within the Portuguese frontier. At the last report, January 11, the infection, which had been present in the town some three or four weeks, seemed rather on the decline. The number of persons attacked were sixty-three, of whom twenty-two died. Of the fatal cases five were men, ten women, and seven children. Relatively to the population, it may be considered to have been extensive in its incidence, if not extraordinarily fatal; but it would seem that at present little anxiety is felt in Portugal.

**Anderson's University.**—A *pro re nata* meeting of the Trustees of Anderson's University was held on Tuesday in the Philosophical Society's Hall, when, out of the eighty-one, the whole number of the trustees, sixty-two were present. The object of the meeting was to appoint a Professor of the Practice of Medicine, in the room of Dr. J. B. Cowan, now Professor in the Glasgow University. The candidates for the chair were Dr. Thomas M'Call Anderson, a relative of the founder of the University, and P. A. Simpson, M.D.—Mr. William Euing, President of the Managers of the University, on taking the chair, announced the object of the meeting, and read a letter from Dr. Simpson, who, in deference to the high Professional talent of the other candidate, and the fact of his being a relative to the founder, requested that his name should be withdrawn from the list of candidates. The announcement was received with applause. Mr. Smith, of Jordanhill, then in warm terms proposed the appointment of Dr. Anderson, which was seconded by the Rev. Dr. Craik in a highly eulogistic speech. On a ballot being taken, Dr. Anderson was unanimously elected.

**A Doctress in the Right Place.**—The French Government, finding that the indigenous Doctors educated at the Medical School of Algiers were not allowed access to the interior of the Arab families any more than Europeans, has authorised a Mademoiselle Rengguer, who had already obtained with great distinction her diplomas of Bachelor (or rather spinster) of Letters and Sciences, to take out regular inscriptions in order to become a Doctoress. She is represented to be a lady of great acquirements, and aptitude, and there is little doubt that her example will be followed by others of her sex.

**The Southampton Medical Officers of Health.**—The local Board of Health for the borough of Southampton notify, by advertisement, that they "are prepared to receive applications from Medical gentlemen (not desirous of entering into or continuing in practice) willing to take the post of Officer of Health. He will be charged with the health of the town, and must possess competent Medical, chemical, and microscopical knowledge. Inspectors of nuisances will be appointed. Salary, £150 per annum." Is not this worse than childish? What can be more important, especially in a seaport town, than that the officers of health should be thoroughly efficient? Yet the Officer of Health for Southampton is to be a gentleman who has tried and cannot make £150 per annum out of the Medical Profession, or who feels assured that if he went into practice he could not make £150 per annum!—*Evening Standard*, February 1.

CAMBRIDGE.—MEDICAL OFFICERS.—At the weekly meeting of the Board of Guardians held on Wednesday last, the question of electing a Medical officer for the second district, in the room of Dr. Ransom, resigned, came on for decision. The Clerk announced that there were but three candidates—Mr. Arthur Taylor, of Camberwell; Mr. J. C. Pritchard, of Putney; and Mr. J. S. Smith, of Harston, Cambs. Mr. Taylor and Mr. Smith were in attendance at the time named, but when Mr. Taylor was called for—the favourite candidate—he was absent, it being stated that he had left to make inquiries as to the duties. The Board were kept in suspense for some considerable time, without any prospect of Mr. Taylor forthcoming; and the Board deeming that Mr. Smith's qualifications were not sufficient, it was eventually determined not to appoint a Medical officer that day, but to refer the question to the Finance Committee for them to consider the expediency of raising the salaries of the Medical officers, it being the opinion of several Guardians that they were not sufficiently paid.

THE following are the last week's Cattle Plague Returns. By comparison with those of the previous week, it will be seen that there have been 23,642 attacked, 9845 deaths, 607 slaughtered, and 2331 recoveries, since January 20:—

| Census Divisions. | 1. Attacked. | | | 2. Result of reported Cases from the Commencement of the disease. | | | | |
|---|---|---|---|---|---|---|---|---|
| | Week ending January 27. | Week ending January 20. | Week ending January 13. | Attacked. | Killed. | Died. | Recovered. | Unaccounted for. |
| 1. Metropolitan Police District . . | 26 | 21 | 38 | 7474 | 3149 | 3408 | 315 | 602 |
| 2. South Eastern Co. . | 35 | 33 | 30 | 4845 | 1494 | 2712 | 422 | 217 |
| 3. South Midland Co. | 589 | 860 | 681 | 10217 | 1830 | 6892 | 741 | 754 |
| 4. Eastern Counties . | 157 | 315 | 265 | 7837 | 2868 | 3904 | 538 | 527 |
| 5. South Western Co. | 58 | 82 | 40 | 1157 | 293 | 614 | 132 | 118 |
| 6. West Midland Co. . | 1723 | 444 | 264 | 4838 | 524 | 3227 | 515 | 572 |
| 7. North Midland Co. | 715 | 442 | 565 | 4984 | 600 | 3399 | 400 | 585 |
| 8. North Western Co. | 3510 | 3738 | 2465 | 19596 | 595 | 13332 | 1298 | 4371 |
| 9. Yorkshire . . | 2034 | 1314 | 1508 | 19331 | 924 | 11863 | 3034 | 3510 |
| 10. Northern Counties. | 116 | 290 | 216 | 2481 | 593 | 1256 | 258 | 374 |
| 11. Monmouthshire & Wales . . | 626 | 542 | 661 | 5225 | 101 | 4022 | 621 | 481 |
| 12. Scotland . . | 2156 | 1960 | 2510 | 32755 | 3771 | 19121 | 5888 | 3975 |
| | 11745 | 10041 | 9243 | 120740 | 16742 | 73750 | 14162 | 16086 |

CATSUP!—The following appears in the police report of the *Times* of Friday, Feb. 2:—Southwark.—Dr. Parker, the Medical officer of Bermondsey Vestry, accompanied by Mr. Rushton, the sanitary inspector, attended before Mr. Woolrych to apply for summonses against a tradesman carrying on business in Bermondsey for having on his premises a large quantity of salted bullocks' liver which was putrid, yet intended for human consumption.—Dr. Parker said that in consequence of information he received he went to a field in Upper Grange-road, where he found a large shed in the occupation of Mr. Hope. It was used as a manufactory of catsup and jams. On entering the place he found a large cask containing about 2 cwt. of bullocks' liver and very thick brine. He examined it and found some of it putrid, but it was so strongly impregnated with brine that he could hardly detect its condition. The foreman told him it was to be used in the manufacture of catsup, and he saw some in the course of manufacture.—Mr. Woolrych: I never heard of such a thing before. I always thought that catsup was made from mushrooms and walnuts. Was any portion of it fit for human consumption?—Witness: I don't think it was.—Mr. Woolrych: Where is this catsup sold?—Witness: I cannot tell; but I received a large placard, on which was printed "Hope and Co., manufacturers of genuine Leicestershire catsup and jams, Upper Grange-road, Bermondsey." I don't know where it is sold, but I saw large quantities in bottles and casks ready for removal.—Mr. Giles Rushton, the Inspector of Nuisances for Bermondsey, confirmed this evidence. Mr. Hope, the proprietor, came into the manufactory while he was inspecting it, and told him he was going to use the liver in the manufacture of catsup. Witness saw some under preparation and in the course of manufacture.—Mr. Woolrych asked if Mr. Hope told him what other ingredients were used in the manufacture of catsup?—Witness replied that he showed him some burnt malt under preparation, which he said was used to colour the catsup. Witness said he had some of the salted liver outside the court if his worship would like to inspect it.—Mr. Woolrych left the court for that purpose, and on his return said that he could not grant a summons under the circumstances. The Act of Parliament set forth that the party must be before him on a specific charge before he could deal with such a case.—Dr. Parker said that he should mention the circumstances to the Vestry, and ulterior proceedings would no doubt be taken.

CHLORINE IN STINKING BREATH.—Dr. Clemens states that during the last thirty years he has constantly found the administration of numerous small doses of weak chlorine water a certain remedy for this distressing inconvenience.—*Wurzburg Med. Zeit., Bd.* 6.

## NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

*Medicus.*—We have no doubt that the practice of the Hospital named would be open to any duly-qualified Practitioner who applied to the Medical officers.

*A Competitor.*—The award for the Jacksonian Prize Essays sent in at Christmas last has not been made; neither have the new subjects been yet published. They will both appear at the same time, probably in the course of a month or two.

*Erratum.*—In our last "From Abroad" the name of Professor Bruns was printed in mistake for that of Dr. Brück, a dentist, of Breslau.

### THE GRIFFIN TESTIMONIAL FUND.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—The following subscription has been further received on behalf of the above fund:—Dr. J. Birkbeck Nevins, Liverpool, 10s. 6d. Amount previously announced, £133 9s. 9d. Received at *Lancet* Office, £9 9s.

I am, &c.,
ROBT. FOWLER, M.D., Treasurer and Hon. Sec.
145, Bishopsgate Without, February 6, 1866.

### CATTLE VACCINATION.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I think it my duty to call the attention of the public to the utter worthlessness of the vaccine lymph supplied to the Profession by Mr. W. Faulkner, whose advertisement appears weekly in your paper. A friend of mine, by my direction, about three weeks since, called on Mr. Faulkner, and was induced by him to purchase lymph from the cow instead of human lymph as I had directed. Thirty-six points were purchased at one shilling per point—six to be used for each cow—and these were most carefully inserted near the vulva in six cows in three separate herds in this neighbourhood, no result following in either case. That vaccination is now proved to be no protection against Rinderpest does not make this result the less annoying; and the fact that I was for years public vaccinator for this district will probably be some proof of the careful way in which the operation was performed.

You will oblige me by inserting this letter in your next issue.

I am, &c., FREDERIC DUKE, M.R.C.S. and L.S.A.
Buckingham, February 5, 1866.

⁂ We have often known the most expert operators fail with points even when they have been well and carefully charged. It is only by using fluid lymph from a capillary tube, or, better still, fresh lymph from the arm, that you can ensure success.

### THE CATTLE PLAGUE AND SMALL-POX.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Resident for some time in this country, into which the cattle plague, so fatal to English herds, has made only the most feeble struggle to effect its entrance, I have been much struck with the fact that, although a virulent and malignant epidemic of confluent small-pox is raging amongst us to an extent equal, if not greater, than the one which prevailed two years ago in England, yet the oxen thus surrounded by disease have almost wholly escaped. Such a fact causes me to doubt excessively the identity of the two disorders so much and so laboriously insisted upon by Dr. Murchison, and so boldly and philosophically put to the test by him.

It is well known that great precautions have been taken on all the frontiers and sea coasts of France against the intrusion from infected countries of all bovine animals—precautions which must have failed long ere this over such a great extent of barrier, and which are clearly useless if the poison be (assuming Dr. Murchison's view to be correct) within our gates, and ready for transmission from man to the animals about him. I am aware that, in opposition to this, it will be urged that, perhaps, the small-pox poison cannot be transmitted by infection to lower animals; but inoculation goes a long way to prove the contrary; for variola has been given in this way from man to both cow and horse, and they have had it—most mildly, it is true, but decidedly. Moreover, the small-pox has been seen in the horse; but I am not aware that any fatal case has been discovered. It is exceedingly doubtful whether these animals ever have small-pox except in its mildest form, and it is believed that they are frequently the subjects of it.

There is one disease which, although seen in isolated cases, is not known as being either endemic or epidemic in France, and that is typhus—a disorder believed to be greatly the child and companion of starvation, and of low and unnatural forms of diet, conditions not wanting in the summers of 1865 and 1864, when all green food was dried up—a disease, moreover, believed by Government commissioners to have been present in Russia last spring under the name of the Russian plague. We may then ask, Cannot the present Rinderpest, known to have come to us from the Continent, be a typhus of a most malignant form? and cannot its absence from France be explained?

The post-mortem appearances described by Dr. Murchison are not altother at variance with my supposition; and as for the pustules, the presence of which in all cases is very far from being established, may they not be a product of the disease to which such cattle are believed to be very often subject, and to which so many of us owe our unseamed faces, and perhaps our lives?

False pathology leads to false treatment, both to waste of time and life—facts which must be an apology for a very long letter.

I am, &c., **Frederick Simms**, M.B. Lond.

75, Rue-de-la-Pouche, Passy, Paris, January 30, 1866.

### Army Medical Department.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—That clause of the Warrant which substitutes selection for seniority, and empowers the Director-General to promote any one he pleases out of the entire number of Surgeons and Surgeons-Major, was undoubtedly a great mistake, and has proved a heavy blow and discouragement to the Medical Department of the Army. It was a violent innovation, introduced without any proved necessity or justifying reason. Medical officers did not desire it, and there was no imputation of failure or incompetency against such as had been advanced to administrative position in the strict order of seniority.

The general opinion is, that an equal amount of talent would have been exhibited by Surgeons-Major in the order of seniority as has been displayed by the seventeen individuals who were selected by the late Director-General out of the entire number of Surgeons and Surgeons-Major, and promoted (some of them much to their own astonishment) to be deputy-inspectors in a single memorable *Gazette.*

If this is the case, there can be no reason for continuing a practice which makes promotion a matter of accident, and which no amount of meritorious service can with certainty secure. If promotion to the administrative grade by selection is so beneficial to the public service, it may be confidently asked why the principle is not extended to the scientific corps of Artillery and Engineers; and it would be interesting to learn what are the distinguishing peculiarities of the Army Medical Department which render promotion by selection desirable or necessary. Sir Andrew Smith desired to "wash his hands of it" (see Blue-book), and Sir James Gibson's former evidence was of similar tendency.

I am, &c. **A Retired Deputy-Inspector.**

### Swelling of the Nose.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Recent notes in the *Medical Times and Gazette* on "Recurrent Swelling of the Tongue," put me in mind of a very curious case that occurred in my practice a few years ago. A gentleman, in the middle rank of life, sent for me and asked if I could do anything for that, touching at the same time a large swollen nose. I inquired after the cause. "Guess," said he. "Well, have you been stung with bees or with a wasp?" "No, with neither." "What then?" "Well, I suppose I may as well tell you, for I daresay you will never guess. I have a peculiarity to the effect that whenever I eat raw beans or pease, my nose swells up as you see it. I was amusing myself in my garden this morning by sowing some beans, and I incautiously ate some of them, and you see the result." I replied, "If this is the cause, send to my Surgery immediately, and you shall get the cure;" he did so, and the raw beans were sent tumbling from his stomach by a drachm dose of sulphate of zinc. This was in the forepart of the day, and I met my friend in the bowling-green in the evening, cheerful, and freed of his large proboscis.

I would ask, Does this case throw any light on "recurrent swelling of the tongue?" If gastric irritation can cause sudden swelling of the nose, it is much more likely to cause sudden or recurrent swelling of the tongue, seeing that that organ is more intimately connected with the pneumogastric nerve. If so, then we have the key to the treatment—viz., remove the gastric irritation. This may be done, as in my case, by an emetic, or by sedatives, purgatives, and counter-irritation. I am, &c.,

Blantyre, February 2. **T. Downie**, M.D.

### Medical Witnesses in Coroners' Courts.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I wish to lay before you a few facts as to the treatment of Medical witnesses in coroners' courts, and to ask you if you think it is such as the Profession has a right to expect.

On December 12, 1865, I was Medical witness in an inquest held by Dr. Lankester on the body of Agnes Cowie. I had previously made a post-mortem examination in the case. I signed a receipt for my fee of two guineas, but did not receive the fee at the time, for I left, after having given my evidence, before the technical details of the inquest had concluded. It is usual for the coroner's officer to call at the Medical witness's residence with the fee, and custom is so strong that the officer deducts the two shillings from the fee as a usual thing. As up to last week I had not received the fee, I wrote to the coroner's officer for it; and moreover, as an inquest had since occurred in which a Medical man had, as I consider unjustly, been subject to a vote of censure—a circumstance that would not have occurred if the coroner's officer had communicated with the Medical man in question—I stated that I should allow no abatement from the usual fee. The coroner's officer called upon me on January 29, during my time for seeing my morning patients, and with the utmost effrontery accused me of endeavouring to obtain the fee twice over. I could never have believed that beadledom could have reached such a standard of audacity as this. The interview will be best explained by a letter which I wrote immediately afterwards to Dr. Lankester:—

"Sir,—I have just had an interview with your officer for Islington, named Stanwell. You will remember an inquest which you held on the body of Agnes Cowie at the "Ram and Teasel." I never received my fee for attendance and post-mortem upon the case. I wrote to the man for the fee, and at the same time told him that I should not allow any reduction, as seems to be the custom here, to be made from it.

"I have now to complain of this man's insolence, and to request that the fee be sent from your office. The man told me that it was his conviction that the fee had been paid in the room, 'and his conviction would be so to his dying day.'

"Under these circumstances, I determined to refuse the fee which he proffered and to write to you on the matter; and I begged my servants to usher the man from my presence.

"I leave, Sir, the whole matter to you, and remain yours truly,

"29, Duncan-terrace, Jan. 29." "**A. Ernest Sansom.**

To this I received the following reply:—

"8, Savile-row, W., January 30th, 1866.

"Dear Sir,—I am sorry to find you have had any difference with my excellent and highly-respectable constable at Islington. I have never known him otherwise than punctual in his payments and truthful in his statements. I will speak to him on the matter; but as you have refused to take the fee which you think you have not had, I do not know what further I can do. "I remain, dear Sir, very faithfully yours,

"A. Sansom, M.B." "**Edwin Lankester.**

I again wrote to Dr. Lankester, stating that I considered that of the consummate insolence of the man's manner there could be no doubt whatever; that it would have been impossible for me to have accepted a fee so proffered; and to dissipate the effect of the man's "conviction" I enclosed a letter from one of the principal witnesses in the case. This was the enclosure:—

"Dear Sir,—Having been present as a witness at the inquest on Mrs. Agnes Cowie, at the 'Ram and Teasel,' on the 12th ult., and having spoken to you immediately before you left the room, I hereby declare that you held no conversation with, nor received any fee from, the coroner's officer on that occasion. It would have been impossible for you to have received your fee unobserved by me. "Yours faithfully,

"Dr. Sansom, 29, Duncan-terrace. "**G. M. Cowie.**

"26, St. Thomas-street, 30th January, 1866."

I scarcely need explain that my reason in making these facts public is not personal gratification, nor the obtaining of the withholden fee; but it is to add to the evidence which already exists of the anomalous position of Medical witnesses in coroners' courts. I am, &c.

**A. Ernest Sansom**, M.B., etc.

29, Duncan-terrace, N., February 1, 1866.

### Poor Law Medical Reform.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I shall feel obliged by your giving insertion to the annexed letter, that the Poor-law Medical officers may be made acquainted with the steps taken towards an improvement in the Medical relief of the poor. Since the last list of subscriptions was published, I have received the following:—Bucknill, S. B., Rugby, 10s. 6d.; Fox, L. O. Stockbridge, 10s.; Turner, N. B., Sutton, etc., 5s.; Roe, R. Barton-on-Irwell, 20s.; Dorning, D., Barton-on-Irwell, 20s.; O'Reilly, T., Ware, 10s.; Sedgewick, C., Hollingbourne, 10s.; Giles, W. F., New Forest, 21s.; Bencraft, H., Southampton, 10s. 6d.; Cheeseman, G., Southampton, 10s. 6d.; Griffin, R. W. W., Southampton, 10s. 6d.; Lawrence, L. A., Southampton, 10s. 6d.; Wiblin, T., Southampton (not union), 10s. 6d.; Tweddle, J., Cockermouth, 10s 6d.; Mason, T. J., Stratford-on-Avon, 10s. 6d.; Nevin, J. B., Liverpool (not union), 10s. 6d.; G. W. F., 10s.; Taylor, H., Guildford, 10s.; Foster, O., Hitchin, 10s.; Colbourn, W. W., Chippenham, 27s.; Crisp, J., Chippenham, 5s.; Ludlow, A., Castle Combe, 10s. Mr. Prowse, of Amersham, has received the following:—Barker, Mr., Aldershot, 10s.; Bywater, F. E. G., Pontefract, 10s. 6d.; Meynott, H., Ludlow, 5s.; Pink, G., Petersfield, 5s.; Knaggs, S., Huddersfield, 5s.; Davies, F., Pershore, 21s.; Reddrop, J., Tiverton, 5s.; Norris, H. E., Bridport, etc., 5s.; Weston, R. P., Wellington, 10s.; Thomas, J. L., Carmarthen, 5s.; Holton, C., Stoke-on-Trent, 5s.; Pearson, J., Cockermouth, 5s.; Morgan, W. W., Newport, 10s. 6d.; Jennings, O. C., Newport, 5s.; Harday, G., Rugby, 10s.; Raymond, L. R., Bromsgrove, 5s.; Rhodes, G. W., Huddersfield, 10s. 6d.; McLachlan, R., Halifax, 10s.; Savory, J. T., Wycomb, 5s.; Spurgeon, C., Samford, 5s.; Few, W., St. Ives, 5s.; Muriel, J. S., Cosford, 5s.; Leech, H. P., Stow, 5s.; King, E. P., Chepstow, 5s.; Dean, P. T., Upper Norwood, 5s.; Kingdon, A., Bideford, 5s.; Kendall, J. M., King's Lynn, 5s.; Newington, J. D., Cranbrook, 10s. 6d.; Royle, O. N., Kendal, 10s. 6d.; Elliott, J. R., South Melton, 10s.; Whitehead, W., Mansfield, 10s. 6d.; Lipscombe, R. M., Berkhampstead, 5s.; Pilkington, W., Blackburn, 21s.; Marley, H., Columb St. Major, 6s.; Hall, C. S., Carlisle, 5s.; Pritchard, W., East Retford, 10s. 6d.; Organ, R., Barwick, 5s.; Davison, R. S., Castle Ward, 21s.; Breach, J., Bradfield, 10s.; Raynes, H., East Retford, 10s.; Cook, M., Barnstaple, 10s. I am, &c.,

12, Royal-terrace, Weymouth, February 5. **Richard Griffin.**

"12, Royal-terrace, Weymouth, 3rd February, 1866.

"Sir,—Since the commencement of this year a large number of Poor-law Medical Officers have sent their subscriptions to enable me to defray the necessary expenses consequent upon an application to be made to Parliament and the printing of a pamphlet, demonstrating the necessity of a thorough revision of the present wretched system of Medical relief to the poor. But prior to this procedure, I feel I should best consult the interest of all parties concerned by laying before you, as the head of this great Department, which has annually under its management over a million and a quarter of sick poor, the draft of a Bill which appears to me would, if passed, be of national advantage; and if you would take charge of it, or of one of similar import, and introduce it into the House of Commons, or make it a part of your new Poor-law Continuance Bill, I feel sure you will immensely benefit the public. That you may have knowledge of the sentiments of the Poor-law Medical Officers on the subject, I request you will permit such of them as can spare the time to wait upon you as a deputation; and if you will fix a time, giving me a clear fourteen days' notice, I will call them together for the purpose; and should you in the interval desire a private interview with me, relative to any arrangements, I will gladly wait upon you any day you may fix.

"I have the honour to be, Sir, your obedient servant.

"The Right Hon. C. P. Villiers, M.P., President
of the Poor-law Board."

### Medical Charges in Scotland.

At the Small Debt Court, yesterday, before Sheriff Cowan, Dr. W. J. P. Kidd, Surgeon, Renfrew, sued Archd. Campbell, Esq., of Blythswood, for payment of an account amounting to £16 2s. 3d., restricted to £12; being charges made by the pursuer for Professional visits and medicine to a poor woman named Mrs. M'Clay, residing about three miles from the burgh of Renfrew. Mr. Thomas Campbell, writer, Paisley, appeared for the defender, and stated that the pursuer had been asked by Mrs. Campbell, of Blythswood, to visit a poor woman residing in her neighbourhood, in whom she takes a great interest. Dr. Kidd made seven visits, and handed in his account to Mr. Campbell, charging in all £6 3s. 3d. Mr. Campbell returned the account to Dr. Kidd, saying there must surely be some mistake, and requesting him to revise the account, as the woman was not a member of his family, nor one of his attendants. The pursuer did amend the account, but in place of charging at the rate of 15s. a visit, as he had done in the first account, he increased the charge to two guineas per visit, making the account £16 2s. 8d. Mr. Campbell had desired him (his agent) to mention that if he could he would have been present at the Court himself. He was not resisting payment of a fair charge, but he considered it was due to the public that so exorbitant an exaction should be refused, as it would tend to check the exercise of charity altogether. Another Medical gentleman in the burgh was in the practice of charging only 2s. a visit to the same place during the day, and 2s. 6d. at night. Defender's agent said he would prove that 3s. a visit was ample payment for the pursuer. Dr. Kidd produced a printed table of fees, to be charged by Medical Practitioners, issued by the Faculty of Glasgow, and stated that he had charged in the present case in accordance with that scale. The patient resided two and a half miles beyond the boundary of the burgh, and he had charged at the rate of 10s. 6d. a mile. He considered he had nothing to do with the woman he attended in making his charges, but with the party who had employed him, and he charged according to the rank and circumstances of his employer, and not of the patient. In the first account he rendered he charged only 15s. a visit, simply to give Mr. Campbell the benefit of the reduction from two guineas, to which he (the pursuer) held he was entitled. Witnesses were called to prove the usual fees charged in similar cases by other Medical men. Dr. Stobo, Renfrew, said his charge for attending a labourer's wife, residing two and a half miles from Renfrew, would be 3s. a visit, and he certainly would charge no more though he was employed to visit a poor patient by Mr. Campbell, of Blythswood. He had sometimes visited Mr. Campbell's servants for that charge. Dr. Patison, Renfrew, said 3s. was the most he ever got for visiting similar cases two and a-half miles from the burgh, and he considered he was well paid. The Medical Profession in this district had a table of fees, but it had not been acted upon strictly for a good many years. In Dr. Kidd's account 5s. was charged for each of two operations on the patient. Dr. Patison said he would expect 4s. 6d. for each operation, in addition to the fee for visiting. Dr. Donald, Paisley, said he usually charged 4s. for the first visit and 3s. for the subsequent visits for attendance on patients of the class, and at the distance referred to. He charged according to the position of the patient, and not of the person who employed him. Mr. Campbell submitted that 3s. a visit would be sufficient payment to the pursuer, with 9s. for the two operations. He made no objection to the charge for medicines. The Sheriff said when the account was brought under his notice it certainly did occur to him that there was a considerable overcharge. The position of the patient in this case appeared to be a very humble one. The pursuer appeared to have been employed to visit her as a matter of charity by Mr. Campbell, of Blythswood. It was perfectly clear from the statement of the witnesses that the practice of the Medical Profession—and it recommended itself to his mind as a very reasonable one—was to charge the fees, not according to the circumstances of their employer, but of the person whom they visited. Now, the pursuer has rendered an account charging at the rate of 15s. a visit, which he afterwards increased to two guineas. That was very extraordinary, seeing that 3s. was the usual charge made by other Medical men in Renfrew for visiting poor persons at the same distance. He therefore thought the pursuer was not entitled to more than that, notwithstanding the circumstances of Mr. Campbell, who had employed him. He thought 4s. 6d. was a reasonable sum for each of the operations. The medicines furnished were charged 18s. 3d.; and seven visits, at 3s. each, amounted to 21s.—in all, £2 8s. 3d.; for which sum his Lordship decerned, subject to a deduction of £1 for the expense of the witnesses.—From *Glasgow Herald*, January 19.

**COMMUNICATIONS have been received from—**

Professor Buchanan, M.D.; A Retired Deputy-Inspector; Ethnological Society of London; Mr. R. Griffin; Mr. F. Duke; Dr. E. Fleming; Royal Institution; Dr. W. J. Rundle; Dr. John Whitmore; Mr. Gaskoin; Mr. J. H. Wells; Dr. McCarthy; Dr. McCall Anderson; Dr. Francis Cook; Dr. T. Downie; Apothecaries' Society; Mr. Lawson Tait; Mr. A. E. Sansom; Mr. H. R. Myers; Mr. Stokoe; Mr. E. Edwards; Dr. J. H. Keeling; Dr. Robert Fowler; Medicus; Mr. T. Constable; Royal Medical and Chirurgical Society; Dr. Handfield Jones; Dr. Tilbury Fox; Mr. J. Hutchinson; Mr. Howard Marsh; Dr. Ballard; Dr. Althaus; Dr. Silver; Mr. J. Chatto; Mr. James Robertson; Dr. T. Whately; Mr. Henry R. Myers; Dr. J. M. Fothergill.

## VITAL STATISTICS OF LONDON.

*Week ending Saturday, February* 3, 1866.

### BIRTHS.

Births of Boys, 1100; Girls, 1071; Total, 2171.
Average of 10 corresponding weeks, 1856-65, 1986·0.

### DEATHS.

| | Males. | Females. | Total. |
|---|---|---|---|
| Deaths during the week .. .. .. | 757 | 660 | 1417 |
| Average of the ten years 1856-65 .. .. | 702·9 | 705·2 | 1408·1 |
| Average corrected to increased population.. | .. | .. | 1540 |
| Deaths of people above 90 .. .. .. | .. | .. | .. |

### DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

| | Population, 1861. | Small pox. | Measles. | Scarlatina. | Diphtheria. | Whooping-cough. | Typhus. | Diarrhœa. |
|---|---|---|---|---|---|---|---|---|
| West .. | 463,388 | — | 12 | 4 | 1 | 4 | 7 | 2 |
| North .. | 618,210 | 6 | 7 | 11 | 3 | 16 | 20 | 3 |
| Central .. | 378,058 | 1 | 6 | 7 | — | 4 | 4 | 4 |
| East .. | 571,158 | 8 | 6 | 9 | 3 | 23 | 11 | 4 |
| South .. | 773,175 | 6 | 3 | 9 | 7 | 19 | 13 | 6 |
| Total .. | 2,803,989 | 21 | 34 | 40 | 14 | 66 | 55 | 19 |

### METEOROLOGY.

*From Observations at the Greenwich Observatory.*

| | |
|---|---|
| Mean height of barometer .. .. .. .. .. .. | 29·558 in. |
| Mean temperature .. .. .. .. .. .. .. | 45·1 |
| Highest point of thermometer .. .. .. .. .. | 57·0 |
| Lowest point of thermometer .. .. .. .. .. | 35·6 |
| Mean dew-point temperature .. .. .. .. .. | 40·7 |
| General direction of wind .. .. .. .. .. .. | S.W., W. |
| Whole amount of rain in the week .. .. .. .. | 0·68 in. |

## BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, February 3, 1866, in the following large Towns:—

| Boroughs, etc. | Estimated Population in middle of the Year 1866. | Persons to an Acre. (1866.) | Births Registered during the week ending Feb. 3. | Deaths. Corrected Average Weekly Number.* | Deaths. Registered during the week ending Feb. 3. | Temperature of Air (Fahr.) Highest during the Week. | Temperature of Air (Fahr.) Lowest during the Week. | Temperature of Air (Fahr.) Weekly Mean of the Mean Daily Values. | Rain Fall. In Inches. | Rain Fall. In Tons per Acre. |
|---|---|---|---|---|---|---|---|---|---|---|
| London (Metropolis) | 3067536 | 39·3 | 2171 | 1400 | 1417 | 57·0 | 35·6 | 45·1 | 0·68 | 69 |
| Bristol (City) . . | 163680 | 34·9 | 91 | 73 | ‡102 | 54·7 | 34·0 | 45·2 | 1·45 | 146 |
| Birmingham (Boro') | 335798 | 42·9 | 270 | 163 | 206 | 53·6 | 36·3 | 43·6 | 0·51 | 52 |
| Liverpool (Borough) | 484337 | 94·8 | ‖377 | 281 | ‖405 | 52·4 | 38·7 | 45·3 | 0·36 | 36 |
| Manchester (City) . | 358855 | 80·0 | 258 | 203 | ‡227 | 52·3 | 31·5 | 42·1 | 0·65 | 66 |
| Salford (Borough) . | 112904 | 21·8 | 86 | 57 | 60 | 52·3 | 32·0 | 43·1 | 0·68 | 69 |
| Sheffield (Borough) . | 218257 | 9·6 | 171 | 115 | 142 | 51·0 | 34·0 | 42·3 | 0·62 | 63 |
| Leeds (Borough) . | 228187 | 10·6 | 182 | 116 | 148 | 54·0 | 33·2 | 43·8 | 0·38 | 38 |
| Hull (Borough) . | 105233 | 29·5 | 76 | 40 | 55 | 48·0 | 30·0 | 40·4 | 0·39 | 39 |
| Nwcastl-on-Tyne, do. | 122277 | 22·9 | 104 | 65 | 80 | 50·0 | 33·0 | 41·5 | 0·20 | 20 |
| Edinburgh (City) . | 175128 | 39·6 | 108 | 84 | 96 | 50·0 | 29·0 | 40·2 | 0·60 | 61 |
| Glasgow (City). . | 432265 | 85·4 | 325 | 252 | 242 | 48·0 | 28·1 | 39·7 | 1·88 | 190 |
| Dublin (City and some suburbs) . | 318437 | 32·7 | 181 | †156 | 171 | 55·8 | 31·5 | 43·6 | 0·83 | 84 |
| Total of 13 large Towns . . . | 6122894 | 34·4 | 4400 | 3014 | 3351 | 57·0 | 28·1 | 42·8 | 0·71 | 72 |
| | | | | | Week ending Jan. 27. | Week ending Jan. 27. | | | | |
| Vienna (City) . . | (1863)<br>560000 | .. | .. | .. | 390 | .. | .. | §<br>36·3 | .. | .. |

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·553 in. The atmospheric pressure was 30·05 in. on the morning of Sunday; it fell to 29·13 in. on Friday, and rose to 29·82 in. on Saturday.

The general directions of the wind was S.W. and W.

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* The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.

† Registration did not commence in Ireland till January 1, 1864; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in that city were the same as the averages of the rates in the other towns.

‡ The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

§ The mean temperature at Greenwich during the same week was 45·1°.

‖ The usual return from Liverpool not having been received, averages of the births and deaths in the previous six weeks have been substituted for the correct numbers.

## APPOINTMENTS FOR THE WEEK.

### *February* 10. *Saturday (this day).*

*Operations* at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.: King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free Hospital, 1½ p.m.

Royal Institution, 3 p.m. Prof. Westmacott, "On Art Education."

### 12. *Monday.*

*Operations* at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.

### 13. *Tuesday.*

*Operations* at Guy's, 1 p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; St. Peter's Hospital for Stone, 3 p.m.

Ethnological Society of London, 8 p.m. Mr. Crawfurd, "On the Physical and Mental Characteristics of the European and Asiatic Races of Man." Mr. T. Valentine Robins, "Notes and Sketches on the Niger."

Royal Medical and Chirurgical Society (Ballot, 8 p.m.), 8½ p.m. Mr. Henry Thompson, "Case of Phosphatic Calculus, with Nucleus of Bone." Mr. Joseph Allen, "Case of Lithotomy; Mulberry Calculus."

Royal Institution, 3 p.m. Prof. Tyndall, "On Heat."

### 14. *Wednesday.*

*Operations* at University College Hospital, 2 p.m.; St. Mary's, 1¼ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.

Microscopical Society, 8 p.m. Anniversary. Annual Meeting for the Election of Officers.

### 15. *Thursday.*

*Operations* at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.: West London Hospital, 2 p.m.

Harveian Society of London, 8 p.m. Dr. Camps, "On Railway and other Accidents attended with Violence: their Effects on the Nervous System."

Royal Institution, 3 p.m. Prof. Tyndall, "On Heat."

### 16. *Friday.*

*Operations*, Westminster Ophthalmic, 1½ p.m.

Royal Institution, 8 p.m. Sir Henry James, F.R.S., "On the Ordnance Survey of Jerusalem."

# ORIGINAL LECTURES.

## LUMLEIAN LECTURES
## ON SOME POINTS IN THE PATHOLOGY OF NERVOUS DISEASES.

By C. HANDFIELD JONES, M.B., F.R.C.P., F.R.S.,
Physician to St. Mary's Hospital and Lecturer on Medicine.

### Lecture III.

(Concluded from page 141.)

From this discussion relative to neuralgia I will now ask you to pass with me to the consideration of spasm, intending thereby, of course, that kind of muscular contraction which we observe in tetanus and in some similar affections. The almost invariable occurrence of intense pain along with the contractions is a very noteworthy circumstance. It is a constant and often very distressing part of common cramp, which is plainly allied to tetanus. That the pain is not simply the result of intense muscular contraction must, I think, be admitted, because no amount of voluntary muscular effort that we can make produces any similar sensation, and because in some very painful cramps the muscles are by no means powerfully contracted. Brown-Séquard explains the pain of cramp in the following way:—He believes that every muscular contraction generates a galvanic excitation of the sensitive nerves in the neighbourhood of the muscular fibres, and that the degree of excitation, and consequently of pain, is in proportion to the energy of the contraction. This view seems to me to be contradicted by the fact above mentioned of the painless character of the most energetic voluntary contractions. These may produce a sense of fatigue, but nothing like the pain of cramp. It is also opposed by the results of Faradising the muscles of a limb. Experimenting in *propriâ personâ*, I find that, with a current strong enough to excite vigorous contractions of the muscles of the calf, no cramp-like pain is felt in the part traversed by the current, but a forcible, quivering, or tremor-like sensation in the outer part of the foot, where the external saphenous nerve is distributed, which passes higher up through the range of the electric stimulation. Here, then, is certainly galvanic excitation of sensitive nerves; yet no cramp. To me it appears that the occurrence of severe pain in states of spasm sets a broad distinction between this kind of contraction and that which is healthy and natural. The attendant pain is of the nature of neuralgia, and the action of the motor nervous apparatus must be, I think, essentially morbid, as far removed from the healthy mode of contraction as neuralgia is from healthy sensation.

A point which seems to me very worthy of notice is, the affinity which is not obscurely marked between spasmodic contraction and paralysis, however widely at first sight the two states appear to contrast with each other. I will adduce some instances. Exposure to cold is a recognised cause of tetanus, and we have seen that it is also of facial and some other forms of paralysis. Dental irritation will sometimes cause trismus (a spasm), sometimes ptosis (a paralysis). Mr. Moodeen Sherriff has recorded some instances of paralysis not depending on organic lesion, in which there was rigidity of one limb, and simple immobility of the other on the same side, the same cause having given rise to both conditions, and the same treatment removing them. Dr. Little, many years ago, expressed the opinion, as the result of extensive observation, that with regard to spasm and paralysis the nature of the primary lesion in the central organ is the same in either case. He regards, however, paralysis as the result of a higher degree of lesion than spasm. A patient of mine who suffered from brachial neuralgia, which yielded to quinine and iron, stated that if she worked hard in the day she had not only severe pain at night, but also complete stiffness of the hand, induced, of course, by spasm of the muscles of the forearm. If she worked but little, the spasm did not occur. In this instance the influence of exhaustion in inducing muscular spasm is very apparent, as also the relation of the latter to the paralytic sensory disorder. A case of cataleptic affection is related by Mr. Buchanan, in which the muscles were rigid as iron during the attacks, which lasted twenty-four hours. They were induced by excitement, want of food, and fatigue, and subsided with the aid of rest, warmth, and an opiate. In most persons languor and weariness would have been the result of the above-named exciting causes rather than spasm. The inference, however, seems just that these states, dissimilar as their outward show is, are not in their origin essentially opposites. Mr. Bryant relates the case of a female, aged 17, who was suddenly attacked with contraction of the flexor muscles of the left hand and forearm a week before she came under his care. Her health was good, catamenia regular; the sensation of the part affected, perfect. Iron was given, and in three weeks the natural movements of the part were restored. The nerves of sensation, however, now became involved, and complete anæsthesia of the whole hand and forearm made its appearance. This condition also disappeared in two months under the same treatment, sensation and movement being at last perfect. Here it can hardly be questioned that the spasm was the equivalent of the sensory paralysis.(b) In a boy who was undergoing the operation of resection of the knee-joint, and had been rendered completely anæsthetic by chloroform, I observed the limbs in a state of marked rigidity, the arms more so than the legs. Here sensory paralysis coincided actually with spasm. A case is recorded by Plagge(c) where a strong healthy soldier, aged 25, after eight hours' march, when the temperature was 63°, fell down suddenly, and lay pulseless, pale and without consciouness, with half-flexed limbs and closed jaws. Stimulants were given, and consciousness soon returned, and the rigidity ceased; but the patient could not move, and complained of severe pain in the back. Examination of the spinal column brought on immediately the most violent tonic contractions, without trismus or loss of consciousness, accompanied by the most frightful pains. An attempt to put the patient into a conveyance brought on the paroxysm afresh. Twenty ounces of blood were taken and morphia administered, whereupon the spine ceased to be painful. After a short journey the spasmodic contractions returned, but yielded to cold applications to the loins and stimulation of the extremities. The next morning the patient was quite well. Plagge entitles this a case of hyperæmia of the cord, but it seems to me to have much more claim to be regarded as one of exhaustion with consecutive nervous disorder. Had active hyperæmia of the cord really existed, recovery could not have ensued so rapidly. The primary sudden syncope, the severe pains, and spasms are much more consonant with the view of a tetanoid than of an inflammatory affection. It is most probable that the above was an instance of the malady termed by Trousseau tetanilla, which is induced by diarrhœa, fevers, lactation, and cold, and is treated advantageously by venesection and sedatives or quinine. In the description given of this disorder, it is stated that the intermittent contractures are usually preceded and accompanied by loss of muscular power; the hands, though half flexed, cannot be completely closed, and the tactile sensibility is also much impaired,—in fact, both in the causes and phenomena of this neurosis there is an evident affinity indicated between spasm and paralysis. I remember when taking my first lesson in aquatics with youthful enthusiasm, that my fingers for some time afterwards were contracted and retained the position they had taken while grasping the oar—a contrary result to what one would have expected from the prolonged fatigue of the flexor muscles. A friend tells me he experienced the same, and so I suppose did the Israelitish worthy who arose and smote the Philistines until his hand was weary and *clave* unto his sword. In a case recorded by Mitchell severe spasms of the facial muscles, cervical and lingual, were found to depend on the presence of carious teeth. This cause would most commonly have given rise to neuralgia, which, as we have just seen, has decided affinities with paralysis. If Earle records a case in which trismus was cured immediately by the discharge of a tape-worm, a case I have cited in Lecture II. proves that the same cause may give rise to facial paralysis. If we pass from tonic spasm to clonic, we find still more frequent indications of its affinity to paralysis. It may be sufficient merely to allude to choreic affections, which often contain quite as much of one morbid element as of the other. The same is exemplified in disorders of the internal organs depending on debility. I met a Medical friend some years ago in the street, who was looking pale. Said he to me, "My solar plexus is worn out; I want a new one. I am not ill otherwise; but I can't keep anything on my stomach. I have not been out of London more than a day consecutively for six years." Here was surely a state essentially depending on nervous paresis, but presenting phenomena of irregular muscular action. Such cases are sometimes cured by strychnia—a fact which further illustrates their true nature.

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(b) *Vide Medical Times and Gazette*, June 14, 1862.
(c) *Vide Schmidt's Jahrb.*, vol. 107, p. 29.

The preceding observations appear to me to afford considerable evidence that spasmodic contraction is a very different thing *quoad* innervation from voluntary, and is a morbid mode of action related to paralysis, much in the same way as neuralgia is to anæsthesia. It is, of course, impossible to state in what respect the molecular condition of a nerve-cell which gives rise to a spasm differs from that which gives rise to paralysis. The constituents of the living tissues are not accessible to our microscopes; and, if they were, it is by no means certain that we should be able to distinguish any visible deviation from their healthy appearances in conditions of mere functional derangement. It is conceivable that some such changes in the nervous currents as occur during polarisation in luminous undulations may be the cause of neuralgia and spasm in the sensory and motor nerves respectively. I am utterly disinclined to enter into barren speculation, but it seems to me by no means such to endeavour to form a just estimate of the *nature* of the morbid actions which come before us, and to ascertain in what direction they differ from the healthy. We may be quite unable to acquire a full and complete knowledge of a disease, but we may, nevertheless, obtain very practical and useful knowledge respecting it. Thus we may never find out precisely what malaria is, or be able to demonstrate exactly in what way it acts upon the frame; but it is a highly practical and important point to know that it enfeebles and lowers nervous energy, and that most of its morbid effects can be explained on this view of its operation.

It seems to me an established point that the *quality* of nervous action differs greatly in different instances of disease, and that we cannot regard it as either simply increased or diminished in energy. This does not seem to me to have been always kept in view. In the motor nervous apparatus we have the state of healthy vigorous action replaced by tonic or clonic spasm, by tremors, choreic jerkings, and finally by paralysis, all without organic lesion. Muscular contractions, which our common persuasion holds, and I think correctly, to be an evidence of existing nervous power called into play, are most evidently not in all cases produced by the same *kind* of nerve action. Many actions might indeed be classed as *actions of weakness*, in apposition to actions of *strength*. The depression of the jaw in yawning when we are weary and languid is surely *quoad* nervous power, not the same kind of action as that which occurs when a hungry man is eating, and the jactitations of chorea are not prompted by the same kind of nervous impulses which direct the strong, steady strokes of an oarsman rowing a wager. The movements of chorea are usually readily controlled by a steady grasp of the agitated limb, but I had recently under my care a girl whose arm I was quite unable to keep still by all the force I could exert with both my hands. At the same time the legs were weak and tottery. Here the morbid condition of the lower part of the cord must evidently have been different to that of the upper. In some epileptic attacks there is much more tetanic rigidity than in others, yet we cannot think that different nervous centres are affected in the one case and in the other. In the sensory apparatus we have gradations from healthy sensation by hyperæsthesia, endless varieties of dysæsthesia and neuralgia, down to complete anæsthesia.

Without recognising the different quality of nervous action in different instances, it would be impossible to explain the great varieties we find in the action of certain medicines. This remark leads us again to consider whether, while we view spasm as the result of a particular kind of action in nerve cells, there may not be varieties of this special mode of action itself, some being of a more sthenic, others of a more asthenic character. Certain cases of tetanus are beneficially affected by aconite, and show a very remarkable power of resistance to this potent agent; others are not at all relieved by it. The same may be said of nicotine. Conway records two cases of traumatic tetanus cured by the exhibition of tartar emetic in large doses, while in other instances free stimulation and tonics appear to have been successful. The spasm of asthma is sometimes markedly relieved by depressants, as emetics and tobacco, sometimes by free doses of alcohol and ether. Some cases of chorea are much benefited by antimony, some by sedatives, some by tonics. The above-mentioned facts seem to me to indicate plainly that all spasmodic actions are not of the same quality, and that the same sort of difference prevails among them as there does between instances of hyperæsthesia and neuralgia. To recognise this is, I think, important, because it does away at once with any idea that the disorders of which spasm is the characteristic element are to be treated in any unvarying manner, even when we have arranged them in their classic groups. Nothing impresses me more as I grow older in practice than the manifoldness of disease, and how insatiable is the variety which Nature exhibits in her deranged as well as in her healthy aspects. We are too prone to imagine that where we see an outward show of resemblance there exists an internal and real identity; and this idea is hard to displace, though it be negatived again and again by the testing action of remedies. I will now attempt to apply the above views respecting neuralgia and spasm to a disease respecting the true nature of which authorities are by no means agreed—I mean angina pectoris. Dr. Stokes says, "If we inquire into the nature of a paroxysm of angina, two completely opposite views present themselves. Is it to be explained by spasm of the heart or referred to diminished action?" Now, the position I would take is that these views are not completely opposite; that spasm of the heart is much more akin to paralysis of the organ than to healthy contraction. The latter is unattended by pain, or indeed by any feeling except it be a certain indefinite sense of "wohlsein," and what we may term whole-heartedness. The former is essentially and distressingly painful, and attended with that sensation of imminent peril of life which is characteristic of all, even of minor, cardiac dysæsthesia. The pain I regard as the more constant and essential phenomenon, and the muscular spasm as a secondary and varying. It is of course possible that death might result during an attack from closure of the cavities in tetanic contraction; but though Lussana is inclined to adopt this view, the evidence in favour of it seems to me but scanty. There are only three observations in which the heart is stated to have been decidedly contracted after death, and it is reasonable to conclude that in many of the cases where the muscular tissue has been found more or less diseased the condition of the cavities was very different. But even could it be shown that the fact was otherwise it would be of no great weight, for it seems most probable that the post-mortem condition of the heart is determined in this disease, as we saw that it was in peritonitis and in similar states, by the amount of contractile energy possessed by the cardiac muscle. If this is great, the cavities close in a kind of rigor mortis, the contractility of the fibre outliving the inhibitory influence of the neuralgic pain; if it is the reverse, as one may conclude where the organ is found thinned, softened, or fattily degenerated, the cavities will remain more or less open. The treatment found most beneficial in angina is evidently such as contemplates a stimulating and invigorating rather than a sedative effect. Opium is, indeed, to be given in tolerably full doses, but this is for the purpose of counteracting and quelling the pain, and not of producing any narcosis of the nervous system. Stokes seems to be averse from employing this remedy when the heart's action is very weak. Stimulants are by general consent accounted our chief remedies in angina, and I am free to confess that I hold with those who look on opium as primarily and essentially (at least, in moderate doses) a powerful though peculiar nervine stimulant. The most practical point for consideration in all cases of angina is whether the breast-pang which threatens to, and sometimes actually does, arrest the heart's action is of organic or non-organic origin. If we are obliged to consider that the former is the case—that the neuralgia has its starting point in a nervous filament pressed upon by a patch of calcareous deposit in the coats of the aorta or coronary arteries—the prospect is, of course, very unfavourable. If, on the other hand, we can hope that some existing rheumatic, gouty, or malarious disorder has produced the neuralgia, we may be more hopeful, though I have known a patient die in whom an autopsy demonstrated the absence of any organic lesion.

Time warns me to close, and I will now only enumerate the principal conceptions which I have endeavoured to lay before you in these lectures.

(1) That of the direct paresis of a nerve or nervous centre as the result of the action of some imponderable influence.

(2) That of inhibitory paresis where the result is produced by some morbid irritation, the vasomotor nerve centres seem to be more liable than others to suffer in both these ways.

(3) That of the influence of nerve-prostration in altering the texture of capillary vessels at the same time that it dilates arteries, thus giving rise to extravasation of blood in greater or less quantity.

(4) That of the paralytic character of neuralgia and hyperæsthesia.

(5) That of the morbid affections of the nervous centres being very analogous to those of the nerves.

(6) That of the affinity between spasm and paralysis.

I am well aware that the grounds which I have assigned for the views above enunciated are insufficient to demonstrate their truth, and when I compare my own work in these matters with the long laborious researches of others, I feel very conscious of short-coming. Still, it is to be remembered that when we come to stand at the bedside, we often feel the want of more than the bare facts which we can ascertain by observation; we need to have also ideas appropriate to the facts, and which may enable us to interpret their meaning aright. I am not without hope that these lectures may have done something to supply such conceptions, or to make them more familiar, and if this be the case I shall be well content.

THE SUBSTANCE OF A

# LECTURE ON NIGHT-BLINDNESS.

## SYMPTOMS — CAUSE — PATHOLOGY — RESULTS — TREATMENT.

By HAYNES WALTON,
Surgeon to St. Mary's Hospital, and to the Central London Ophthalmic Hospital.

Before anything else, I shall speak of the names of this defective state of sight. Night-blindness, as used to signify the symptoms, certainly gives a correct idea of the complaint. Short definitions have much to recommend them. It is impossible to include in one or two words both symptoms and pathology, and usually when giving a name it is more convenient to express the former. The high-sounding terms "Nyctalopia" and "Hemeralopia" are, however, those most used; sometimes the one and sometimes the other, and the first has also been applied to another condition of the eye. This is bad every way: it causes confusion and discouragement to learners. Eye subjects in particular are clogged with such impediments, and they are multiplying fast. A new language has lately sprung up. Of course there must be a nomenclature, as also scientific terms, in all sciences; but we should be ever jealous to make as few as possible. It certainly answers every purpose better to use the vernacular whenever an idea can be expressed in it as clearly and concisely. I have always adopted this rule myself, and have always endeavoured to induce others to follow it.

Night-blindness, then, is usually considered a tropical complaint, because for the most part it attacks persons, generally young ones, in tropical climates. But it has been witnessed in a slight degree during the summer time in northern Europe, and among so many persons at a time as to be called epidemic.

A short description of a case in a young man, who was brought to me a few days ago by Mr. Giles, of Hackney, will show the characteristics. This sailor youth had been at home more than a week. He was in robust health. When he was coming from Calcutta, the return voyage of his first trip to sea, he discovered about mid-passage one night after sundown, that he could not see. He groped about with difficulty, a lamp-light gave him scarcely any help, for however much objects were illuminated, he could not see them. When within a week's sail of England his sight returned.

His eyes remained well when at home and during a second outward voyage, but when at the Bombay Harbour, where he had been with his ship for five months, on came the night-blindness, and in a worse degree than formerly. It lasted for four months, and disappeared as before when near home.

That his day sight was not very bad may be inferred from the fact that up to the latest period of the last voyage, he was often sent aloft to keep a "look out." But on this passage there was some evidence of eye irritation, for when the sun was shining, the reflection from the water always produced discomfort.

I could not see from an external examination of the eye that anything was wrong. I found, however, that a very slight degree of near-sightedness had come on, but there was not any impaired vision as regards the definition of minute things, nor in the accommodating power of the eye.

Thus, from the attack coming on after the eye having been used in tropical glare, from being sudden, from the day sight being perfect in the earlier part of the attack, and from the addition of complications when the affection may be said to be chronic, such as the intolerance of light, is the history of these cases told. I do not know if near-sightedness is usual here. Possibly it has nothing to do with the night defect. It is only to add that in very chronic cases the eye may become so diseased that blindness may ensue.

This is the first instance of the kind of all that I have seen, that I have examined with the ophthalmoscope, and the only apparent departure from a perfectly healthy state was a want of the full tint of the arterial and venous colours. My colleague, Mr. Taylor, who has examined several, tells me that there has been in all an anæmic condition of the interior of the eye. I suppose, when the affection runs on to blindness, there are more decided changes to be seen. Possibly some observers have knowledge on this point.

The pathology does not appear to me to be clear. The disease is met with almost entirely in one part of the world, and has, as we may well suppose, for its exciting cause the intense light of that region; but it is a rare affection, while impairment of sight arising out of this very tropical influence is very common, and is always associated with congestion of the eyeball; the surface is highly injected, and so is the interior. There is most marked intolerance to light, and any minute use of the eye causes pain. Sight is best then at night.

When the eye occasionally suffers in a temperate climate after having been subjected to the heat, glare, and dust of furnaces and fires, the symptoms are, according to what I have seen, congestion, or inflammation, and impaired sight. But I have never met with, nor heard of, night-blindness from such a cause. Perhaps it is, that there is naturally or acquired some peculiarity of the eye that predisposes it to this loss of sensibility to feeble light and to artificial light, and afterwards to worse symptoms.

So far as history serves me, the prognosis of these cases is very favourable. Remove the eye from the heat and glare, and complete visual function is restored. Such restoration is not, of course, to be expected, if the change is delayed till the complications have arrived. I was consulted by Mr. Giles to determine whether his patient might go again to sea. I advised most strongly that he should never go again to the tropics, and that it would be better to give up the naval life altogether. The captain had refused to take him again.

# ORIGINAL COMMUNICATIONS.

NOTE ON THE

# NEW METHOD OF PRODUCING LOCAL ANÆSTHESIA BY NARCOTIC SPRAY.

By BENJ. W. RICHARDSON, M.A., M.D., F.R.C.P.

Since the publication of my original paper on the "New Method of Producing Anæsthesia" (see *Medical Times and Gazette* of February 3) I have made one or two observations of importance to which I would direct immediate attention.

I. I find that all the ordinary ethers of the shops contain alcohol, the presence of which substance materially interferes with the success of the process; it prevents perfect anæsthesia, and it causes tingling and burning sensation at the beginning of the process and during the brief period of reaction. I would, therefore, point out that before Practitioners resort to the process they test the purity of the ether they are about to use, by the following simple experiments:—

### Tests for Ether.

(A) Take the specific gravity. The specific gravity should not exced 0·723.

(B) Try the boiling point. Warm the hands by gently blowing into them the warm breath. When the hands feel as warm as the breath, make the palm of one hand into a cup and pour in one or two drachms of ether. The ether ought immediately to boil briskly without giving any pain.

(C) Test the effect on mucous membrane. Put one or two drachms of the ether in the palm of the hand and quickly take up the ether into the mouth with the tongue. The ether should at once pass off, leaving neither smarting nor burning, nor any sensation except a slight coldness.

(D) Pour a little of the ether on a piece of clean white blotting-paper and lay the blotting-paper on the warm hand. The paper should dry within a minute, leaving no moisture and no smell whatever. If the paper, while drying, yield an odour like eau-de-cologne, there is some alcohol present. If it give a smell slightly pungent, and which hangs about for a time, there is some methylated compound present. Perfectly pure ether, in a word, leaves no persistent odour.

(E) Try the degree of cold producible by the ether. Charge the bottle connected with the spray producer, and direct the spray on the bulb of a thermometer. The mercury ought to fall rapidly to six degrees below zero Fahr., and the falling of the mercury should continue until there is a deposit of snow on the bulb of the thermometer from condensation of water in the air.

(F) Test the effect on the skin. Direct the spray, at a distance varying from half an inch to an inch and a-half from the jet, on the back of the hand. In a space of time, extending from thirty seconds to two minutes, a slight hoar-frost deposit should form on the skin, followed immediately by a diffuse blanching. The skin is at this moment altogether insensible.

(G) Test the reaction of the ether by litmus. The reaction should be neutral.

These are the ready and necessary tests. A pure ether answers to all of them, and no other ether ought to be used.

For a little time the Profession may experience a difficulty in obtaining pure ether, because it is not commonly vended. At the same time, as there is nothing more required than repeated rectification to render ether quite pure, it will be produced so soon as there is a demand; and, although the prime cost will be increased, it will be saved in the end, because the quantity of ether required for each operation is reduced in proportion to the purity of the fluid. Already, indeed, Mr. Robbins, of the firm of Garden and Robbins, of Oxford-street, has, with his usual promptitude, produced for me an ether which bears all the tests I have described above.

II. I have observed in producing local anæsthesia by this new process that the peculiar hardness of the skin which occurs when the freezing mixture of ice and salt is applied, does not occur. The tissues, on the contrary, are comparatively lax, so that difficult dissections may be carried on with ease and nicety.

III. I have found during the last few days that the application of the narcotic spray to parts of the body subject to neuralgic pain gives immediate relief.

I have only to add, in conclusion, the gratifying intelligence that I have now applied the local anæsthetic in forty-three minor operations with a result of complete success in thirty-six cases, and with more than partial success in the remainder. In those cases where the success has not been absolute, the result has been due to imperfection either in the ether or apparatus, or to deficient experience (unavoidable in all preliminary inquiries) in the mode of application. The reaction has been rapid, painless, and satisfactory.

ON THE

# TREATMENT OF FRACTURE OF THE RADIUS AT THE STYLOID PROCESS BY MEANS OF GORDON'S SPLINT.

By Mr. LAWSON TAIT.

Few fractures have had so many painfully ingenious splints devised for their treatment as that common injury to the radius, which generally goes by the name of Colles's fracture, if we except fracture of the patella with the awe-inspiring hooks of the late M. Malgaigne. The French pistol splint for twisting the hand to one side, Dr. Bethune's ingenious pivot splint for twisting the hand to either side, the American splint for twisting the hand down, and some other kind of splint for twisting it up, have all been used, and nearly all given up as insufficient, besides being, for the most part, perfectly intolerable to the patient. Thus it is that we find Sir William Fergusson recommending the ordinary palmar and dorsal straight splints for the treatment of this fracture, and these, I believe, are used by most British Practitioners with the addition of various supplementary pads as required by the exigencies of each case.

In spite of the utmost care most cases of this fracture turn out unsatisfactorily, and many are the actions of damages that have been raised on its account. The reason of this non-success is, I think, very plain; and let any one examine his own wrist, and the following explanation will be clear. Holding the hand straight out in a plane with the forearm, it will be seen that, while the dorsal aspect is almost a straight line, there is a considerable concavity at the wrist on the palmar aspect; indeed, that a line drawn from the elbow to the ball of the thumb would be, so to speak, the chord of a segment of a circle. Thus it is that when an arm, with the radius broken as it is in Colles's fracture, is pressed by two straight splints, one on either aspect, extending from the elbow to the fingers, the upper fragment must necessarily be pressed towards the palmar aspect of the limb; while the lower fragment, which is practically the same in this condition as the ball of the thumb, is pressed in the opposite direction—in fact, that the distortion is only increased by the splints as they press the fragments in the very direction in which they are already displaced. If this be correct, then it is easy to understand the success which has attended the use of Dr. Gordon's splint in the treatment of this fracture, and to believe that it is devised on sound anatomical and mechanical principles—that it really is what all splints ought to be, viz., a dermal skeleton.

This instrument was originally invented and described by Dr. Gordon, of Belfast, the only notice, however, which I am aware that it has subsequently received is in a paper by Mr. Stokes in the *Dublin Medical Journal.* It is composed of two pieces of wood, the one for the palmar aspect of the forearm being about nine inches long, two and a quarter inches wide at the wrist, and three and a half wide at the elbow; the surface to be in contact with the skin is slightly hollowed out to fit the arm, and along its radial border it has screwed to it a wooden bar or pad, which is rounded off at the distal extremity to fit the concavity of the radius; this latter, of course, necessitates that, to fulfil this condition, separate splints are required for the right and left arms.

The pad, in addition to its being rounded off at the extremity, is rounded all along its inner surface so as to press accurately against the radius throughout nearly its whole length, and it is of sufficient height to embrace rather more than half the thickness of the forearm. The other portion of the apparatus consists of a plain piece of three-eighth inch board, two inches and a quarter broad, and two inches longer than its fellow; it is for application to the dorsal aspect of the forearm, and has the surface to be in contact with the skin slightly hollowed, and it likewise has its distal extremity transversely rounded. Its application is effected as follows:—The fracture having been reduced, the limb is retained in position by an assistant, the lower part of the apparatus is then applied, padded with spongio piline or lint, to the radial portion of the forearm alone, and not to the hand. Then the upper splint is to be applied, likewise padded, in such a manner that the proximal ends of the two parts of the apparatus are maintained at the same level, while the distal end of the upper one projects about two inches beyond the end of the radius. For a more particular description and a drawing, see *Dublin Medical Journal*, for February, 1865. The whole apparatus is firmly secured by two small straps with buckles. In this manner no pressure is exerted on either of the fragments but what is calculated to keep them in their correct position. The arm, during the after progress of the case, is recommended to be kept in the position most agreeable to the patient, which will be found to be that of almost complete pronation. In the employment of this apparatus the wrist will be found to be confined only to a limited extent, while the movements of the fingers and carpo-metacarpal articulations are quite unimpeded; thus entirely doing away with the most objectionable condition of stiff joints, which is such an annoyance both to Surgeon and patient for weeks after the common splints have been removed from the forearm.

Shortly before I became acquainted with this splint, I met with two cases of Colles's fracture, in which, in spite of the greatest care I could possibly bestow on them, there still resulted a considerable degree of the deformity peculiar to this particular injury. The first case occurred in an old lady, and the other in a young collier lad; in both the injury resulted from a fall on the palm of the hand. The unsatisfactory results of the ordinary methods of treatment of this fracture having been thus prominently brought under my notice, I was induced to pay special attention to what had been suggested by Surgical authors as to the cause of the displacement and as to the best means of overcoming the resulting deformity. Much has been written on the action of those muscles which some have supposed to be the cause of this peculiar deformity; but I think that this is one of the many instances where muscular action is blamed for ill effects of which it is blameless. The deformity seems to me to be caused solely by the direction of the violence which is the cause of the injury, this being almost invariably a fall on the palm of the hand. The mechanism of the fracture seems to be that when the patient falls on the hand, and that by its being forced outwards it drags with it the apophysis of the radius, the ligaments breaking the bone rather than yielding themselves. Much the same, indeed, as in the very analogous fracture of the fibula at its lower fourth, where the internal lateral ligaments of the tarsus much more frequently drag away with them the tip of the malleolus externus than are ruptured themselves. Again, the idea that the displacement depends merely on the violence is borne out by the occasional occurrence of a case where the patient falls on the back of the hand, and when the ball of the thumb and lower fragment of the radius are driven upwards and towards the palmar aspect of the forearm. Bearing these things in mind, and looking at the great improbability of fragments so displaced returning spontaneously to their normal position, it seems to me that, in this instance at least, the theories which would attribute to particular muscles the power of drawing particular fragments this or that way, thus producing and maintaining the displacement, are quite needless. What is required in the treatment of this fracture, if we wish to obtain a perfect result, is not mere repose of the parts, which alone is secured by the ordinary straight splints, but such special adjustment of the normal curve of the shaft of the broken radius with its apophysis as will restore their normal relation to each other, and to the corresponding extremity of the ulna. This result theory satisfied me was obtainable by the use of Dr. Gordon's apparatus, and the result in the following cases will, I think, satisfy any one of its utility and success.

Since reading Mr. Stokes's paper on this splint, I have met with two cases of the fracture, both of which were treated by means of it with remarkably pleasing results. The first occurred in the left arm of a boy, about eight years old, who fell from a height and lighted on the palms of his hands. In this case, the deformity was excessive, putting me in mind at the moment of that mysterious symbol connected with our early faith, known to antiquarians as the zig-zag sceptre ornament. He had his arm in the Gordon splints scarcely three weeks; and now, from careful examination of both wrists, it could not be told in which arm the fracture had occurred. The other case occurred in a gentleman, aged 63, whose carriage was upset, and who likewise lighted on his palms. In this instance the deformity was well marked, but not nearly to so great a degree as in the former example. After their original adjustment, the splints were not touched for six weeks, and there now exists not the least deformity. In fact, I had an opportunity of examining this gentleman's wrist within the last few days, and am quite as well satisfied with it as with the other.

Recently Dr. Heron Watson mentioned to me a case of this fracture which he had treated by Dr. Gordon's apparatus with the most satisfactory results. The patient was an adult male, and had met with the accident in the usual way. "The injured limb," writes Dr. Watson, "had been put up in the first instance in Gooch's splints by my House-Surgeon; but when I saw him next day, as he was uneasy, I took them off and applied Dr. Gordon's. They were adjusted two or three times while they were required, which was only four weeks. The original displacement was well marked, and the result was eminently satisfactory, the position of the ulna with reference to the carpus being natural, and the movements of the wrist quite unimpaired; while the rotation backwards and outwards of the styloid process and articular surface of the radius was, if present, imperceptible."

In none of the cases did the patients complain of the slightest pain or inconvenience arising from the apparatus.

## CASE OF OVARIOTOMY—DEATH ON THE THIRD DAY.

By W. M. TURNBULL, M.D.,
Physician to the Melbourne Lying-in Hospital.

THE following case was sent to me by my friend Dr. Robertson. For the history and details of the after-treatment, I am indebted to the Resident Surgeon of the Hospital, Dr. Mackenzie:—

C. S., aged 33, a native of Ireland, domestic servant, admitted into the Hospital September 12, 1865. She states that she has been troubled for the last eighteen months with irregular menstruation, during which time she began to lose flesh, and her appetite became bad. About four months ago she perceived a swelling in the region of the right ovary, which has gradually increased in size. On admission she complained of a great swelling of the abdomen, loss of appetite and flesh, and great dyspnœa when she attempted to lie down, and that the menstrual discharge was irregular and scanty.

On examination it was ascertained that there existed a large fluctuating tumour in the abdomen. It was felt to the right of the median line, extending above the umbilicus.

September 13.—Appetite bad; tongue slightly coated; bowels naturally costive. Ordered liberal diet; compound rhubarb pills, two to be taken when required.

14th.—A medium-sized trocar and canula, with drainage tube attached, was inserted about one and a-half inches below and to the right of the umbilicus, and about two gallons of dark brown gelatinous-looking fluid drawn off, after which the wound was closed, and a flannel bandage applied in the usual way. The fluid was highly albuminous; its specific gravity 1·020. The urine was not albuminous; specific gravity, 1·015.

16th.—Pulse regular; complains of burning pain through abdomen; takes her food; one grain of opium to be taken at bedtime every night.

18th.—The opium pill makes her feel sick; ordered half a grain of morphia instead.

25th.—Pulse regular; sleeps well; increasing in size; urine scanty, and bowels regular.

October 9.—A consultation, due notice of which had been given, was held with Drs. Robertson, Barker, and Livingston (Dr. Tracy being unable to attend); it was then deemed advisable that ovariotomy should be performed. I may state that the very morning after being tapped, and almost every time when going my rounds, the patient inquired when I was going to operate; she had previously been made aware of the dangers attending the operation.

On the 12th I proceeded to operate. Before doing so, due precautions were taken, as recommended by Baker Brown. I may as well state, at this time I had made up my mind to follow the plan recommended by him. The bowels had been freely moved in the morning by castor oil and enema; the temperature of the room was duly kept at about 70°. Dr. Robertson administered the chloroform. Drs. Barker, Livingston, Thomas, Tracy, and Mackenzie were also present and assisted me. I first made an exporatory incision of about three inches in length in the linea alba, and whilst cutting cautiously down upon the peritoneum, the director was unfortunately passed through it into the sac; this allowed a large quantity of the contents of the cyst to escape, and embarrassed the future steps of the operation very much. After several ineffectual attempts to seize the ruptured portion of the sac the incision was enlarged, and the trocar (Spencer Wells's) passed through the opening in the sac, and attempts were again made to seize it with the hooked apparatus attached to that instrument. With some difficulty this was effected; the hand was then passed round the sac, and several extensive and chiefly abdominal adhesions were found, but being recent were easily broken through. In removing the sac considerable adhesions of the omentum were discovered, which being also comparatively recent were easily destroyed by the fingers; no bleeding followed. The tumour was now drawn outwards: the pedicle was very short; a clamp was applied, which in tightening broke, and two pieces fell into the abdomen; these I at once removed, and applied another. A ligature was then passed close to the clamp, and the tumour removed. The stump was brought to the lower end of the wound, which was united by needles and twisted sutures, one needle being passed close under the clamp. Thick cotton wool was applied over the abdomen, and confined *in sutu* by a many-tailed flannel bandage. The patient was then removed to bed, and 40 drops of the solution of muriate of morphia administered, and a hot water-bottle applied to her feet.

12th, 11 p.m.—Pulse 100; tongue and skin moist; no pain.

13th. 9 am.—Pulse 110; tongue moist; slept through the night; has had strong beef tea, barley-water, ice, and brandy through the night; temperature of the room kept between 65° and 70°; urine was drawn off by Dr. Mackenzie every four hours.

14th, 2 a.m.—Pulse 120, feeble; complains of great thirst; is greatly troubled with belching; ordered nothing but ice to suck for some hours. 8 a.m—Belching not so troublesome; ordered champagne and ice. 11 a.m.—Belching relieved; clamp removed from pedicle; wound looking healthy;

light linseed-meal poultices to be kept applied to abdomen. 4 p.m.—Pulse 110; skin moist; tongue dry and irritable; ordered strong mutton soup, brandy, and ice. 8 p.m.—Pulse 120, feeble; abdomen tympanitic; countenance anxious; tongue dry and rough; is inclined to be restless; great thirst. There is a sero-sanguineous looking discharge oozing from pedicle; still takes the brandy and ice and beef tea.

15th, 2 a.m.—Pulse 130, thready; is very restless; complains of no pain; abdomen tympanitic and swollen in right iliac region; thirst very great. 8 a.m.—Pulse 140, very feeble; features becoming pinched; is very restless, wanting to get out of bed; the hot poultices were still kept applied to abdomen; there is considerable discharge from the pedicle. Died at 11·30 a.m. Throughout the treatment occasional doses of morphia were given.

*Post-mortem Appearances.* — Present: Drs. Robertson, Livingston, and Thompson. On removing the needles and opening the wound, very little attempt at union by the first intention was found. The pedicle of the tumour was very short, and situated on the left side of the fundus of the uterus, which was rather enlarged; the omentum was thickened and collected into a mass. There were adhesions of the ascending colon with the small intestines by bands of lymph. There were no signs of active inflammation about the peritoneum, but there was a small quantity of sero-sanguineous fluid in the abdominal cavity. The kidneys were normal; there was slight cirrhosis of the liver. The uterus was removed, and was sent to Professor Halford for examination. The result of that gentleman's examination, given below, of this body, as well as of the cyst, would evidently point to exhaustion consequent on the malignancy of the disease as being the cause of death.

*Remarks.*—I consider that it was fortunate the rupture of the cyst took place whilst making the exploratory incision, and not later, as thereby a larger quantity of the contents of the cyst was prevented from escaping into the abdominal cavity. I cannot say that I found the facilities afforded by Spencer Well's trocar and canula to be such as I was led to believe, but perhaps this was owing to the imperfect manner in which the instrument was manufactured here.

This is not the first occasion on which I have considered it my duty to report unsuccessful cases to the Medical journals, and if the statistics of ovariotomy and other capital operations in Victoria are to be of any service, it would be well if my example were more generally followed.

I now come to a very disagreeable subject. I allude to that most ungenerous, to say the least of it, report which has been put into general circulation—viz., that I had thrust the pin through the uterus. I requested Professor Halford to make a minute examination with a view to ascertain if such were the fact. His reply is given below:—

"University of Melbourne, Oct. 25, 1865.

"My Dear Sir,—The ovarian cyst sent me for examination was malignant, partly colloid and partly medullary cancer, the latter in greatest quantity.

"The appearances were such as are described by Paget, Rokitansky, and others.

"The body of the uterus contained also two distinct patches, as large as beans, and its cavity was full of creamy matter of cancer, verified by microscopic examination.

"No pin or any other sharp instrument had passed through the uterus Of this I am certain.

"I am, my dear sir, yours truly,
"George B. Halford."

AN EPIZOOTIC.—The silkworm disease which has been prevalent in France and other parts of Europe has reached the Caucasus, and is producing great distress amongst the population who get their living by trading in silk.

CHARLOTTE WINSOR.—The case involving the life of the convict Charlotte Winsor is still undecided. She has been further respited, the Attorney-General having seen cause for issuing his *fiat* to have argued before the Court of Error the question as to the legality of discharging the first jury without a verdict. In the meantime the wretched woman has made a "confession," admitting that she was present at the murder of Harris's child, but asserting that the deed was done by Harris. This is the substance of a long letter written for publication in the newspapers, but stopped by the governor of the gaol. When informed of her further reprieve she professed total indifference to her fate, and advised her husband to marry again.

# REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

## GUY'S HOSPITAL.

### HYSTERICAL SPEECHLESSNESS — SPEECH RESTORED BY THE INTIMIDATING EFFECT OF GALVANISM.

(Under the care of Dr. PAVY.)

THE following particulars are from the report of Mr. Vaudrey:—

S. C., aged 17, having been occupied as a domestic servant at Tottenham, was admitted into Mary Ward, under the care of Dr. Pavy. Her history, which she gave in writing, is as follows:—About seven months ago, whilst out on an errand in the evening, a man laid hold of her arm and demanded money of her. He tore her jacket, but inflicted no personal injury upon her. She was so frightened that she could neither speak nor move for some time. She, however, at length reached home, although she does not remember how. On her arrival home she had a hysterical fit, which lasted for two hours and a-half, and from that time up to her admission—a period of nearly seven months—she has been perfectly speechless and partially deprived of the use of her lower extremities. She is healthy in appearance. When spoken to she does not attempt to answer, but shakes or nods her head. The movements of her tongue and lips are free enough for other purposes besides speaking. She can move her legs, but requires support in walking; neither leg, however, is dragged, as in paralysis. Apart from the speechlessness, her other faculties are right. She usually has a fit of a hysterical nature every night, about nine. Catamenia regular, and bodily functions in general healthy.

Dr. Pavy remarked that he believed this to be one of those strange vagaries brought about by hysteria. Here was a girl of healthy and lively appearance, and of good bodily condition, who had not uttered a single word for seven months. Doubtless she had excited the commiseration and sympathy of her friends, but one would have thought it must have been a great hardship to endure to forego speaking altogether for such a length of time. There was evidently nothing physically to interfere with her speaking. She was never to be caught unawares. When spoken to she made no attempt to answer by speech, but was ready to write down her reply. It was difficult to suppose that the girl was a voluntary agent in the part she was performing, or that she was practising a wilful deception. It was more rational to suppose that she was herself deceived—that she was so impressed with the conviction, so deluded with the belief that she could not speak, that she did not make the attempt. Some powerful impression would have to be made to dissipate the delusion. The galvanic shock had succeeded before in such cases, and Dr. Pavy would have it tried in this. An instrument in use by a paralytic patient in the ward was set to work, and the girl made to grasp the handles. The battery was not strong enough to yield a very powerful shock, and she did not utter any sound, although she cried and moved her mouth as though attempting to speak. She was told that a more powerful battery would be used another time if she did not find her voice, and that she was meanwhile to try all she could herself to speak. The next day she had a fit of hysteria, and afterwards uttered some sounds. She now began to speak, and in the course of a few days talked as freely as any patient in the ward. The use of her legs also became restored, and her hysterical attacks disappeared. The medicine administered was sp. ammon. fœt., ♏xx.; inf. valerianæ, ℥j., ter die.

## THE LONDON HOSPITAL.

### RESUMÉ OF A WEEK'S ADMISSIONS.

BEING THE SUBSTANCE OF A CLINICAL LECTURE DELIVERED WEDNESDAY, JANUARY 10.

(Cases under the care of Mr. HUTCHINSON.)

[Reported by Mr. WAREN TAY.]

(Continued from page 120.)

CASE OF FRACTURE OF LONG BONES.

Amongst our cases of fracture we have five of fracture of tibia and fibula. None of these present any exceptions to he general statement that the lower end of the upper fragment is displaced forwards and inwards, and in three of them this displacement is considerable. Two cases of fracture of the femur have been admitted. Two of fracture of the tibia only, and two of fracture of the fibula only. In one of the latter there was very considerable displacement of the foot outwards and backwards, so that the inner malleolus and lower end of tibia projected forwards and inwards. No doubt the deltoid ligament was completely ruptured. This kind of displacement is often very difficult to deal with, and constitutes a not infrequent complication of Potts' fracture. Two cases of fracture of the humerus have been admitted, one because the patient was very old, and the fracture was of the Surgical neck.

### COMPOUND DISLOCATION OF THE ANKLE-JOINT.

Our case of compound dislocation at the ankle joint is of great interest. The patient is a young man, who, whilst resting on one foot, had a heavy weight fall on his back. The result was that his ankle gave way, the inner malleolus being broken off at its base, the external ligaments torn through, and the end of the fibula and tibia driven through a laceration in the skin on the outer side. Mr. Dove sawed off the ends of the projecting bones—about an inch and a-half of the fibula and half an inch of the tibia, and then easily effected reduction. There was some trouble from hæmorrhage from a small vessel afterwards. Ice has subsequently been applied to prevent inflammation. There was no laceration of important arteries or nerves; as the violence was indirect, there was no contusion of the soft parts. You will therefore watch with much interest the result of a compound dislocation at the ankle treated by free excision, and occurring in a young and healthy subject.(a) I have often taken occasion to point out that these cases, however treated, and whatever may be the state of the patient's health, are of very serious nature, and that we very rarely succeed in saving the limb.

### DISLOCATION OF THE ASTRAGALUS.

There was another curious case of dislocation of the astragalus. A man fell from some steps, between two of which his foot was caught and most violently twisted. Mr. Dove informs me that when admitted there was great deformity. The foot was twisted inwards and backwards, so that the inner malleolus projected forwards, but there was in addition a rounded bony mass on the instep, which could be no other than a displaced astragalus. It was reduced without much difficulty, and there has been no undue inflammation about the parts since. We conjecture that the astragalus remaining in connection with the tibia had been displaced from the scaphoid and os calcis.

### MISCELLANEOUS CASES.

Amongst the cases of contusion, ten in number, we have one in which we believe the kidney is lacerated. At any rate, the patient, after a severe blow on the back, chiefly in the right loin, continued for three days to pass considerable quantities of blood in his urine.

Amongst the cases admitted by governors' letters—*i.e.*, not "accidents"—we have three of unusual interest. A case of syphilitic disease of the larynx with urgent dyspnœa, in which we expected that tracheotomy would have been necessary, but which has been relieved by large doses of iodide of potassium and black wash gargle.(b) A case of soft tumour on the inner side of the knee in a young man, into which, in the belief that it was an abscess, an incision was made, and which has since proved to be one of soft cancer growing from the bone. This patient has refused our recommendation of immediate removal of the limb, and has left the Hospital, and will probably seek admission elsewhere.(c) The pseudo-fluctuation of soft cancer is a fact which often comes under our notice. In the last three cases of soft cancer of bone which I have seen in all an incision had been made in the belief that matter existed. You will well recollect a very interesting case of malignant tumour on the buttock of a young girl, which Mr. Curling removed a month or two ago, in which the sense of fluctuation was so definite that, excepting for the knowledge that grooved needles had been several times thrust into it without result, one might have felt certain that there was fluid. Another case, which I will reserve for future mention, is that of the woman with suspected abscess in one tibia, who has twice previously been in the Hospital, and in whom we have incised the periosteum to-day.

### STRANGULATED INGUINAL HERNIA—REDUCTIO EN MASSE—OPERATION—RECOVERY.

I have reserved to the last the most important case of the week. Yesterday morning, on going into the Hospital after lecture, I was informed that a man had been admitted who had had a strangulated hernia reduced by the taxis the day before, and who had been sent in because some doubtful symptoms of strangulation still persisted. I found our patient a healthy man, aged 45. I learnt that he had been the subject of inguinal hernia, and had worn a truss for some years; that his hernia had become strangulated during the night of Sunday. He had sent for a Surgeon as soon as he found that he could not return it; and this gentleman succeeded, after a forcible attempt, in getting rid of the tumour. On the following morning, however (Monday), the tumour was again partly down, and another reduction was effected. Since this last attempt, there had been no protrusion externally, but as the pain and sickness had continued, the man was sent to the Hospital. When I saw him on Tuesday morning, about thirty-six hours had elapsed from the first strangulation. The man's countenance had a somewhat anxious and distressed expression, but his tongue was only a little furred, his abdomen was neither distended nor tender, and his pulse was but little quickened. He had been in the Hospital twelve hours, and although he had felt sick, he had not actually vomited. His bowels had acted on the previous day, but the motion was only a very scanty one.

You will observe that this man had no hernial tumour whatever externally. I could make out the tail of a hernial sac extending about an inch below the external ring, but it was quite empty, and it did not fill when the man coughed. The problem before us was to determine whether an internal strangulation existed. Against such an hypothesis was the very slight character of the symptoms of the obstruction, the freedom with which the man allowed his abdomen to be examined, the absence of urgent sickness, etc.; whilst in the opposite scale we had the fact that, although the symptoms were but slight, they had been sufficient to make the man apply for relief, and that his own conviction seemed very decided that the rupture was not put right. He stated that the hernial tumour had in the first instance almost filled his scrotum; whereas the portion of empty sac which remained was not more than an inch below the external ring. This favoured the idea that the greater part of the sac had passed up with the intestine. I carefully examined the inguinal regions, both in the erect and the recumbent posture, and I made myself certain that a slight degree of fulness and resistance to pressure might be felt on the right side which was not present on the left. I passed my finger up into the inguinal canal, and in the right side I could feel something driven against the finger when he coughed the like of which I could not feel on the left. The fact that the hernia could not be made to come down again by any amount of coughing seemed to favour the supposition that the sac had been reduced, since the inguinal canal was large and the hernia had often been down before, and under ordinary circumstances it ought easily to have come down again. Putting together all these consideration, I ventured to express an opinion that we had to do with a *reductio en masse*. You will easily see, however, that the decision to operate involved great responsibility. On the one hand I was most unwilling to leave a strangulated hernia unrelieved, and on the other I had before me the risk of opening the peritoneal cavity, only to find that that measure was not necessary. We determined, therefore, to wait a few hours; and meanwhile we abstained from doing anything which would complicate the symptoms. Three hours later I saw the man again; he was sitting up in bed with the utensil before him, and, although he had not vomited, he still persisted that he felt very sick. His countenance was decidedly more anxious; his other symptoms as before. When I proposed an operation he willingly assented, and we had him at once removed to the theatre. I made a free incision obliquely over the external ring, took up the little pouch of sac below it and laid it open. Drawing down the sac a little, the distended convex end of a coil of intestine became visible. The nature of the case was now clear. I passed my finger up into the sac, and as high as it could reach I detected a stricture. Having drawn down the sac as much as we easily could, I got my finger under this stricture, and then notched it with the bistoury. Still reduction could not be effected;

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(a) The result has been death on the eleventh day, from acute inflammation of the cellular tissue of the limb, sloughing of the skin about the wound, and traumatic delirium.

(b) Tracheotomy has since been required, and the patient is now doing well.

(c) The poor fellow has since returned in a much worse condition, and I fear it is too late to think of amputation.

and on renewed examination I found another and much tighter stricture an inch and a-half higher up. The hernial sac was thus almost wholly within the cavity of the abdomen, being, however, of course, behind the parietal layer of peritoneum between that membrane and the rest of the abdominal wall. My finger passed up so far that one of my colleagues who was assisting me remarked that it must be free in the abdominal cavity. I had some difficulty in bringing this upper stricture within reach, but at length succeeded in dividing it and in returning the contents of the sac. These contents were coils of small intestine much congested. The sac itself would, I think, easily have held a fist.

Having completed the operation, the wound was closed with metal sutures, and we directed that a large bladder of ice should be kept on the abdomen just above it, and that the man should take two grains of calomel and half a grain of opium every three hours. I explained to you that I commenced the calomel treatment thus early in order to get the start of any traumatic peritonitis which might result from the operation. Up to the present time the man has done uninterruptedly well. His abdominal pain and tendency to sickness were wholly removed by the operation, and have not returned.(d)

This case is full of instruction, first, as an instance of complete "reductio en masse," complete, at any rate, so far as the contents of the sac were concerned. This occurrence is, I believe, more common than writers would have us to suppose; at any rate, this is the third case which has come under my own care during the last five years. Secondly, the case shows how slight may often be the symptoms by which strangulation of the intestine is denoted, and very fully bears out the practical rule, "When in doubt, operate." Probably the symptoms were less severe owing to the fact that the strangulation was caused only by the neck of the sac itself, and not by any tense ligamentous structures. Lastly, as to the results of treatment,—I scarcely ever recollect to have seen so good an instance of healing by the first intention after an operation for inguinal hernia, and the incision had been a very free one, and the manipulation considerable. The efficient use of ice had probably a good deal to do with the non-occurrence of inflammation of the wound. As regards the use of mercury, I will not at present ask you to believe that a state of ptyalism is conducive to the rapid healing of wounds; but I will ask you to note this as a clinical fact, that it does not prevent it.

## ST. GEORGE'S HOSPITAL.

### SUBCUTANEOUS INJECTION OF NARCOTICS FOR NEURALGIA.

(Cases under the care of Dr. JOHN W. OGLE.)

*Subcutaneous Injection of Aconitine and Morphia for Neuralgia.*

MARY K., aged 22, became an out-patient September 11, 1865, suffering from neuralgic pain, which she had had for some weeks, down the back of the left thigh and in the muscles forming the left buttock. This was at times excruciating, and could not be connected with disease of any organ. She was, however, not a very robust person.

Dr. Ogle at once ordered the subcutaneous injection of $\frac{1}{40}$th of a grain of aconitine, and enjoined that she should come again to the Hospital in three days' time, and have $\frac{1}{30}$th of a grain of aconitine injected. Valerian, steel, and quinine were also prescribed.

She experienced a certain amount of relief from the subcutaneous injection, but not so much as was expected; so that on the 16th half a grain of acetate of morphia was injected. After this she complained of feeling "very queer" for three hours, and subsequently passed a restless night, "sleeping and waking," as she said. The next day she felt "weak;" but for two or three days decidedly less pain was experienced. On the 25th the pain had returned very acutely, and therefore $\frac{1}{20}$th of a grain of aconitine was injected. At the end of a week she returned, saying she had received very great good from the last injection, and had been quite free from pain ever since. She was accordingly discharged, as being no longer in want of treatment.

*Subcutaneous Injection of Atropia and Morphia in Neuralgia of the Thigh.*

Emma G., a rather delicate and pale young woman, was admitted under Dr. Ogle's care on September 6, 1866, with acute pain down the back of the left thigh of a persistent character. There seemed to be no actual disease of any organ. It appeared that she had been previously in the Hospital with a similar attack, which was benefited by subcutaneous injection of some sedative. Accordingly Dr. Ogle at once ordered $\frac{1}{40}$th of a grain of atropia to be injected beneath the skin of the thigh and a senna draught to be given. This produced no good result whatever, and then a draught with half a grain of morphia every night was prescribed, and in a day or two quinine in 7-grain doses twice a day and occasional pills with colocynth and hyoscyamus.

On the 18th Dr. Ogle ordered half a grain of morphia to be injected subcutaneously. This gave a considerable degree of relief, lasting a whole day, and on the 25th it was repeated. She quickly improved after the latter injection, and on Oct. 2 was discharged free from pain. It is right to state that she also had gone on with her quinine daily, and had been taking ordinary meat diet.

*Neuralgia of the Face (Infra-Orbital Branch of the Fifth Cranial Nerve)—Relief from Steel, Quinine, and Subcutaneous Injection of Morphia, etc.*

Anne V., aged 56, a widow, thin, and delicate looking, had for four months been subject to acute pain extending from below the right orbit to the middle of the upper lip, which was rather swollen. She became an out-patient January 9, 1865. This was wont to come on suddenly, lasting a minute and a-half, as well during the night as day. The pain was described as being like scalding with hot water or violent pricking, and was brought on by lifting up the lip with the finger, sucking, swallowing spittle, eating and drinking, etc. Very rarely the pain was also felt *above* the orbit. Moreover, all along the course of the pain the surface of the skin was *exquisitely hyperæsthetic*. There was a slight degree of drooping of the right upper eyelid, but there was no paralysis of the facial muscles, or of those of the arms or legs, etc. The pupils were natural. There were no teeth in the upper jaw, as they had been extracted or had fallen out from being decayed when young.

The patient thought that her pains began with "cold and great discharge from the nose." The mental powers seemed intact. For several weeks she was treated with steel and five-grain doses of quinine. Belladonna ointment was applied to the painful part, but the patient thought this made her worse at the time: perhaps it was from the friction. On the whole she much improved, the pain still being described as "jarring," "pricking," "throbbing," but in the intervals of pain she was much stronger and more comfortable. As this appeared to be especially so after the use of night pills containing half a grain of acetate of morphia, the same quantity of morphia was injected (February 27) beneath the skin of the right cheek. This gave great temporary relief. She afterwards took quinine with four minims of the tincture of aconite. On March 20 one grain of morphia was injected subcutaneously. Since that time the patient has not presented herself at the Hospital.

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**FEVER** is rife in Friars-mount, Bethnal-green. The Divisional Surgeon states that he has attended eighteen cases of typhus and typhoid in two of the houses. The *Times* states —"The place was utterly filthy; there was a want of water, the closets were full, and the drainage inoperative. There was an accumulation of vegetable and other refuse. The result was to be expected."

**UNIVERSITY OF DUBLIN.**—At the spring commencement held in the Examination Hall of Trinity College on Shrove Tuesday, the 18th inst., the following degrees and licenses in Medicine and Surgery were conferred:—*Baccalaurei in Medicinâ.* —Gulielmus Morton Harman, Jacobus Thompson, Gulielmus Robertus Mac Dermott, Thomas E. Little, Alexander Leney, Michael Shanley, Christophorus Armstrong, Ricardus Edgeworth, Samuel B. Gamble. *Magistri in Chirurgiâ.*—Samuel B. Gamble, Jacobus M'Cutchan, Edvardus Kough. *Licentiati in Chirurgiâ.*—Wellington Gray, Ricardus Murray Vesey. The answering of Mr. Little, who obtained the first place at the examination in Medicine, amounting to 87 per cent., may be taken as an illustration of the fact often observed in Dublin University, that those students who distinguish themselves most in the Arts course are also the most distinguished in their Medical studies. Mr. Little, during his Collegiate career, held both a Science and a Medical Scholarship in Trinity College.

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(d) This patient has, since the lecture was given, made a perfect recovery. Slight ptyalism was apparent on the third day, and the mouth remained sore for nearly a week. The man had no peritonitis, and the wound united by first intention without the formation of a drop of pus. On the ninth day we were able to order a truss.

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Medical Times and Gazette.

SATURDAY, FEBRUARY 17.

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## THE GOVERNMENT AND THE CATTLE PLAGUE.

IN introducing a bill on the cattle plague on Monday night, Sir George Grey stated that the desire that the most stringent measures might be taken in order to check, if possible, the progress of the disorder and to prevent the consequences which would ensue from its unchecked advances, had been evinced within a short period. Opinion had been greatly changed on the subject, and he felt that this had occurred within a very limited period—not within the last few weeks, but since the week which preceded the meeting of Parliament.

Now, it is certainly very natural that opinion should change during the spread of an evil like the cattle plague. Every week it is more felt by us and is extended to greater numbers of us. Our neighbours' misfortunes naturally concern us much more deeply when experience has opened our eyes to the unpleasant conviction that they are what our own misfortunes are only too likely to be in a short time unless help and protection be vouchsafed to us. Besides, the state of an epidemic visitation materially affects the nature of the means to be adopted. It is, therefore, only as might be expected that those who proposed a set of measures suitable to the occasion when the cattle plague first entered the country advocate different measures, or at least a modification of them, now that it rages through the land. The public demand that active measures be taken has certainly become stronger—so strong, indeed, that no government would be safe that ventured to disregard it; and the conviction has become firmer and more general that certain means only out of the many proposed afford any promise of proving successful in subduing the disease; and no wonder, when the country has been left to learn by sad experience the utter futility of the many recommendations that have been offered upon grounds that a very little of the wisdom in the country, if appealed to and heeded, would have shown to be baseless. Having been left for months by the Government to try means of cure in a thoroughly haphazard way, the country, more awake to its helplessness, now cries out to the Government to save it from itself.

These reasons, however, why a change in public opinion should have taken place, and why a louder voice than before should have been raised by the country in asking that something be done, are not sufficient to account for the feeling that has been excited in Sir George Grey's mind that a great change in opinion had occurred since the week which preceded the meeting of Parliament. But has there been any such sudden change? Is it evidence of such a change that when at last Parliament comes to assemble, the country makes a stir, in hopes of now getting done what the Government has hitherto shown itself so apathetic in undertaking to do? Is it strange that, with fresh hopes, societies should meet, and conferences be held, and resolutions be made, and recommendations be passed, and deputations sent to wait upon Sir George Grey? We think not. The meeting of Parliament, after a period of inaction by the Government, naturally called forth strong expressions of opinion in different quarters. And months of bitter experience, having made many wiser, have made the opinions expressed more unanimous and different from those at first uttered.

But there is nothing new in these opinions. Personal experience has only taught the farmer the truth of what the Royal Commissioners and other competent authorities told the Government months ago. Here is where we feel the Government have contracted the heavy responsibility of having allowed the diffusion of the cattle disease to be as great as it is. Of course, enlightened measures, proposed with foresighted knowledge, are sure to be attacked by the interests which they have to interfere with; but this is no reason why they should not be brought forward. The wisdom of adopting them would be made patent by the discussion they would receive. The Government should not have so long disregarded the statements of its official advisers. It cannot for a moment attribute, with any show of reason, its inactivity to the differences of opinion held by skilled men on the subject.

The Government was cautioned in 1857 in the reports of the Consul-General in Poland, copies of which were laid before the House on Monday, about the means by which the Steppe murrain might enter our country, and informed of the uselessness of treatment hitherto, and of the only means at all successful in arresting its progress. When the cattle plague appeared in the land, overwhelming evidence of its identity with the Russian distemper was received by the Government. Hence it could know the terrible mischief of inactivity in repelling the inroads of the disease; and it could know, also, how surely certain means of meeting the enemy would fail, and certain others as surely succeed. This was not all; it was told that the disease was without doubt closely allied to human diseases, such as scarlatina, typhus, variola, and others, for all of which no curative treatment has ever been made out. It therefore learned that no *cure* for cattle plague could be looked for with any degree of hope, but, at the most, only an improved system of nursing. It could thus see the force of the recommendation to slaughter at once; for the disease was very fatal, and where recovery was to be hoped for there would be a long retention of a return of infection, which could hardly be prevented from spreading the disease. On the other hand, it could see the shallowness of the objections raised by some popular organs against the adoption of slaughtering instead of attempts at curing. We were not to kill merely because we knew of no successful line of treatment for a very virulent distemper, but because, while trying to save one very doubtful life we were risking hundreds of others. These were points upon which it was informed, and by those who, as members of our Profession and from their eminence among us, deserved the full confidence of the Government on such a subject. As to the means for carrying out the ends to be aimed at, the Government must surely have seen how impossible it was for them to be effectually put in force without its active interference and assistance, and this being so, it seems deservedly to fall under the censure of having been so far heedless of the public welfare.

However, it is now at last in action. Let it show the country that it is going to make up, so far as is possible, for the past by adopting means which must certainly go far to quell the advance of the disease, if not fully successful in doing so. By the provisions of the Ministerial Bill, all diseased animals are to be imperatively slaughtered; but other animals which have been exposed to infection from these are only obliged to be slaughtered by the orders of local authorities. This arrangement, if put in force, will surely prove imperfect in its purpose of exterminating the sources of disease. The slaughtered animals are to be buried at least six feet deep. Disinfection of the places contaminated by diseased animals is to be practised, and fresh animals are not to be removed into them.

As regards the movements of cattle, the restrictions it is proposed to enforce are assuredly insufficient. Cattle can be removed by license during the day, and it can hardly be supposed that, in every case, the license will be granted with sufficient circumspection to ensure that the sources of contagion may not still be diffused through the land. We were glad, therefore, to see that Mr. Hunt introduced a bill on Monday, of which one provision is, that cattle traffic shall be totally suspended by road and rail. A strong support was given to this proposition; and a most influential meeting held the same night in the tea-room of the House of Commons passed resolutions denouncing the movement of cattle along common roads and railways. Railway cattle traffic at least ought to be totally suspended, since it seems impracticable to carry out any regulation of it with sufficient care. There was one point of great interest mentioned by Mr. Hunt in the debate on Monday respecting railway transmission of cattle. He stated that there was a moral certainty that in Northamptonshire animals were infected by trains of diseased cattle passing through it, for in every case in the county they had been able to trace the origin of the disease, except in most of those cases occurring adjacent to the railway, unless they were attributable to this cause.

In the new Report of the Commissioners which was presented to the House on Monday night, some evidence is afforded of the spreading of the disease by contagion. Whether the disease has had or continues to have spontaneous origin in this country, we learn from the Report that the great breeding districts of the kingdom into which cattle are seldom imported have remained comparatively free from the disease; and that from the centres of contagion on the eastern coast the disease has travelled west or south-west, traversing alike low and elevated lands, having been apparently uninfluenced by varieties of soil.

The successful mode of arrest of the disease in France and Belgium by means, it is to be hoped, we are now at last about to adopt, and the operation of the Orders in Council issued from time to time by our Government, are fully gone into in the Report. The system of investigation of the disease with the view to establish a sound basis for curative or preventive treatment is explained. It also contains a statement of "some of the points of more or less practical moment at which the Commissioners have arrived." These are:—1. That no thoroughly efficacious treatment of the disease has been discovered. 2. That vaccination is no protection against the plague. 3. That the only means of combating it consist in the stoppage of the movement of stock, and of things likely to be vehicles of infection, in the isolation and slaughter of infected cattle, and in the use of disinfectants.

## FENIAN STATISTICS IN THE "LANCET."

Our contemporary, the *Lancet*, in its first leader in last week's issue, has stumbled upon the most extraordinary statistical mare's-nest which ever rewarded the search of "a professed grievancemonger," and has proceeded to build upon this frail basis a sensational superstructure of most portentous dimensions. It appears that certain Fenian prisoners, who are described in one part of the article as "men of active mind and impatient temperament," and in another as not having "much cerebral matter to experiment upon," have been sent to Pentonville, where, in common with other prisoners who have earned sentences of three years and upwards, they are to spend six months or so in separation, with all its horrors, added to the cruel obligation of keeping their cells clean. These men may also, if they please, bring upon themselves floggings and the "black hole," by not conforming "minutely to a strict system of rules." But the worst remains to be told. Madness looms in the distance; and statistics which scarce madness itself could imagine, or imbecility believe, vindicate to the full the scandalous dictum that "anything may be proved by figures." But, strangely enough, the awful figures are not the figures of Pentonville, but of Chatham. It is not the separate system of the first that is accountable for the results, but the associated labour of the last prison. But, as Chatham is partly fed with convicts by Pentonville, it is probably intended to assert that the results reported are really due to the six months' confinement which the fraction from Pentonville had to undergo before they left it. Be this as it may, the writer in the *Lancet* contrives to find in "the 'Convict Prison Report' for 1863, that out of 852 convicts received at Chatham during that year, 85 had to be sent to the Asylum at Broadmoor." This beats Mr. Reade's fictions hollow. It would, indeed, be time to mend, if not too late to do so, if these awful statistics, or anything like them, were true. But, fortunately for us, Blue Books are cheap and easy of access, and the "Prison Report" for 1863 explains itself without much questioning. The figures are absurd and incredible on the face of them, but the explanation is at hand. The convicts sent from Chatham to Broadmoor were destined, not to be shut up as madmen in the Asylum, but to work, under proper superintendence, on the still unfinished grounds of the establishment. In turning over the leaves of the report we think we see statistics which, if carefully studied, would comfort Mr. Pope Hennessy, Mr. Reade, and our benevolent contemporary himself. To each and all we commend the proverb of the novel and play, "It is Never Too Late to Mend,"—even in the matter of statistics.

## HOSPITAL DOCTORS AND WORKHOUSE PATIENTS.

One good always leads to another, and we are quite sure of being uncontradicted when we say that whatever would give pay, status, and dignity to the Medical attendants of the poor would secure also greater skill and kindness for the poor patients.

Here is an astonishing contrast. England is dotted here and there with Hospitals supported by voluntary contribution or by charitable endowment, varying in size from Mr. Napper's Village Hospital with its half-a-dozen beds to the stately St. Bartholomew's or Guy's with as many hundreds. The Medical offices attached to these Hospitals are regarded as the prizes of the Profession, and the holders are looked up to and respected as the best and highest in the Profession.

Again, in every union there is what is virtually a Hospital, though it pass under the name of sick wards of the Workhouse or Workhouse Infirmary. This Hospital is supported out of the public rates. If the parish be a rich one, the sick poor may have nothing to complain of; but if it be poor, the space for the sick is small, the Medical staff scanty, the nursing and diet inadequate, and the Medical officer a man who works hard for a small pittance, and with no honour, status, or prestige to act as compensation.

The buildings which we are accustomed to call the Hospitals —that is, those supported by voluntary contributions—so far as London is concerned, provide barely 4000 beds. But in the Workhouse Infirmaries the number is at least four times as many. Yet the former are considered the *public* institutions; they are the places to which Practitioners attach themselves for distinction's sake, and pupils for the sake of study; and they have each a large staff of officers to attend on the sick, and not only so, but to take note of facts worthy of record; so that they are, as it were, the head quarters of scientific Medicine.

As for the Workhouse Infirmaries in London, there are men such as Godrich, Bloxam, Randall, Rogers, and others who hold office in them, quite capable of practising or teaching, but where are the pupils? There is no staff, no registrar, clinical clerk, nor pathologist; there is plenty of material, but no scientific result.

We are glad to know that there is at last a "Society for Improving the Condition of the Sick Poor in the London Workhouses." It is not a "benevolent" society in the ordinary sense of the word, as it will give nothing away directly in charity. Neither is it a perpetual association, with collectors and annual guineas. It is designed, now, at the opening of the new Parliament, to put a pressure on the Government and the Poor-law Board to effect a reform and consolidation of the Infirmaries of Workhouses, and to procure for them the status and organisation of other Hospitals properly so called, and when its work is done to vanish. We wish the Association every success, and may refer such of our readers as take interest in the subject to Dr. Anstie, Mr. Ernest Hart, and Dr. Rogers, the hon. secretaries.

If we may venture on one word of criticism, we would urge the promoters of this scheme carefully to define their objects, so that they may not be met with the accusation of attempting impossibilities. Workhouse Infirmaries at present serve first, for that proportion of the regular inmates of the Workhouse who are sick—and as the regular inmates include the old, disabled, broken-down, lame, halt, blind, and drunkard, that proportion is a large one—probably one-half. Secondly, they serve as places of refuge for persons who have received sudden hurts or illnesses not usually received into general Hospitals, by which they may become chargeable to the parish. Thus, maid-servants discovered to be with child, domestic servants who become lunatic, or affected with small-pox, and the like, are sent off *instanter* to the Workhouse Infirmary. Thirdly, in low neighbourhoods, certain cases of acute disease are sent in from crowded rooms, kitchens, and other poor dwellings, in which the sick can have neither quiet, care, cleanliness, food, nor nursing in any shape. But alas! it must be obvious that in large parts of many parishes there is not a single room inhabited by a family that is fit for a sick person to be treated in—more especially if the disease be infectious. But it would be clearly injudicious to propose Hospital accommodation for too large a mass of the out-pauper population. Let the improvements be confined at first to the Infirmaries for the regular inmates of Workhouses.

Then, in the next place, one word for the ratepayer. There seems to be an inexhaustible fund of philanthropic Billingsgate applicable to that much-suffering Briton, the ratepayer. The epithets, greedy, pinching, mercenary, skinflint, inhuman, jobbing, low, uneducated, heartless, and grasping, are applied without mercy to ratepayers, and to such of their members as are elected to serve on representative vestries. Does it ever occur to those philanthropic vituperators that ratepayers may be poor—struggling, half-starved, denying themselves, to pay their way; frugal; pinching themselves to be able to pay their workmen on Saturday night, whilst said workmen, being true rate-eaters, squander their money in gin and prate Liberal politics at public houses? There is no reason why the provision for the destitute should be laid solely on the man who hires a house. Rates are heavy enough already on the industrious tradesman. Take rather the money from the Consolidated Fund, so that the consumers of beer and tobacco, the lodgers, the idlers, and the hoarders may contribute their just share.

Anyhow, Medicine will be benefited by the establishment of institutions in which comfort to the sick and the promotion of science go hand in hand.

## THE THERMOMETER IN DISEASE.

Much attention has of late years been paid to the temperature of the body in disease, and much practical information has been gained from this study. We therefore propose to lay before our readers an account of the help which we may get from the temperature of the body in the diagnosis, prognosis, and treatment of disease.

To Traube, Baerensprung, and Wunderlich on the Continent, and to Parkes and Sidney Ringer in England, we are chiefly indebted for the information we possess on this subject. By the use of the thermometer we are enabled to distinguish between diseases the symptoms of which are so similar that the most practised must wait for the disease to declare its true nature by its further development. Such cases constantly present themselves to the Practitioner. They baffle his skill, compel him to postpone his treatment, and they may injure his reputation. In such cases the thermometer, by the evidence it gives of the temperature of the body, often affords us a certain means of diagnosis.

A patient is suddenly seized with a severe pain in the side. This is increased by breathing, coughing, or pressure on the chest. The expression is anxious, and the breathing is hurried and superficial. There may be slight cough. The pulse beats quickly and feebly. Sleep is prevented and the appetite becomes impaired. By a physical examination of the chest we find that the painful side expands imperfectly. The percussion note may be slightly dull and the respiratory murmur is weak and jerking.

This group of symptoms is unfortunately too common. Have we here a case of pleurisy or pleurodynia? How are we to decide? The pain is of itself sufficient to explain all the symptoms and physical signs. This prevents the free play of the chest, and consequently the movements are hurried, jerking, and abrupt. It quickens and enfeebles the pulse; it prevents sleep. The pain and want of sleep impair the appetite. On account of the impairment of the movement of the chest walls, the respiratory murmur is weak on the affected side.

In such a case the presence or absence of cough and the state of the pulse may afford much information. But this evidence cannot be implicitly relied on. With pleurisy there is always some cough, and, owing to the fever which accompanies the disease, the pulse is quickened. Neither of these symptoms usually occur in pleurodynia; but cough due to some bronchitis may be present in pleurodynia, and pain, or fear, or the excitement caused by the visit of the Medical attendant may cause the pulse to beat quickly. Pleural friction often cannot be detected by auscultation. But pain is common to both pleurisy and pleurodynia. This pain, as we have seen, may produce all the symptoms and physical signs that are often present in either disease. The diagnosis, therefore, at the onset of the attack becomes in some instances impossible, and must be postponed till well-marked physical signs are developed.

Fortunately, by means of the information that we gain by the thermometer in very many cases we can at once decide the true nature of the disease in question. Pleurisy is an inflammatory disease; pleurodynia is not so. *In all acute inflammatory diseases the temperature of the body is raised.* Hence in all cases of pleurisy the temperature is considerably raised at the very commencement of the attack. In pleurodynia the temperature remains normal. The temperature of the body in health varies from 97° to 99·6° Fah. In pleurisy it rises to 101°, or even to 105° Fah.

On the other hand, with such an elevation of the temperature as that just mentioned, occurring with the symptoms detailed above, we are justified in diagnosing pleurisy. It is true that this elevation may be caused by some co-existing disease. This, however, is a rare coincidence, and such co-existing disease can be mostly detected; therefore, in the absence of such co-existing disease, our diagnosis must be pleurisy, and the event will justify such a conclusion. Should it be urged that the hand can detect this elevation, and that thus the use of the thermometer is uncalled for, it may be answered that, firstly, if the hand alone be employed, much error is liable to be incurred; for a dry skin of natural temperature may feel preternaturally hot, while, on the other hand, a hot but moist skin may feel to be considerably cooler than the temperature indicated by the thermometer.

As a means of estimating the amount of preternatural heat, the hand is all but useless. But it is important to obtain an exact estimate of the elevation of the temperature; for by careful observations it has been shown that *the degree of elevation is proportionate to the severity of the disease that causes it.* Hence the amount of preternatural elevation of the temperature forms one of the most important factors on which the prognosis is made. This exact information the thermometer alone can give us. Nor are the other symptoms, individually or collectively, at all to be compared to the temperature in this respect; *for in every case of fever, no matter from what it originates, the temperature is elevated, and this elevation of the temperature is the only constant symptom of fever.* It alone is pathognomonic of fever. Thus fever and preternatural heat of the body are used as synonymous terms; for the pulse may beat with the frequency of health, the tongue may be clean, and even the appetite good, and thirst may be absent; but there is always preternatural heat of the body if fever exists. Thus cases are recorded (and such frequently occur to those who use the thermometer) where from the presence of various symptoms grave disease was apprehended, while an appeal to the thermometer negatived this assumption; or from the apparent mildness of the symptoms an unimportant complaint has been suspected, when the thermometer has indicated some grave affection. In all these cases the predictions made by the assistance of the thermometer have proved correct. The following cases illustrate these remarks:—

A girl, aged 18, was admitted into Hospital. She was extremely weak, so that she had to be assisted into the ward. She had been ill eight days. During this time she had suffered from severe frontal headache and some diarrhœa. The motions were liquid. The tongue was thickly coated. The attack had commenced insidiously. There were no typhoid spots, and her abdomen was not distended. Her sister was at that time in the Hospital under treatment for typhoid fever. These circumstances were sufficient to render it highly probable that she suffered from typhoid fever. Her temperature, however, was normal, and thus our diagnosis was corrected. In two days she had so far recovered as to be able to dress and walk about the ward, and in a few days more she left the Hospital.

A girl, 22 years of age, was admitted into Hospital a month after her confinement. She felt slightly indisposed. Her appetite was good and her tongue clean. She assisted in the work of the ward. On careful examination very slight tenderness of one breast was discovered. Of this, however, she had not previously complained. Her temperature varied between 101° and 102° Fah. In a few days the breast became much enlarged, hard, red, and tender, and subsequently an abscess of considerable size formed.

While advocating, however, the use of the thermometer, we by no means wish to lead our readers to the conclusion that the information it gives us enables us to disregard the remaining symptoms; for it is from these latter that the diagnosis must be mostly made. It is from these that the greatest information in respect of the treatment is obtained. Much care is necessary in the use of the thermometer. It is, therefore, advisable that we should make a few remarks respecting the method of its application.

The temperature of the body should be taken by a thermometer placed in the axilla. The patient should be in bed and undressed; otherwise the temperature of the surface of the body may be considerably below that of the internal parts. A difference of 2°, or even 3°, Fah. can easily result from the non-observance of this precaution. The patient should be in bed an hour before the temperature is taken, as this time is often regulated before the surface of the body recovers from the effects of the previous exposure. The patients should be placed diagonally on the right or left side; for if placed on their back patients are apt in their anxiety to retain the thermometer in the axilla to press the arm too firmly against the side. The axilla is thus converted into a cavity in which the bulb of the thermometer moves about loosely without coming thoroughly in contact with the tissues. This is specially apt to occur in emaciated people. On the other hand, if placed quite on the right or left side, the distal end of the thermometer becomes depressed, thus rendering the reading of it difficult—nay, sometimes the column of mercury divides when part gravitates down the tube, giving a fictitious result. If, on the other hand, the patient be placed neither completely on the back nor side, but in a medium position, these objections are obviated; for the parts then fall naturally together, no muscular effort being required to retain the thermometer. Care should be taken that the patient has been previously covered up, and that the axilla has not been exposed; otherwise a difference of 2° or 3° Fah. may result. It is, therefore, better, if the patient has been lying on one side, to turn him diagonally on the other, and to use the axilla which was previously most dependent. Care should be taken that the thermometer be in complete contact with the skin, and that no clothes are in the way to separate it from the surface of the body. All these precautions being observed, it is better to allow the thermometer to remain in the axilla at least five minutes. The temperature should be taken twice in the day—at 8 a.m. and 8 p.m. If only one observation can be made in the day, the evening must be chosen, for often the temperature is normal in the morning, but very considerably elevated at night.

It is better to use a thermometer constructed for the purpose. Those of the ordinary make are often untrue, and are always difficult of application. Trustworthy and suitable thermometers can be obtained of Mr. Casella, of Hatton-garden.

## THE WEEK.

### DEATH OF PROFESSOR BRANDE, D.C.L., F.R.S.

We have this week to record the death of a veteran in science. William Thomas Brande, Assayer to the Mint and Honorary Professor of Chemistry in the Royal Institution of Great Britain, after a life spent in the advancement of science, died at his residence at Tunbridge Wells on February 11, aged 80. Although his life was a long one, the announcement of his death will be read with surprise by many who knew him, for his green old age and remarkable retention of mental powers still promised years of activity. Professor Brande was educated at Westminster School. He loved chemistry from his boyhood, and has recorded in the Introduction to his Manual that on a half holiday it was his greatest pleasure to steal away and gratify his taste at the Royal Institution. His first chemical instructor was Mr. Charles Hatchett, who introduced him "as a boy fond of chemistry" to Sir Humphry Davy. Brande afterwards went abroad, but on his return renewed his acquaintance with Davy, which grew into an intimacy that lasted until Sir Humphry's death. When Sir Humphry resigned the Professorship of Chemistry at the Royal Institution, he recommended Brande as his successor. After delivering a probationary course of lectures, the latter was unanimously elected to the chair on June 7, 1813. Several letters published in the memoir of Davy, in the Introduction to which we have referred, testify to the affectionate regard which he bore to his successor. Brande's works on chemistry have been in the hands of generation after generation of Medical students, and his last volume, written conjointly with Professor Taylor, showed that the advance of life had not left him behind in the advance of science. At the time of his death he was engaged in editing a Dictionary of Science, Literature, and Art, of which, we believe, the first three parts only have appeared. He was a Member of the Society of Apothecaries and Professor of Chemistry and Materia Medica at the Hall. He had, however, for some years discontinued lecturing, but he still superintended the examinations for the prizes offered by the Society. He was one of the last links between the times of Sir Humphry Davy and the present, and he leaves a name as a chemist which will endure for long years yet to come.

### OVARIOTOMY AND JOURNALISM IN VICTORIA.

We print this week four documents from the other side of the globe. The first is a case of unsuccessful ovariotomy by Dr. Turnbull, quoted from the *Medical and Surgical Review* of Nov. 1, 1865; the second is a letter from the same periodical, signed $NO_5$, a signature which is the formula for nitric acid, and aptly symbolises the sour, uncharitable tone which the writer permits himself to adopt; the third is a letter from Dr. Turnbull to ourselves, conceived in a manly, frank spirit, and showing a not unnatural indignation against $NO_5$; the last is an announcement from the publisher that he has resolved to discontinue the *Medical and Surgical Review* from the difficulty of finding an impartial editor. How is it that members of a Profession whose scope and aim is to do good are so uncharitable to each other?

### SIR CHARLES BELL'S WATERLOO SKETCHES.

It was known to members of his own Profession that Sir Charles Bell united to his eminent character as a Surgeon and Physiologist the accomplishment of being a rapid and effective draughtsman. The class drawings by which he illustrated his lectures, executed by his own hand in water colour, were distinguished for breadth, form, and truthfulness, without appearance of undue labour bestowed upon them. It is told that it was his custom to work upon these drawings on the easel with large, fully-charged brush, while dictating at the same time the subjects of his various publications. Among them his former pupils will remember a series representing soldiers wounded at Waterloo. They were seventeen in number, and were made from sketches which he took shortly after the battle in the Hospitals at Brussels. Inspired with a strong interest in the subject of gun-shot wounds, as soon as intelligence of the great victory reached England, Sir Charles Bell hastened, with others bent on the same good object, to lend his assistance to the wounded. On a former occasion, when the men wounded in Sir John Moore's campaign, closed by the battle of Corunna, were being brought to our shores, he took up his abode at Haslar Hospital, that he might the better study their condition and be of service; and during the subsequent Peninsular War he paid frequent visits to the sufferers in the York Military Hospital at Chelsea. In that respect he followed the example of his senior brother, John Bell, who, prompted by a zealous desire to impart the best instruction he could give to the youths then about to be sent out as military or naval Surgeons, left Edinburgh, on the occasion of the victory of Camperdown, and lived among the wounded, for a time, in Yarmouth, making sketches or drawing up cases, which afterwards enriched his works on Surgery. Thus, when Sir Charles Bell found himself surrounded at Brussels by crowds of severely-wounded soldiers, French as well as Allied, in the churches or extemporised Hospitals, he was not inexperienced in the kind of their injuries. Most of the days, from the eleventh to the sixteenth after the battle, were occupied, early and late, in consultations and operations; yet he had time for the exercise of his ready pencil. His sketch-book contains above forty figures of soldiers seriously maimed; and, regarding them as sketches, what one chiefly remarks concerning them is the large significance of the few, well-directed, decisive lines of which they consist. On the margins of the drawings he has written brief, expressive notes as memoranda. Besides that, he had carried with him an interleaved copy of a dissertation on gunshot wounds, published by him some years previously; and he jotted down numerous remarks in it for future use. Moreover, for some time after he left, he was furnished with reports of the progress or termination of the cases in which he was principally interested, by the Army Surgeons who succeeded to the care of the patients, and many of these letters have been preserved. The seventeen class-drawings, the original sketch-book, and the note-book referred to, the widow of Sir Charles Bell has just presented to the country, through the Minister of War, to be placed in the School of Military Surgery at Netley. Before they are sent away from London, the Council of the Royal College of Surgeons have allowed them to be seen in their Museum during the ensuing fortnight.

Mr. Wormald, the President of the College, has just presented another series of seventeen drawings by Sir C. Bell to the library of the College, and Sir William Fergusson, at the same meeting of the Council, presented an original drawing, by John Bell, of the fatally-wounded admiral at the battle of Camperdown.

### GORE V. WALPOLE.

This case, which occupied the Court of Queen's Bench for nearly two days, was an action brought against the Right Hon. Spencer Walpole for an alleged wrong to the plaintiff in 1858, when Mr. Walpole was Secretary of State for the Home Department. According to the *Times'* report, the case in substance came to this:—

That in 1856 the plaintiff was a prisoner in the Queen's Bench Prison for debt, and upon proper medical certificates that he had become of insane mind, he was removed, under a warrant of Sir George Grey (then Secretary of State for the Home Department), to Bethlehem Hospital. In 1858, upon the medical certificates given by Dr. Wood and Mr. Helps, that he had became again of sound mind, Mr. Walpole, then Secretary of State, issued his warrant to remove him back to the Queen's Prison, there to remain until liberated in due course of law. In 1861 he was released under the Insolvent Debtors' Act, and he then brought his action against Sir George Grey for issuing his warrant to remove him to Bethlehem. The case was tried before Lord Chief Justice Erle, and, as the plaintiff raised the issue of his sanity at the time of his removal, there was evidence on that point, and the trial occupied two days. The jury determined against him, and the question of the legality of the warrant was carried to a Court of Error, and there decided against him. The plaintiff then brought the present action against Mr. Walpole for issuing his warrant in April, 1858, to remove him back to the Queen's Bench Prison, his case being that, as he had been illegally removed to Bethlehem, the Secretary of State had no power to remand him back to the Queen's Bench, but was bound to release him absolutely; and as he had not done so, but had remitted him back to his former custody, he was answerable for its continuance, though he admitted that his original custody in the Queen's Bench Prison was lawful. So that the action was in effect for taking him out of Bethlehem, and as the first action was against Sir George Grey for putting him into Bethlehem, so the present, against Mr. Walpole, was for taking him out. The defendant—Mr. Walpole—who, it will be borne in mind, ceased to be Secretary of State in 1859, pleaded, first, a denial that he had caused or was liable for the plaintiff's confinement in the Queen's Prison; and also pleaded the Statute of Limitation, which, in actions of trespass, is four years. He further pleaded a justification, in which, without stating that the plaintiff was insane when removed to Bethlehem, he stated that certificates of Medical men were duly issued under the statute that he was so, and then stated that afterwards, in April, 1858, upon certificates of Dr. Hood and Mr. Helps, 'duly' given under the statute, he duly issued his warrant under the statute for his removal to the Queen's Prison. The plaintiff took issue upon the plea, and in opening the case to the jury insisted that this plea raised the question of his sanity when he was removed to Bethlehem; and stated nothing against Mr. Walpole, except that he had issued the warrant for his removal from Bethlehem, which, however, he did not prove.

The plaintiff conducted his own case, and certainly did not thereby increase his chance of obtaining a verdict, the Lord

Chief Justice having great difficulty in keeping him "in order." Dr. Hood gave evidence as to his mental condition when in Bethlehem, and the jury found that the plaintiff was of unsound mind at the time of the original confinement in Bethlehem. We do not quote the case as one of direct Medial interest, but as a rather interesting psychological study, in so far as it illustrates the mode in which "a gentleman of exceedingly subtle and ingenious mind," as the plaintiff was termed —somewhat emphatically, we think — by the Lord Chief Justice, may harrass those who have had the misfortune to be obliged to meddle with him; and it is very noteworthy also as showing that others besides Medical men may, by the license and liberty of the law, be legally attacked for humanely following their duty by men of the plaintiff's temperament and mental characteristics. The Solicitor-General remarked that the plaintiff had earnestly desired what had been done, and sued Mr. Walpole for acceding to his own request. But for Mr. Walpole, he would have remained in Bethlehem to this hour. Mr. Walpole had taken him out, and for that he was sued in this action—one of the most absurd, groundless, and vexatious actions ever brought. And the Lord Chief Justice, in his summing-up, told the jury that "a more cruel, groundless, and ungrateful action never was brought." Very few will dispute this; but we think we could quite match it with not a few cases of actions brought against Medical men, though we fear we should find some difficulty in showing such warmth of sympathy with a Medical defendant by the presiding judge. Some points as to the legality of the warrants were left still to be tried, and, "lest the objections to these should prove well founded," the jury, having given the verdict we have mentioned, also gave the plaintiff "one farthing damages, conditionally only." Truly wonderful are the mysteries and the subtleties of law!

### FROM ABROAD.—TREATING WOUNDS BY PNEUMATIC OCCLUSION—A NEW GALVANO-CAUSTIC KNIFE—CONGENITAL DISLOCATION OF THE CRYSTALLINE.

M. Jules Guérin, who during the last thirty years has been developing the principles and practice of subcutaneous Surgery, read at the last meeting of the Academy of Medicine a memoir on the "Treatment of Exposed Wounds by Pneumatic Occlusion," intending by this not very well expressed title to indicate the action of an apparatus which he has contrived, by the aid of which open wounds involving the skin and subjacent parts may be assured of a protection from the action of the air analogous to that afforded by the skin in the case of subcutaneous wounds, and therefore, freed from suppurative inflammation, enabled to heal by immediate union. After trying a long series of experiments by covering the wounded surfaces with various substances capable of isolating them from the atmospheric air, and finding these one after another fail, either by reason of the penetration of the air or the accumulation and putrefaction of the products of secretion and exhalation—he believes that he has now devised an apparatus capable of successful application. Envelopes of various forms and dimensions formed of vulcanised caoutchouc are adapted to any part of the body, and when applied to the injured part they are introduced into a metallic receiver, which is kept constantly exhausted. Between the wounded surface and the caoutchouc envelope is placed a very thin, permeable tissue, in order to facilitate exhalation from the surface. Capable, as M. Guérin believes, of a very wide application, this apparatus has at present been tried in the following cases—viz., (1) An excoriated wound left after the removal of a fibrous tumour from behind the malleolus, was covered with some waxed silk and placed in the air-tight apparatus, rapid cicatrisation without suppurative inflammation following. (2) In a fracture of the forearm, with a fragment of the radius penetrating the skin, the same mode of dressing was applied, and at the end of the fourth day, the wound of the skin having become closed, the case was treated as a simple fracture. (3) After an amputation of the thigh the flaps were brought together by seven points of suture, and the stump having been placed in the apparatus, cicatrisation was found to have become completed by the seventh day. As it was not sufficiently solid, however, the apparatus was re-applied until the eighteenth day; neither fever, suppurative inflammation, nor notable pain occurring during the treatment. (4) The palm of the hand having been much shattered by the explosion of a cartouche exposing the metacarpo-pharyngeal articulations, fifteen sutures had to be applied to bring the fragments of skin together before the part could be placed in the apparatus. Once there, however, all suffering ceased, elimination of mortified parts taking place with ease, and excellent cicatrisation following.

At the Société de Chirurgie, M. Broca exhibited a new galvano-caustic knife, invented by M. Séré, of the Military Hospital at Vincennes. The blade of this knife, formed of platinum, can be heated as high as 1500° C. by the passage of a galvanic current from a Grenet pile. Platinum being a soft metal, this blade has no cutting edge, but it acquires an excellent one under the influence of the electrical heat, which instantly communicates to it a special temper, the blade again becoming blunt upon the abatement of the heat. At 1500°, a white-red heat, the vessels cleanly divided remain open, and the blood issues freely out. The instrument is, in fact, graduated from 1500° to 600°, the heat being increased or diminished by a very simple procedure, which consists in elongating or shortening the portion of platinum comprised in the circuit. The blade can thus be made to pass through all the intermediate degrees from a white-heat at 1500° to a dull red at 600°; and by means of these graduations the instrument can be made to fulfil three different Surgical indications,—(1) at 1500° it divides the tissues, producing hæmorrhage; (2) at 600° hæmostasis is produced at the same time as the incision; (3) and between these two limits it divides and cauterises simultaneously. It is, moreover, in its mechanism an ingenious improvement upon the galvano-caustic knife already in use.—M. Demarquay observed that he has once had occasion to employ the instrument, and he became alarmed at the extreme facility with which this knife, without a cutting edge, cuts through the tissues; and if care be not taken much more of these may become divided than is intended. He thinks Surgeons should have their attention drawn to the excessive and truly fearful cutting powers of this knife.—M. Broca could really see nothing alarming in the powers of the knife; but that may be from his temperament being different to that of M. Demarquay.

At the same Society, M. Follin presented a patient, 20 years of age, the subject of a very rare lesion, judging from the silence of authors upon the subject—viz., a double congenital dislocation of the crystalline. From early childhood the patient's friends observed abnormalities in his visual powers, the child not being able to distinguish his toys, and at a later period even large letters of the alphabet. It was not until he employed a small Galileo telescope that he became able to read; but by its aid he can distinguish the smallest print. He is the subject, also, of a double convergent strabismus, and of a binocular diplopia, resulting from a double image—the one produced by the passage of the rays through the lens, and the other through the vitreous humour. The lens on the left side continues quite transparent; that of the right side has a slightly whitish colouring; so that the patient cannot see so well on one side as on the other. The lens is placed behind the iris, being situated upwards and inwards. The patient possesses no power of accommodating the eye to distances, not being able to see objects placed within or beyond from twenty-five to thirty centimetres distance, this being for him the limit of visual power. M. Follin endeavoured to substitute convex glasses for the Galileo telescope, which is troublesome to employ and adjust; but, after some trials, the patient preferred the means he had been so long accustomed to.

### PARLIAMENTARY.—THE CATTLE PLAGUE—MORTALITY AT HONG-KONG—OPEN SPACES AROUND LONDON—IRISH COUNTY INFIRMARIES.

In the House of Commons on Monday, February 12,

Sir George Grey explained the provisions of the Cattle Plague Bill which he asked leave to introduce. After referring to the great change of opinion which had taken place within a very recent period in favour of more stringent measures, he laid down four main points to which the attention of the Government had been chiefly directed by the numerous representations which had reached them from various quarters. These were, the compulsory slaughter of all infected cattle with compensation, the absolute or qualified prohibition of the removal of cattle, the isolation of suspected animals and the disinfection of suspected premises, and regulations as to cattle brought into the country by sea. Having quoted the resolutions agreed to on these points by the Royal Agricultural Society, the Conference of Local Agricultural Societies, the Highland Societies, and other bodies, which, he observed, were almost unanimous in principle, Sir George said that the principle of the Bill would be to lay down certain general rules applicable to the whole country, from which no local authority should be able to depart, to make use of the local authorities in carrying out the rules, and to give them a discretion in certain matters on which they must be best able to form a judgment. With regard to the slaughter of cattle, the Bill proposed to make it imperative on the local authorities to order the slaughter of all infected animals, and gave them a discretion to order the slaughter of animals which had been exposed to contagion, and they were allowed to grant compensation in the first class to the amount of two-thirds, and in the second class to the amount of three-fourths of the value of the animals, the maximum not to exceed £20 and £25 in each case respectively. On the subject of the removal of cattle, the bill laid down statutory restrictions applicable to the whole of the country, leaving it open to the local authorities to apply them. For a limited period the removal of cattle by night would be entirely prohibited, and there would be a general prohibition to move cattle at other times except by licences given by the local authorities under certain conditions. Instead of a penalty of £20, the driver would be liable to arrest, and the magistrates would be empowered to direct the slaughter of the cattle without compensation. The local authorities would be empowered to declare a district infected, and upon their notice being issued to that effect no further removals in that district would be permitted under any circumstances. The public sale of lean and store cattle would be prohibited for a limited period, and no market for fat cattle would be allowed to be held except with the licence of the local authorities. No beast once brought to market should be removed before being slaughtered, and in small boroughs the concurrent licence of the county magistrates would be necessary to holding a fair or market. The bill further provided that foreign cattle should not be removed from the port of entry before slaughter—with the exception of cattle from Ireland, if they were immediately sent forward from the port without passing into a market where they might meet with infected cattle. On the difficult question of compensation, which was to be retrospective, Sir George proposed that two-thirds of it should be provided from the county rate, the remaining third by a cattle rate not exceeding five shillings per head, power being given to borrow money from the Public Works Commissioners on security of the rates, and a discretion being also vested in the magistrates to remit the whole or part of the rates in cases where farmers had suffered severe losses. After explaining several minor provisions of the Bill relating to disinfection, penalties, combinations of districts, and similar matters, he fixed the second reading for Wednesday.

Mr. Hunt was of opinion that the perpetuation of removals under licenses or permits would afford no security against the spread of the disease, and urged the Government particularly to prohibit all removals by railway. He explained the provisions of a bill which he himself had prepared, based on the resolutions of the conference held at St. James's Hall last Thursday, the chief features of which were the entire suspension of all traffic for March 1 to 31, the provision of additional slaughterhouses, and the disinfection of railway trucks and platforms. Of the scheme of compensation he expressed a general approval.

The Chancellor of the Exchequer offered no objection to the introduction of Mr. Hunt's Bill, which, he remarked, really differed from Sir G. Grey's only on one point; but doubted whether a complete suspension of the movement of cattle was possible, or would be tolerated by the country. He impressed on the House the necessity of promptitude.

After several speakers had expressed their regret at the complication of the measure advocated by the Government, leave was given to introduce the Bill, and it was read a first time.

In the House of Commons on Tuesday,

Colonel North moved for a return showing the accommodation for the troops of all arms at Hongkong and Kowloon at the time of the arrival of the 2nd battalion 9th Regiment and 2nd battalion 11th Regiment, specifying the nature of the accommodation and number of cubic feet allowed per man; also for returns of the mean annual strength, total annual sickness, mortality, and invaliding of the troops of each arm, officers and men, at Hongkong, up to the year 1855; and of the number of deaths annually on the voyage to England of the troops invalided, in a tabular form, giving the date, corps, mean annual strength, number of sick, deaths, invalided, and died on the passage to England.—Agreed to.

Mr. Doulton asked the First Commissioner of the Board of Works whether it was the intention of Her Majesty's Government to introduce early this session a bill having for its object the preservations of commons and open spaces in and around the metropolis?

Mr. Cowper replied that it was his intention to propose a bill which he had in preparation, and he hoped that he should be able to introduce it very shortly.

Lord Naas, in moving for a copy of the report of the committee convened by the Lord-Lieutenant of Ireland to consider the measures that might be adopted for arresting the progress of the cattle plague, asked when the bill which was to be carry out the recommendations of this committee would be ready?

Sir G. Grey replied that the bill had been drafted, and would be introduced at an early day.

Mr. P. Urquhart obtained leave to bring in a bill for the better regulation of county infirmaries in Ireland.

In the House of Commons on Wednesday, February 15,

Sir G. Grey moved the second reading of the Cattle Plague Bill.

Mr. Hunt passed in review the provisions of the bill, condemning the system of licences, and expressing his preference for a compulsory and uniform set of regulations applicable to the whole country. He approved many of the regulations of the bill, pointing out that some of them, however, were already in force under the Orders in Council. He regretted that the Government had not proposed to stop the movement of cattle altogether for a limited period, both by road and rail, and announced his intention of taking the sense of the House upon this point.

Mr. Bright was of opinion that a strict system of isolation would diminish the necessity for compulsory slaughter, which, coupled with compensation, he feared would lead the farmers to slacken their preventive and curative efforts. He inveighed strongly against the compensation clauses, which, he said, were contrary to all the principles on which Parliament had ever acted in reference to other interests, the effect of which, he said, would be to tax towns and villages to indemnify rich landowners and others for losses which were the result of the visitation of Providence.

Colonel Lloyd-Lindsay supported Sir G. Grey's Bill, approving particularly its permissive character. He believed that the stringent compulsory measures proposed by Mr. Hunt would not be tolerated by the country.

Mr. Lowe reminded the House that the compensation provided by the Bill was not for losses sustained by the death of cattle from the disease, but for cattle which had been slaughtered by the direct orders of the Government to effect a public benefit. He pointed out that the great argument for compensation was that it gave the farmers a motive for revealing the existence of the disease the moment it appeared among their cattle, and showed how necessary this was to prevent its spreading. As to retrospective compensation, he argued that it should be borne not out of the county rate, but the general funds of the country. He approved the provisions of the Bill relating to slaughter, but hoped that the Government would take power to suspend compulsory slaughter, in case any of the experiments now being made should result in the discovery of an efficient cure. He objected to the second rate on cattle, thinking it unfair that the stock-holder should thus be made to bear a double share of the burden, and urged the Government to reconsider their decision as to the prohibition of the total removal of cattle, suggesting that the prohibition and the exceptions should be embodied in the Bill, with the view of making the law uniform and intelligible.

Mr. J. S. Mill, while admitting the justice of the principle of compensation, asserted that as carried out by the bill it was excessive in amount, and that the burden of it was not fairly distributed. He entered into a long and elaborate argument as to the proportion which the compensation should bear to the loss, and contended that as the ultimate loss, by reason of the rise in prices, would fall on the consumer, it was not just that the class which suffered the first loss should be compensated by the whole community. He argued that the chief hardship of the calamity to the farmer was the inequality of its incidence, and drew from that the conclusion that those who had been unfortunate should be compensated by their fellows in the same class who had suffered no loss.

Lord Cranbourne protested against the narrow view which regarded this question as one affecting merely the agricultural interests, and warned the House that foreign Governments, for their own interests, might find it expedient to stop the exportation of cattle, when the calamity would be brought home with much greater force to the consumer. In criticising the Government Bill, he objected to the ill-timed compliment which it paid to local authorities, and asserted that the effect of this portion of the Bill would be to prevent the cattle reaching the consumer, while it would give every facility to the plague passing to the cattle.

Mr. Ayrton asked some questions as to the operations of the bill in the city of London, to which no answer was returned.

The discussion was continued by Mr. Acland and Mr. Grenville, who supported the bill, and after a few words in reply from Sir G. Grey the bill was read a second time, the committee being fixed for Thursday.

Mr. Hunt's bill on the same subject was also read a second time, and the House adjourned at half-past five o'clock.

## ON BRASS PLATES.

(*From a Correspondent.*)

Is there a Practitioner living who can recall without emotion the sensations he experienced when he ordered, for the first time in his life, his name to be written in bold, legible characters upon some part of the front of the house in which he was about to commence his Professional labours? To the uninitiated it may seem a matter of the most trifling importance *how* the name is written, but the young Doctor considers for a long time, and then perhaps finds great difficulty in deciding as to the form and size of the letters, whether they shall be cut in brass or zinc, or painted in black, or gold, or colour.

How various the ways chosen by different Practitioners to inform the public of their readiness to take charge of their health and relieve their sufferings! One legally-qualified Practitioner writes his name in letters a foot long, blazing with gold, on an enormous board over a grand window, in which gigantic globes filled with bright blue, and red, and yellow coloured fluids, excite the wonder of the pedestrian by day, and strike him with awe by night. Another orders a little brass plate no bigger than a card-plate, with his name engraved in characters so tiny and so elegant, that it must excite the admiration of the most fastidious; or, so averse is he to obtrude himself upon public notice, that the name is written on the margin of his letter-box.

These extremes are connected with one another by the most delicate and almost insensible gradations, and a careful scrutiny of the Medical names he passes, will afford the observer who travels from Mile-end to Park-lane not only amusement but matter for serious reflection.

If a Practitioner desires to let the inhabitants of certain parts of Eastern London know that he is qualified to doctor them, he must make his name six feet long, suspend evidence in the front of his house that he is duly qualified, exhibit the actual bandages, splints, and instruments he uses in his calling, and draw attention to the excellent qualities of the rhubarb and magnesia he has provided for public consumption. Nay, in some cases, it seems necessary to show that the very leeches he would apply are the true and proper species, and allow the intending patient an opportunity of examining their zoological characters at his leisure, and assuring himself they are not their equine representatives before he risks his fee.

By the time our traveller reaches the City, he will find the fashion has sobered down. The names have been gradually reduced till even a long one is compressed into the length of eighteen inches, and they are now strictly confined to the door or doors; but still there is room for the display of individual taste. Sometimes two doors enable the Practitioner to exhibit his name in two different characters. The inner one, covered with bright red cloth, exhibits the name on a handsome brass plate, with an elegantly wrought border; while on the outer door, exposed to the inclemency of City weather, and to the dirt and chalk of City boys, the name is painted usually in sober colours, but the letters are bold and easily legible, even by old ladies passing on the other side of the street. In order that the numerous persons taken with aches and pains after dark may find relief without trouble, attention is directed to the man who cures by a bright red or blue light; but this ridiculous, vulgar, and useless practice is seen in all parts of London and the environs, and sometimes a transparency with the name in full, titles and all, is added.

In Bloomsbury and Russell-square, though brass plates largely predominate, the custom of painting the name on the street door still remains, and it is scarcely before Savile-row is reached that the letters become reduced to ordinary dimensions, and painted names entirely give place to brass plates. Westward of Savile-row, however, woe to the fortunate Doctor who, migrating from the E.C. or W.C. to the classic W. district, omits to follow the different fashion that prevails. Custom that must not be departed from has ordained that no Practitioner living within that charmed ground bounded by Bond-street, Oxford-street, Park-lane, and Piccadilly, shall write his name in letters longer than one inch. Many have attempted to introduce a new custom, but a very short residence has invariably been sufficient to bring them to a sense of their grievous bad taste, and the plate has been reduced. In some instances the sudden transition from the large letters to the small ones was too much, and the necessary reduction has been gradually accomplished.

Some might be inclined to conclude that Professional men living in different parts of the town differed as much in skill, character, in taste, and refinement as their door-plates; but those acquainted with the peculiarities of Medical life know that this is not invariably the case, and that in this, as in many other things, a man *may* have to give way to a vulgar fashion without necessarily being in any way vulgar himself. The surroundings make all the difference in the manner in which a man must come before the public, although they may have little or no influence upon the individual man. The most refined Practitioner in the West-end, whose name is engraved in letters too small to be read, meets, and on a perfectly equal footing, his apparently more obtrusive friend who practises in the most unpleasant parts of E.

And this is as it should be. What could be more monstrous than to exclude men from a society merely because their names were written in very large letters, "Surgeon" printed on their cards, or blue bottles and leeches exhibited in their windows, or pretty coloured lamps over their doors? Is it not obvious that these things *may* be mere accidents or necessities of the situation, and that in spite of them the Practitioner may be a well informed and high-minded gentleman? They may, however, be fairly held to exclude men from private clubs, for the members of a club have a perfect right to exclude any one who does or does not wear bright red kid gloves if they choose; but a club differs entirely from a learned society, established for the furtherance of a special department of human knowledge. Would it not be utterly inconsistent with the liberty of science if a scientific man could not be admitted a Fellow of the Royal or other scientific or learned society simply because he put up his name in very large letters, or kept a shop, or advertised, or sold rhubarb, or extracted teeth?

That which scientific and Medical societies have never attempted, however, may perhaps yet be carried out by a section of the Medical Profession—the Dental Surgeons. A certain party of the dentists appear desirous that as far as regards a certain dental society their department of the Profession shall be subdivided into at least two classes—1, those who extract and insert teeth without advertising, and, 2, those who advertise painless extractions and faultless insertions. The extreme sensitiveness of the successful dentists in these days is not a little amusing; and all the delicate refinements by which the exact status of a man is fixed, according as he has "dentist" on his card, or more detailed information conveyed in many kinds of letters with beautiful flourishes, or exhibits artificial teeth at his door, are most curious, but very difficult to master. It would require a volume to describe briefly the various transitional forms by which we pass from the highest and most refined professors of the art, grade below grade, until we come to the grim wretch, whose death's head invites you to have your tooth out for a shilling, or one in for five, or prints his name in veritable human molars. But horrid as this last appears, it may be after all but the accident of circumstances, and these molars and advertisements may possibly be but illustrations of exceeding bad taste upon the part of most ingenious and not otherwise unpleasant persons, who may, in spite of all this, be seriously advancing the mechanical and other departments of their Profession. Nor can it be too frequently mentioned that some of the brightest ornaments and the most vigorous intellects in all professions have sprung from very low in the scale. Let us, therefore, rather exclude a man from our societies for his conduct as an individual than for the mere accident of his position, or the size of the letters in which he makes his name known to the public. S. P. E.

## REVIEWS.

*On Hip-Joint Disease, with Reference Especially to Treatment by Mechanical Means, for the Relief of Contraction and Deformity of the Affected Limb.* By W. Curtis Hugman, F.R.C.S., late Surgeon to the Hospital for Deformities, Great Portland-road, London. Second Edition. London: John Churchill and Sons.

Absolute quietude in the *prone* position during the earlier stages, and the use of extension and other mechanical appliances to prevent and remove deformity, seem the leading features of Mr. Hugman's book. It is well got up, and shows a great deal of patient observation on hip-joint disease.

*A Latin-English Dictionary for the Use of Junior Students.* By the Rev. J. T. White, M.A. London: Longmans and Co. Pp. 650.

This Dictionary is of handy size, and adapted to help the student who wishes to know something of the etymology of Latin and the derivation of English and French words. It does not contain all the technical terms in Celsus, which would be needless in a junior scholar's dictionary. By the way, a big schoolboy at our elbow wonders what would be said to him if he shortened the *i* in the noun *suspicio*?

*The Treasury of Botany.* Edited by John Lindley, Ph.D., etc., and Thomas Moore, F.L.S. In two vols. London: Longmans and Co.

This is a short botanical dictionary, containing an account of such plants as are likely to be of interest to the general reader. It is a popular book, contains much interesting matter, and is profusely illustrated by woodcuts and steel engravings. We have tested it by looking out for names of plants useful in cookery—as winter cherry, oyster plant, tea, etc., and have not been disappointed.

*Contributions to Surgery.* By W. H. Van Buren, M.D., Professor of Anatomy, University of New York, etc. Pp. 203.

This is a collection of important cases published by Professor Van Buren in various periodicals during the last few years. The most remarkable are three cases of amputation at the hip-joint. His method of operating somewhat resembles that recommended by Professor Spence as regards the flaps; the disarticulation is effected with a straight scalpel. Two of the three were primary and fatal. He treats painful ulcers and fissures of the lower part of the rectum by forcible dilatation of the sphincter ani, so "as to paralyse the sphincter for at least a week." There are some interesting cases of stone, dislocation of the femur, and strangulated hernia of the tunica vaginalis. An elaborate paper on Ligature of the Subclavian Artery, and a case of salivary fistula complete a list of cases which reflect the highest credit on their narrator and American Surgery generally.

We regret to state that Dr. Lewis Brittain, House-Surgeon of the Chester Infirmary, has died of typhus fever, caught in the discharge of his duties.

## GENERAL CORRESPONDENCE.

### MEDICAL EDUCATION IN LONDON AS IT LOOKS TO A LONDON TEACHER.

Letter from Professor Lionel S. Beale.

[To the Editor of the Medical Times and Gazette.]

Sir,—I do not think the "Provincial Professor" is quite right in attributing the defects in London Medical teaching to the London teachers. He argues as if the thirst for information on the part of the student was not satisfied by the teacher and our existing arrangements, while the real difficulty on the part of the teacher is to *excite the thirst.* I can show that the very same information, communicated in the very same way, will be gladly paid for as an extra by students who have passed their examinations, while of existing students only a very small minority can be interested or persuaded to pay the slightest attention to it. Were it not for the small minority of thoroughly earnest students who really like work and support earnest teachers with all their heart, the task of a teacher would in these days be dismal and useless enough. Some of us are quite ready to teach tutorially, or in any other way, in our wards and lecture-rooms, and to instruct men in the very elements, and to appoint tutors to help us in the work;—but does the Provincial Professor suppose that the general run of Medical students will come to the bedside to be drilled in the elements of diagnosis when the College of Surgeons does not examine candidates for its licence in Clinical Medicine? Is it wonderful that, under existing circumstances, a young student should consider his chemistry and his physiology and microscope work as mere useless grind, all very well for scientific people, but unnecessary for those who are going to be thoroughly practical men!

I believe that there would be more inclination on the part of many to learn if there were no examinations to pass at all than under the present system. An inefficient examination actually discourages work, and encourages idleness. It leads students to laugh at all save that small modicum of Medical learning required from them by the examiners, and thus it happens that an earnest teacher soon finds that he has to contend against not only the apathy of the less energetic of his class, but a far more powerful influence behind, which is tacitly but most powerfully fostering and encouraging this.

It is very well to talk of instructing students in what will be of great value to them in after life without reference to examinations; but the fact is, many of the students do not wish for such instruction. All they want is to pass the College of Surgeons; and now and then a man will tell you that when he is a Member of the College he intends to begin to work a little at Medicine and the microscope!

If there was a general feeling on the part of the students that it was necessary and desirable to work at Medicine, you may depend upon it clinical work would soon be well taught in all our schools. If the teacher asks many questions at the bedside there is danger of driving the very few away who enter the Medical wards, and this will almost certainly be the result if the Surgeons during their visit ask no questions. If, however, no man could pass his examination without answering questions of a practical clinical character, both in Medicine and Surgery, the very same men would flock to the teacher who asked the most questions and took the greatest trouble to teach at the bedside. I am quite certain I could convince the "Provincial Professor" that at any rate the vast majority of the London teachers are quite ready to perform their part. That the fault does not rest with them is very easily proved, and most conclusively.

I quite think that the time has come when something ought to be done; but is it not simply absurd to suppose that any amount of energy displayed by the most earnest and enthusiastic teacher, or all the arguments he could advance, would convince the majority of Medical students of the real importance of certain branches of Medical education, while examiners of far higher Professional standing than the teacher, necessarily with ten times his influence, and of perhaps twice or three times his age, simply ignore them? What is the use of making zealous hardworking men teachers if their pupils are to be examined by those who think nothing of the subjects you call upon them to teach? A lazy man may pity, or respect, or even love his teacher, but he fears his examiner, and is it not probable that the fear of being plucked exerts a more powerful influence upon him—at any rate, during his first year—than pity, or respect, or love for his teacher? The loss of a year, if he failed to pass an examination at the end of his first winter session, would be a penalty which no one would pay even for the pleasure of idling away the first and most important period of study—that which probably exerts a greater influence upon his future than any other part of his student's life. The first year is the time when a man's character is made, and yet our examining boards allow the first year to pass without any examination, and a man may spend it in idleness.

Either the training in our schools ought to be adapted to the examination for the Membership of the College, or that examination ought to be modified to suit the requirements of Medical education in the present day. Either men ought to be examined in what they are taught, or they should not be bored with that which examiners regard as worse than useless. As far as I can see, improvements in education and advance in Medical knowledge emanate from teachers; and I am quite sure that, as a body, the London Medical teachers perform their work honestly and well. If they were not practically discouraged in their efforts by those who have real power in their hands, I am quite sure that no one would long have reason to find fault with the progress of the London School of Medicine. I am, &c.

Lionel S. Beale.

## SUPPOSED COMMUNICATION OF RINDERPEST TO MAN.

### Letter from Dr. Wm. Cholmeley.

[To the Editor of the Medical Times and Gazette.]

Sir,—In answer to some inquiries about a reported case of human inoculation with Rinderpest virus, I received from the Surgeon I had written to a communication of so much interest that I send it to you for public use. Local skin affections, such as eczematous eruptions on the arms, are, I believe, not very uncommon in those who have much personal contact with cattle suffering from Rinderpest; but I have not heard of any cases similar to these reported by my friend, Mr. Harbord. I give his letter without any further comment, except to point out as of special interest, the vaginal affection which he describes. I am, &c., Wm. Cholmeley, M.D.

In his first letter answering my inquiry, Mr. Harbord states—"The case of Mr. J. Heanley's foreman's wife was this:—She incautiously rubbed her right cheek with the coarse flannel which her husband used to cleanse his hands with after coming from the sick beasts. In a few hours she had tingling pain in the cheek, and the following day some redness and commencement of eruption. This eruption lasted for fourteen days, and then died away in the form of desquamation, has left no mark beyond slight discolouration and roughness. There was no abrasion on the cheek, but as the woman has a most thin delicate skin, I consider that she inoculated herself with Rinderpest virus by means of the rough flannel. The eruption was the most beautiful cluster of herpes I have ever seen, and corresponds with that seen in the mouth of the ox during the very earliest stage of its malady. I have myself suffered from herpes on the hands most painfully after performing a post-mortem examination; in my case the spots had very much the appearance of vaccinia. I have several cases of fever corresponding in symptoms with Rinderpest; in all there is herpetic eruption on the lips, and in one case, that of a child, diphtheritic deposit as well. I have no doubt that Rinderpest is herpetic fever, which, if left to itself, runs into one of two states, typhoid or diphtheritic; in the former it torments its victim for several days, in the latter form death is earlier. On this account it ought to rank as an exanthem. It certainly is not variolous, and vaccination is a positive evil, and often leads to the result it was intended to avert."

The second letter gives fuller information about the cases of fever mentioned in the first:—

"The enclosed illustrations will, I hope, give you some idea of the nature of a malady of which I have several cases, all presenting the same pathological features as Rinderpest, as a rule. In some the more purely diphtheritic condition exists, in others a typhoid state without exudation, but with ragged ulcerations of the mouth and fauces. Of these cases, by far the greater number are females, and the vagina exhibits a condition similar to the mouth. In every case a near residence to infected yards happens; in two cases there had been actual contact with the cattle; and in one inoculation—viz., the case of the foreman's wife. Figs. 2, 3, and 4 are from a case I have seen to-day, in which the symptoms, especially laryngeal and intestinal, were marked. In this case the woman, about 40 years old, has not felt in good health for three weeks, being anxious and depressed. Yesterday she complained of soreness of the mouth and enlargement of the tongue, stiffness of the neck, pains in the belly, and a sense of constriction of the chest; swelling of the genitals, and great pain on voiding urine, which is scanty and high coloured and offensive; Bowels somewhat costive; stools blackish-green in colour. Fig. 2 shows the highly vascular gum which, with the lip, is studded with vesicles, singly or in patches; there are two or three bullæ, and some dark streaks. Fig. 3, the palate, on which are two large bullæ, several patches of diphtheritic deposit, some deep sloughing ulcers, and here and there a few vesicles. Fig. 4, mucous membrane; vagina swollen, much injected, studded with vesicles, diphtheritic patches, and sloughing ulcers. The patient complains of loss of power in the legs, and of a sensation along the spine of which she says she can give no adequate description; eyes suffused; lips and tongue swollen and brown, with reddish margin; pulse 180, feeble; respiration frequent; chest sounds unaltered; great tenderness over right hypochondriac region, and also about the umbilicus; has no desire for food or drink; lacteal secretion nearly suspended (been going on six months) since last night. This is truly an interesting case. The diagrams I have not done justice to, being hurried; but they convey a good idea of the nature of the case. What I have observed in cows having Rinderpest is analogous, but on a more extensive scale—herpetic eruption of the mucous surface, with or without diphtheritic deposit, and sloughing ulcers, attended with fever of a low type, and intense congestion of the liver and intestines. Two of my cases have taken on a remittent form after running a course of three weeks, and one has passed rapidly into active dysentery. In this case (a child), the sloughing of the mouth is fearful. If you think my observations of any use, pray do with them as you think best. "Yours, &c.,

"Wm. Harbord, M.R.C.S.E., &c., &c."

"Wainfleet, Lincolnshire, February 12, 1866.

P.S.—The illustrations sent me are water-colour drawings, so that they cannot be re-produced; but Mr. Harbord describes sufficiently clearly the conditions they represent.

## AN UNSUCCESSFUL OPERATION FOR OVARIAN DISEASE.

### Letter from Dr. W. M. Turnbull.

[To the Editor of the Medical Times and Gazette.]

Sir,—I beg to enclose a copy of the *Medical and Surgical Review* of November 1, containing my account of an unsuccessful operation for ovarian disease, also an account of the same operation by an individual writing under the signature of $NO_5$ (and who was not present at the operation). You will observe that Mr. Baillière, the publisher of the *Medical and Surgical Review*, for reasons given, has discontinued the publication of the journal, and when I inform you that $NO_5$ is the editor of the *Australian Journal*, you will easily understand that I have no means of replying to the scurrilous and mendacious letter alluded to. I trust, therefore, to your sense of justice to allow me, through the medium of your columns, an opportunity of justifying myself to the Profession here and my few Medical friends who may recollect me in the mother country, your journal being widely circulated in this colony. I am the more induced to send the accompanying remarks to you as Spencer Wells, in your journal of Sept. 30, manfully lashes those crawlers, such as $NO_5$. I can assure you when I read his remarks I slept sound that night. Those remarks do him alike credit as a man and a member of the Profession. I feel pleased that my own sentiments should be endorsed by him. Would that we had many such in the Profession!

Spencer Wells talks of the men of large experience who conceal their blunders. One of my greatest decriers is a man who cut down upon a phantom tumour. Professor Halford's letter will show you the falsehood of $NO_5$'s statement as regards the puncture of the uterus. I am grieved to say that the rumour was set in motion by men who punctured the sac. I have his admission to the facts. The allusion to the ligature is an unmitigated lie. Every requisite had been provided for by my resident Surgeon, Mr. Mackenzie. In justice to Spencer Wells, allow me to state that the manufacture of the instruments was bungled, but when discovered it was too "late to mend," and I had to work with the tools at hand.—I am, &c.,

W. M. Turnbull,
Honorary Physician to the Melbourne Lying-in Hospital.
101, Spring-street, Melbourne, Dec. 12, 1865.

### IMPROVEMENTS IN OVARIOTOMY.

[To the Editor of the Medical and Surgical Review (Australian).]

Sir,—Mr. Spencer Wells, Mr. Baker Brown, and others are wrong. Their elaborate directions of the conditions to be observed in the performance of ovariotomy are demonstrated absurdities. It remained for an Australian Hospital obstetrician to show to the Profession that it is not necessary to prevent any of the fluid in the cyst entering the peritoneum, and that the complicated trocar is a needless embarrassment. The proper method is to cut boldly into the cyst, and let the fluid flow freely among the abdominal viscera. A certain amount of dramatic effect can be communicated to the business by using clamps that break, and in eventually securing the pedicle with a bit of old ligature silk accidentally found in the pocket of a bystander. Finally, the operation is appropriately concluded by passing the sutures through the body of the uterus, and in the course of the following day regaling the patient with sparkling Moselle, freely exhibited. It is totally unaccountable that the patient should die on the fourth day, but patients do sometimes die most perversely. The brilliancy of the operation, however, remains unquestioned; and it is to be hoped that European Practitioners will promptly modify their manner of operating, now that it is shown how differently ovariotomy may be managed.—I am, Sir, your obedient servant. NO$_5$.

## REPORTS OF SOCIETIES.

## OBSTETRICAL SOCIETY OF LONDON.

Wednesday, January 3, 1866.

Dr. Barnes, President.

The following gentlemen were elected Fellows:—Messrs. R. J. Cave, Birmingham; John Deans, Cranbrook; F. H. Gervis, Adelaide-road; W. K. Giddings, Calverley, Yorkshire; T. Langston, Broadway, Westminster; W. T. Mollay, Balmoral, Victoria; Jabez Thomas, Swansea; Drs. W. C. Lucey, Bermondsey; J. E. Neild, Melbourne, Victoria; Mark Tanner, St. George's-square, Pimlico; H. J. Yeld, Sunderland.

Dr. Swayne, of Clifton, read a case of Double Monstrosity.

Mr. W. Owen read a case of Mechanical Obstruction to the Growth of a Fœtus.

Dr. Cory exhibited an Ovum Forceps.

Dr. Murray showed two large Kidneys, weighing seven ounces four drachms, and six ounces three drachms and a half, which had been removed from a still-born fœtus otherwise normally made.

Dr. Eastlake read

### BRIEF NOTES ON SOME UTERINE THERAPEUTICS.

The author first drew attention to the action of the resin of podophyllum on the uterus. He found an emmenagogue effect produced in several cases where it had been prescribed for constipation. He referred secondly to the beneficial use of the spiritus pyroxylicus rectificatus in cases of obstinate vomiting; and lastly spoke of "iodoform; as a sedative in cases of cancer especially attacking the uterus. The drug was discovered by Scrullus in 1824, and is produced by the action of iodine and alkalies or alkaline carbonates on wood spirit, alcohol, or ether. Dr. Eastlake has used it with much success locally, by means of medicated pessaries, the effect produced being a marked diminution of pain and discomfort.

Dr. Greenhalgh stated that eighteen months ago Dr. Eastlake called his attention to iodoform, suggesting its use as an anæsthetic and alterative, especially in cases of cancer. He (Dr. Greenhalgh) first gave it in quarter-grain doses, but soon found that it might be administered in pills of three to five grains thrice daily. He had prescribed the drug in carcinoma, epithelioma of the uterus, rheumatic gout, neuralgia, and other painful diseases, in most of which it had been followed by good results. In some cases, but slight effects appeared to result from its use, whereas, in a limited number, when given at once in full doses, sickness was occasioned. He considered it had the advantage of never producing that malaise so frequently attendant upon the use of opium, and regarded the drug as a valuable addition to our present stock of medicaments.

Mr. Gaskoin remarked that for many years he had been aware of the employment of iodoform as a disinfectant in many parts of the Continent; but that he had been unsuccessful in obtaining much information concerning it. The objection to its general use was its expense as compared with other disinfectants.

Dr. Woodman said that a small quantity of iodoform is produced when the compound tincture of iodine is prescribed with liquor potassa—a favourate combination with many country Practitioners, and considered by many to be more efficacious in the treatment of bronchoceles than iodine alone.

Dr. Hall Davis communicated the report of a case of

### FIBROID TUMOUR OF THE UTERUS WITH EARLY PREGNANCY.

At first there had been retroversion of the womb and retention of urine. The latter was relieved by the catheter, the patient being placed in the kneeling posture; the former by the caoutchouc ball air-pessary. Nine days later (Sept. 29) the patient came into Hospital, presenting a considerable-sized solid enlargement of the abdomen, extending as high as the last rib. She was feverish, reduced in flesh, frequently vomiting; subsequently dysuria and renal pain appeared; later scanty urine and drowsiness, and also sloughing of the cornea, etc. She died on October 18, after on the day previous discharging a putrid fœtus of about four months' growth. The morbid specimen, which was exhibited to the Society, showed a large fibroid tumour, of kidney shape, attached to the fundus of the uterus; also others much smaller growing from the cervix, in the substance, others bulging on the surface of the body of the uterus. The kidneys contained purulent deposits; the ureters were dilated. Dr. Davis concluded that this patient died from pyæmia, and that had an early discharge of the decomposed fœtus been brought about, the patient's life might have been saved. It first became apparent at the autopsy that the largest fibroid might have been easily removed; others, however, would have remained for subsequent development had the patient survived extirpation of the tumour.

Dr. Routh said the case was important, viewed in the aspect of what should be done in such cases—*i.e.*, when we had abdominal tumours and pregnancy coexistent. The post-mortem examination revealed a large fibroid extra-uterine, with small pedicle; precisely the case most favourable for gastrotomy. Should this patient have been operated upon before labour had taken place, or should labour have been prematurely induced first? He thought the latter: First, because it commonly happened that when abdominal tumours, whether ovarian, but especially if fibroid, were operated upon before labour, a miscarriage or premature delivery occurred; occasionally death. Secondly, if premature labour was induced, then not only was diagnosis made more easy as to the exact nature and bearings of such a tumour, but the impetus given to its rapid growth by pregnancy was removed.

### ANNUAL MEETING.

The report of the auditors of the accounts of the treasurer for the year ending Dec. 31, 1865, was read, from which it appeared that the balance in the hands of the treasurer is £234 18s. 8d., and the amount invested in Consols is £881 10s., representing in Three per Cent. Annuities £955 12s. 1d.

Dr. Tyler Smith moved the adoption of the report, and warmly congratulated the Society on its present very flourishing condition.

Mr. Mitchell seconded the resolution, which was carried unanimously.

The report of the hon. librarian (Dr. Meadows) was then read. After detailing the general condition of the library, the report recommended that attempts should be made to establish in connection with the library a museum of pathological anatomy, by preserving such specimens as, having been exhibited to the Society, were afterwards presented for that purpose. The entire cost of the library for the year was £61 3s. 5d. The number of works presented was upwards of sixty, making a total of nearly 900 volumes, a classified catalogue of which is about to be published in the forthcoming volume of *Transactions*.

Dr. Greenhalgh moved that the report be received and adopted. He warmly commended the suggestion of the establishment of a museum, and offered a donation of five guineas towards a separate Museum Fund, and a similar sum towards a Library Fund.

Dr. Wynn Williams seconded the resolution, which was unanimously carried.

Dr. Martyn proposed, and Dr. Cory seconded, "That the best thanks of the Society be and are hereby given to the President and officers of the Society for their services during the past year, and that the special thanks be given to Dr. Braxton Hicks, the retiring hon. secretary, for the very efficient way in which he has discharged his duties."

The President (Dr. Barnes) and Dr. Braxton Hicks respectively returned thanks.

The report of the Scrutineers was read, and the following gentlemen were elected officers of the Society for the year 1866:—Hon. President: Sir Charles Locock, Bart., M.D. President: Robert Barnes, M.D. Vice-Presidents: Dr. Gream, Dr. Greenhalgh, Mr. Haden, Dr. Hicks, Dr. Hall (Brighton), Dr. Wilson (Glasgow). Treasurer: Dr. Graily Hewitt. Hon. Secretaries: Dr. Meadows, Dr. Murray. Hon. Librarian: Mr. James Reeves Traer. Other Members of Council: Dr. Aveling (Sheffield), Mr. Thomas Bryant, Dr. Earle (Birmingham), Dr. Eastlake, Dr. Gervis, Dr. Leishman (Glasgow), Mr. Mitchell, Mr. Newton, Dr. Oldham, Mr. Oldham (Brighton), Dr. Timothy Pollock, Dr. Priestley, Mr. Ray, Dr. Richards, Dr. Skinner (Liverpool), Dr. Tyler Smith. Mr. Wm. Squire, Mr. Symonds (Oxford).

The President then delivered the

### ANNUAL ADDRESS.

After adverting to the continued prosperity of the Society, and the place which its *Transactions* occupied in obstetric literature, he observed that hitherto the annual surplus had been invested in the Funds; but now, the position of the Society being secure, it was thought better to put out what money could be spared at scientific interest. There was nothing so fruitful as knowledge spread abroad. It gathered increase at an infinitely quicker rate than did capital in the Three per Cents. He hoped, therefore, that more money might in future be spent upon the library and in forming a museum. The sale of *Transactions*, indeed, during the past year had more than covered the rent and cost of maintenance of the library. The President then passed on to recount the losses the Society had sustained amongst its Fellows. It had never before fallen to the lot of its President to record so long a series of losses by death. He gave sketches of the lives of the late Dr. F. W. Mackenzie, Dr. Edwin E. Day, Mr. Decimus Nelson Frampton, Mr. Arthur Octavius Arden, Dr. Thomas Herbert Barker, Mr. Henry Merton Gould, Mr. Charles Saunders, Dr. William Bloxam, and Dr. Charles G. Ritchie. He dwelt more especially upon the personal and Professional merits of Dr. Barker and Dr. Bloxam. Turning from the task of commemorating the lives of lost companions in labour, the President directed attention to the work before the Society. He hoped the proposed conversazione and exhibition of instruments would prove interesting and instructive. By bringing together the instruments that had been used in different ages and in different countries for the purpose of overcoming those obstetric difficulties which are met with in all ages and in all countries, we should be able to read by those tangible symbols the most important chapter in the history of obstetrics; we should be able to enter into the thoughts of our predecessors and contemporaries by studying the visible expressions of their minds labouring in the cause of our common science; and do something towards identifying and preserving the original forms of instruments as they were designed and used by their inventors. An instrument was not less the offspring of a man's mind than was a book. Libraries preserved books in their original form. But the security for preserving an instrument so that it should, even for a brief time, tell truly the working of the mind that produced it, and continue to answer in the hands of others the purpose for which it was designed, was very small. Instruments were made under instructions that were more or less faithfully observed; and there was a constant tendency to depart from the original forms under the hands of mechanicians and the ideas of subsequent Practitioners. Considerations such as these suggested to the President the project of instituting this exhibition. It had met with the cordial approval of the Council; and the College of Physicians had, in the most liberal spirit, given him permission to hold the exhibition in their building. The Council would endeavour to preserve a scientific record of the specimens sent; a *catalogue raisonné* would be drawn up; and drawings would be procured of such ancient and modern instruments as could not be presented for actual exhibition. It was anticipated that we might thus lay the foundation of a museum of instruments that should render a service to science similar to that which libraries rendered to literature.

A vote of thanks to the President for his valuable address was proposed, seconded, and carried by acclamation. The Society then adjourned.

## BOOKS RECEIVED.

The Journal of Social Science. February. Chapman and Hall.

⁂ A good paper by Mr. Begg, on the only true and effective mode of providing homes for the lower orders—that is, encouraging them to provide them for themselves. The Peabody donations can be but a drop; they may benefit a certain number here and there. What we want is some scheme for enabling the whole working population to benefit themselves.

Essai de Pneumatologie Medicale. Par J. N. Demarquay. Pp. 860. Paris: J. B. Baillière et Fils.

⁂ An elaborate systematic treatise on gases—whether existing in the body in health or in disease, or whether applied or used for therapeutical purposes.

Short Sermons for Hospitals and Sick Seamen. By the Rev. J. B. Harbord, M.A., Chaplain R.N. Pp. 246. W. Blackwood and Sons. 1863.

⁂ It would be out of place to say more than that these sermons are very short, very easy to be understood, and of a comforting rather than of a scolding tone. They are intermixed with hymns, and would, doubtless, be useful to all sick people, whether landsmen or seamen.

The Popular Journal of Anthropology. No. 1, January. London: Trubner and Co.

⁂ A new shilling monthly magazine. The Anthropological Society is said to be "a refuge for destitute truths;" and this magazine may serve as a repertory for discussions on the nature, habits, and peculiarities of the human race, which would not be admitted into the popular religioso-politico-humanitarian periodicals of the day.

## MEDICAL NEWS.

**Royal College of Physicians and Surgeons, Edinburgh.—Double Qualification.**—The following gentlemen passed their First Professional Examinations during the recent sittings of the Examiners:—

John Kerr Davidson, Wick; Edward E. Purcell, Limerick; Henry Bath, Glastonbury; Rd. Young, New Lanark; John Riddell, Ballybay.

And the following gentlemen passed their Final Examinations, and were admitted L.R.C.P. Edinburgh and L.R.C.S. Edinburgh:—

Cornelius John M'Kenna, Tipperary; Lewis Miller, Dublin; Colles Litchford Anderson, Madras; Alexander Ramsay Ritchie, Edinburgh; Wm. Hugh Holmes, Cork; Arthur Luke Hackett, Cork; Thomas Alexander Thompson, Carrickfergus; Wm. Wylie, Poyntzpass; James Loos, Ceylon; Samuel Parke, Gilford; David Joshua Jones, Carmarthenshire; William John Grier, County Longford; Robert Pattie, Dumfriesshire; Howison James Johnstone, County Longford.

**Royal College of Surgeons, Edinburgh.**—Mr. Rolt Ayre Smith, Monkwearmouth, passed his First Professional Examinations during the recent sittings of the Examiners; and the following gentlemen passed their Final Examinations and were admitted Licentiates of the College:—

John Aloysius Walsh, Carrick-on-Suir; John Charles Douglas, Wigtownshire; William Thomas Greene, Dublin; George Wardlaw Turnbull, Linlithgowshire; John Wright, Derbyshire.

**Apothecaries' Hall.**—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, February 8, 1866:—

George Thomas Hankins, Guy's Hospital; Frederic William Lloyd Hodder, Toronto, Canada West.

The following gentlemen also on the same day passed their First Examination:—

William James Todd, King's College Hospital; William George Kemp, St. Bartholomew's Hospital.

### APPOINTMENTS.

⁂ The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

**Anderson, T. McCall**, M.D. Glasg., has been elected Lecturer on the Practice of Medicine in Anderson's University, Glasgow.

**Bland, Mr. W. C.**, has been appointed Assistant to the House-Surgeon at the Huddersfield and Upper Agbrigg Infirmary.

**Brennan, R.**, M.R.C.S. Eng., has been appointed Resident Surgeon to the Birmingham and Midland Counties Lying-in Hospital and Dispensary for the Diseases of Women and Children.

Hammond, Edward C., M.R.C.S. Eng., has been appointed Honorary Surgeon to the Wallasey Dispensary, Egremont, Birkenhead.

Newett, Robert H., L.R.C.S. Edin., has been elected House-Surgeon and Superintendent of the Belfast General Hospital.

Oliphant, John, M.D. Edin., has been appointed Junior House-Surgeon to the Northern Hospital, Liverpool.

Pocock, Gavin E., M.R.C.S. Eng., has been appointed Consulting Surgeon to the Brighton and Hove Dispensary.

Sankey, W. H. Octavius, M.D. Lond., has been appointed Lecturer on Mental Diseases in University College, London.

Sykes, Mr. E. J., has been appointed Dispenser to the Devonshire Hospital and Buxton Bath Charity, Buxton.

Tuxford, Arthur, M.D. Edin., has been appointed Medical Officer to the Boston Local Government Board.

### BIRTHS.

Ashforth.—On February 11, at Market Overton, Rutland, the wife of G. M. Ashforth, M.D., of a daughter.

Davis.—On February 8, at 2, Marine-villas, Croydon, the wife of Theodore Davis, jun., M.D., of a daughter.

Eames.—On February 3, the wife of Dr. Eames, of H.M.S. *Gladiator*, of a daughter.

Fleming.—On February 9, at 17, Princes-street, Stranraer, Wigtownshire, N.B., the wife of Ebenezer Fleming, M.D., L.R.C.S.E., of a son.

Hamilton.—On February 7, at 1, Princes-road, Liverpool, the wife of Robert Hamilton, F.R.C.S. Eng., of a daughter.

Liveing.—On February 9, at 52, Queen Anne-street, the wife of Edward Liveing, M.B., of a son.

Moffat.—On February 3, at Thornhall, Polmont, N.B., the wife of Robert Moffat, M.D., of a daughter.

Sibley.—On February 13, at 12, New Burlington-street, W., the wife of Septimus W. Sibley, F.R.C.S. Eng., of a daughter.

Taylor.—On February 6, at Ebury-street, S.W., the wife of Theophilus Taylor, M.R.C.S. Eng., of a daughter, still-born.

Thompson.—On February 3, at Westerham, Kent, the wife of Charles R. Thompson, M.R.C.S. Eng., of a son.

Williamson.—On January 24, at Maryport, the wife of J. N. Williamson, M.D., of a daughter.

### MARRIAGES.

Brown—Gates.—On February 7, at St. Margaret's, Plumstead, Alfred G. Brown, M.R.C.S. Eng., to Emma Hodgson, only daughter of Charles Gates, Esq.

Davidson—Campbell.—On February 6, at Edinburgh, Robert H. Davidson, M.D., Deputy-Inspector-General of Hospitals, to Burella Elizabeth, second daughter of Arthur Campbell, Esq.

Gornall—Guest.—On January 25, at the Parish Church, Warrington, John H. Gornall, M.R.C.S. Eng., to Mary, youngest daughter of the late John Guest, Esq.

Hawkins—Hick.—On February 8, at Christ Church, Harpurhey, Manchester, Thomas Henry Hawkins, M.R.C.S. Eng., to Mary, daughter of the late Benjamin Hick, Esq.

Miles—Beddoe.—On February 7, in the Lady Chapel, Hereford Cathedral, Edwin J. Miles, M.D., to Frances Anne, youngest daughter of John Beddoe, Esq.

Shepheard—Wymer.—On January 31, at Lowestoft, John Shepheard, M.R.C.S. Eng., to Fanny Olivia, youngest daughter of the Rev. E. Wymer.

### DEATHS.

Brittain, Thomas L., M.D. Edin., House-Surgeon, General Infirmary, Chester, on February 1.

Brown, Frederick, M.D., at Benham Lodge, Newbury, on February 2, aged 79, late 4th Dragoon Guards.

Geisow, Dr. F. L., at Frankfort-on-the-Maine, on February 5, aged 62.

Giraud, Frederick F., M.R.C.S. Eng., at Faversham, on February 11, aged 62.

Hawthorne, Arthur N., F.R.C.S. Eng., at Eccleshall, Staffs., on January 28, aged 46.

Jones, William, M.D. St. And., at Torquay, on February 6, aged 59, formerly of the Strand, London.

Riddell, Robert F., at The Grove, Clapham-common, S., formerly H.H. the Nizam's service, and late Superintending Surgeon Hyderabad Contingent, on February 7, aged 68.

Taggart, John, M.D., at Antrim, Ireland, on January 30.

Ward, Nathaniel, F.R.C.S. Eng., at The Ferns, Clapham-rise, on February 10.

Williams, Henry D., M.R.C.S. Eng., at Brow Llan, Llanstffraid, Conway, North Wales, on February 6, aged 71.

## POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

### RESIGNATIONS.

*Atcham Union.*—Mr. James Weaver has resigned the Alberbury District; area, 16,430; population, 2098; salary, £30 per annum.

*Forehoe Incorporation.*—The Fourth District is vacant; area, 8445; population, 3426; salary, £30 per annum. The workhouse is vacant; salary, £25 per annum.

*Sheffield Union.*—The North District is vacant; population, 25,125; salary, £40 per annum.

*Thorne Union.*—Mr. Pullan has resigned the Belton District; area, 8530; population, 1871; salary, £17 per annum.

*Totnes Union.*—Mr. R. F. Burrough has resigned the Dartmouth District; area, 200; population, 3176; salary, £17 per annum.

*Walsingham Union.*—Mr. Damant has resigned the Fakenham District; area, 12,539; population, 4665; salary, £52 per annum.

### APPOINTMENTS.

*Chesterfield Union.*—Walter Simpson, M.R.C.S.E., to the Bolsover District.

*Glanford Brigg Union.*—Charles Frederick George, M.R.C.S.E., L.S.A., L.M., to the Kirton District.

*Martley Union.*—Frederick A. Cramer, M.R.C.S.E., L.S.A., L.R.C.P. Edin., to the Fourth District.

*Nottingham Union.*—John Wheatcroft, M.R.C.S.E., L.S.A., to the First District.

*Penistone Union.*—John Ward, M.R.C.S.E., L.S.A., to the Workhouse.

*Redruth Union.*—Thomas Michell, M.B. Lond., M.R.C.S.E., L.S.A., to the Redruth District. Thomas S. Reed, M.R.C.S.E., L.S.A., to the Illogan District.

*Richmond (Surrey) Union.*—James Adams, M.D. St. And., M.R.C.S.E., to the Barnes District. Charles W. Browne, M.R.C.S.E., L.S.A., to the Kew District.

*Southwell Union.*—Edward Wright, M.R.C.S. Edin., L.R.C.P. Edin., to the Eighth and Ninth Districts.

*Stroud Union.*—Samuel Rowe, M.B. and C.M. Aber., M.R.C.S.E., L.M., and L.S.A., to the Fourth District.

The Cholera Conference.—The following telegram appeared in the *Times* of Thursday:—"Constantinople, Feb. 13. The Cholera Conference was opened to-day *pro formâ* with an address from Aali Pasha. The regular sittings will begin on the Monday after the Bairam."

Royal College of Surgeons of England.—The following Members of the College having been elected Fellows at previous meetings of the Council were admitted as such on the 8th inst.—viz., Messrs. Charles Reynolds Rowe, Wimborne Minster, diploma of membership dated June 1, 1835; Clement Mears Harris, Wootton-under-Edge, December 21, 1138; and Thomas Guy, Doncaster, July 2, 1841.

Recognition of Medical Services in France.—The French Government has decided that seven Medical students who particularly distinguished themselves by their services during the prevalence of the cholera at Toulon, Sollies-Pont, Var, and Raon l'Etape, Vosges, shall be exempt from all further charges in the completion of their studies.

Sphygmography.—At a meeting of the Midland Medical Society of Birmingham, held on the 6th inst., a paper was read by Dr. Foster on the investigation of the pulse in disease by the sphygmograph. The paper was illustrated by a large number of pulse tracings which the author had taken from various cases of heart disease and other affections. Dr. Foster pointed out the manner in which the use of the instrument afforded not only valuable aid in diagnosis, but also in prognosis. We believe that this is the first systematic paper on the subject read at an English society.

Odontological Society.—At the ordinary monthly meeting, on Monday evening, February 5, the newly-elected President, W. A. Cattlin, Esq., gave an address on taking the chair. The set of false teeth found with the body in excavating for the Thames embankment were submitted to examination, and the subject discussed. Dr. Richardson read a description of his new process for producing local anæsthesia by narcotic spray, which elicited considerable interest.

We are informed that at the monthly evening meeting of Metropolitan Medical Officers of Health on Saturday evening, the 17th, Mr. Begg will open a discussion on the dwellings of the labouring classes, and the best mode of improving them.

Dr. Henry Trimen and Mr. W. Thiselton Dyer are collecting materials for a Flora of Middlesex, on the plan of the Essex and Cambridge Floras; and they would feel obliged for notes of localities or any other matter (even the slightest) relating to the subject. In the case of doubtful or critical species, scraps sufficient for identification would be most acceptable. Address, "Dr. Trimen, 71, Guilford-street, Russell-street, London, W.C."

Mr. Windham's Brain.—This young man, whose mental state was the subject of the long and expensive Commission in Lunacy, has lately died suddenly. The cause of death was plugging of the pulmonary artery by fibrinous clots. His brain has been carefully weighed and measured, and the result completely confirms the accuracy of the opinions of the experts, who declared that he must be deficient in intellect.

St. Pancras Workhouse.—On Wednesday Mr. Butt, the Resident Surgeon of St. Pancras Workhouse, reported to the Board of Guardians that a fresh outbreak of fever had occurred in the Workhouse, and that four patients had been sent to the Fever Hospital. A letter was received by the Board from Mr. Finn, the Secretary to the Fever Hospital, stating that a new wing, capable of accommodating forty patients, had been opened, so that an increased number of patients could be received, and also that the foundation of another wing, capable of accommodating sixty patients, had been laid. The wards of the Workhouse lately occupied by the fever patients, it was reported, had been cleansed and disinfected.

**BROTHERLY LOVE.**—The following notice to subscribers appended to the number of the Australasian *Medical and Surgical Review* of November 1, 1865, does not give a very satisfactory impression as to the state of the Profession at Melbourne :—" Notice to Subscribers.—In consequence of the impossibility of obtaining an editor capable and willing to conduct the *Medical and Surgical Review*, as an impartial scientific journal, the publisher begs to announce his intention to discontinue the publication of the same at end of current year ; and, at the same time, begs to thank his numerous subscribers for their past support.—104, Collins-street East, Melbourne."

**CAMBRIDGE.**—In Congregation on Thursday, the Vice-Chancellor presiding, graces were submitted having for their object the adoption of the report of the syndicate appointed to consider of the best mode of providing for the teaching of anatomy and zoology in the University. There were three graces. That proposing the adoption of the Professor of Anatomy of the Department of Human Anatomy and Physiology, separate from the other departments, and that the sum of £300 per annum be continued to him from the University chest, on certain conditions, was non-placeted, but carried by 152 placets to 15 non-placets. The grace proposing the appointment of a Demonstrator in Anatomy, at a stipend of £100 per annum, was not opposed. The grace proposing the appointment of a Professor of Zoology and Comparative Anatomy, who may so arrange his course in conjunction with the Professor of Anatomy, that the lectures of both be mutually dependent, and supply the needs of the Medical as well as the natural science students, the salary of this Professor to be £300 per annum, was also non-placeted, but carried by 163 placets to 17 non-placets.

**CAMBRIDGE.**—At the meeting of the Cambridge Philosophical Society on Monday evening last, Dr. Drosier read a paper " On the Functions of the Air-cells and the Mechanism of Respiration in Birds," in which he disproved the commonly received theories of the use of the air-cells—1. That they are intended to assist in supporting the bird in flight, by rendering it lighter in consequence of the rarefaction of the air contained in them, and their continuations into the hollow bones ; 2. That they assist directly in the oxidation of the blood. The lecturer calculated that the floating power from the rarefaction of the air in the air-cells and hollow bones of a pigeon weighing ten ounces, or 4375 grains, would be less than one grain. He also showed in a hen injected and dissected that the air-cells are bounded by a delicate membrane in which the blood-vessels are exceedingly minute and sparsely scattered, and offer, therefore, very little blood for oxidation. The view he took of their uses was that they act as double bellows, causing a constant circulation of fresh air through the minute air spaces of the lungs, whereby the oxidation of the blood in the capillaries was promoted. He also brought forward new explanations of several details in the mechanism of respiration in birds.

**HUNTERIAN SOCIETY.**—The forty-seventh anniversary meetings of this Society were held last week. On Wednesday evening the annual oration was delivered at the Society's rooms, No. 4, Blomfield-street, by Mr. D. De Berdt Hovell, who in his address gave a comprehensive sketch of the modern practice of Medicine as influenced by recent discoveries in science, and in reference to the life and period of John Hunter. The dinner took place on Friday, at the London Tavern, Alfred Smee, Esq., F.R.S., the retiring President, in the chair. Seventy gentlemen sat down to table, a larger number than usual, the President having specially invited several prominent members of the various learned, scientific, and art societies to meet the members of the Hunterian Society on this occasion. Amongst others present were the President and Vice-Presidents of the Royal College of Surgeons ; the President of the Medical Society ; Professor Owen ; Rev. Dr. Kynaston, head master of St. Paul's School ; Sir James Tyler ; Dr. Miller, Treasurer of the Royal Society ; Mr. White, Treasurer of St. Bartholomew's Hospital ; Professor Abell and Colonel Boxer, of Woolwich Arsenal ; the Rev. Mr. Rogers, Rector of Bishopsgate ; Professor Owen Jones ; Mr. H. Weigall ; Mr. Brook, President of the Meteorological Society ; Mr. Hawes, Chairman of the Society of Arts ; Professors Frankland, Odling, &c. Besides the usual loyal and patriotic toasts and that of " The Hunterian Society," which was responded to by the venerable Treasurer, Dr. Cooke, who in return gave " The President," the various other institutions represented were proposed and replied to. The interest and pleasure of the evening were enhanced by the excellence of a glee party under the direction of Mr. Montem Smith.

**DR. EDWARD CRISP**, in a letter to the Lords of the Council, headed " Dogs and Disinfectants," treats minutely on the subtlety of animal and other effluvia, and their easy transportation. " The scent from the foot of the deer," he says, " is so potent that this animal may be tracked by almost any dog ; but this, it will be said, is a natural secretion, and has no analogy to the poison of cattle plague. Let us take an artificial scent. In some parts of India the jackal is hunted early in the morning, before the dew is off the ground, the oil of aniseed, or some strong perfume, being placed upon the feet. In this country, by the same practice, any digitigrade animal may be hunted ; and I question whether the scent would be lost after many hours' running. There is no reason why the odour of cattle plague, which is very potent and characteristic, should not likewise be retained. So peculiar is the smell, that I know of an instance in Norfolk where the presence of the plague was detected in this manner :—A gentleman, who had seen much of the disease, was driving along a public road in his own parish, and, in passing a shed, he at once recognised the smell of cattle plague, and told the inspector, who found a cow in the last stage of the disease. The owner, not approving of the Government plan of killing without compensation, and adopting the motto of a late duke, " that a man might do what he liked with his own," had concealed the fact from the inspector. In another instance, diseased animals, when the wind was favourable, could be smelt at a distance of more than three hundred yards ; and it is not to be wondered at that cows at this distance were soon infected. If, then, my Lords, the smell of aniseed and other odoriferous substances remain on the feet of jackals and dogs for a long period, it may naturally be asked, why the scent of cattle-plague poison should be more evanescent, or why the virus should be removed from the hair and pad of the dog's foot by friction or dirt ? A dog may, I believe, in this way, contaminate every blade of grass he passes over. If restrictions as regards dogs are necessary for single dogs in Ireland, why, it may emphatically be asked, are packs of dogs allowed free liberty in England ? Surely, my Lords, to quote a vulgar proverb, 'this is straining at a gnat and swallowing a camel.' "

**A PLAN** for the protection of cattle from the plague has been suggested by Mr. White, M.R.C.S. Eng., Finchley, N. " Let the cattle breathe air only," says Mr. J. White, " which is disinfected ; and assuming that the disease is communicated chiefly by the atmosphere, they will be for the most part free from the disease. Let the cattle shed be air-tight ; let the only entrance to the shed be by a porch with a door at each end, having a space between them sufficient for a man with a barrow to be in (say about six feet high by six feet long by three feet broad, inside measure). Let the doors and sides of the porch be of canvas (that used by paper-hangers will do) tacked on the frame. Through this canvas all the air admitted to the building is to be made to pass. This canvas is to be kept constantly wet with a disinfecting fluid (diluted or undiluted), for the purpose of disinfecting the air which passes through it, in the following manner, viz. :—Fix a water-tight vessel, *e.g.*, of wood lined with zinc, over the top of the porch, of such a size as covers it. Let a band of woven fabric, as wool, or flannel, or calico (the more bibulous the material is, the better), be secured by one of its long edges to the bottom of each side of the interior of the vessel, and let this fabric lie over the top edge of the vessel, and descend with its other long edge to the bottom of the exterior of the vessel, so as to impinge against the canvas which is bent over the upper edge of the sides and doors of the porch. Thoroughly soak all parts of the canvas and the band, and fill the vessel with the fluid. The band will, by the process of capillary attraction, empty the vessel, and the fluid, descending by force of gravity by the canvas of the doors and sides of the porch, will keep them wet, and flow off by the floor. When the vessel is emptied, re-fill it. The result will be that the air which enters the building has to pass through the canvas of the doors and sides of the porch, and will, through sufficient contact with the disinfecting fluid, be made pure." Cattle kept in such a building cannot receive the plague through the atmosphere, if the plan is carefully carried out ; and there is not much probability of their receiving the infection through any other medium if ordinary care be used to prevent the entrance of infected matter. The apparatus may be made complete, and fixed to a shed by any carpenter, at the cost of from £4 to £5. A model of the apparatus may be seen at Mr. Weir's, agricultural engineer, 142, High Holborn.

MILDEW IN COTTON GOODS.—There is more than an analogy between the action of minute fungi on dead organised matter and that on the living. As fever germs act on the living animal or plant, so do mildew germs on calico. The preventive and hygienic measures in each case are alike. Let your calico be well made, well sized, and kept from damp. Let your living body be well fed, washed, and aired. If defective food predisposes schoolboys to ringworm, so does defective size predispose calico to mildew. "The Report of the Committee of the Manchester Chamber of Commerce, appointed to consider the subject of Mildew in Cotton Goods" might be read as an appendix to the chapter on parasitic disease in any treatise on pathology. "The researches of your Committee tend to the conviction that mildew plants colonise certain decaying matters, each species living and propagating on its appropriate pabulum; and your Committee are not without hope that ere long such knowledge will be gained by a continued search amongst the mildewed pieces returned to this country, that special 'mildew growths' will be traced to distinct defects of size, and that parasites which affect cloth will be no less marked out than the parasites which affect animal life. Your Committee would observe that the dust from mildewed pieces is a spawn which can be sown amongst sound pieces, if damp, to the future destruction of the same, and would advise that mildewed goods should never be left about in the sample room, as the sporules float for hours in the air. Attempts have been made to prevent the growth of mildew by various antiseptics, but with very partial success. Your Committee have examined several of the proposed remedies, and the difficulties which beset the question are so many (the health of the operatives being studied), that they consider no immediate solution is at hand. With the return to a *well-compounded flour or starch size*, the occasion for an antiseptic would pass away. Your Committee believe that it would be a loss of time to distract attention by experiments directed to a search for anti-mildew specifics." Just so, a well-washed man needs little perfume, and a well-aired house little, if any, disinfectant.

THE following are the last week's Cattle Plague Returns. By comparison with those of the previous week, it will be seen that there have been 11,443 attacked, 7636 deaths, 626 slaughtered, and 1893 recoveries, since January 27 :—

| Census Divisions. | 1. Attacked. | | | 2. Result of reported Cases from the Commencement of the disease. | | | | |
|---|---|---|---|---|---|---|---|---|
| | Week ending February 3. | Week ending January 27. | Week ending January 20. | Attacked. | Killed. | Died. | Recovered. | Unaccounted for. |
| 1. Metropolitan Police District . . | 36 | 26 | 21 | 7510 | 3170 | 3429 | 320 | 591 |
| 2. South Eastern Co. . | 39 | 35 | 33 | 4888 | 1507 | 2729 | 430 | 222 |
| 3. South Midland Co. | 689 | 589 | 860 | 11224 | 1954 | 7591 | 894 | 785 |
| 4. Eastern Counties . | 201 | 157 | 315 | 8055 | 2902 | 4034 | 593 | 526 |
| 5. South Western Co. | 48 | 58 | 82 | 1217 | 311 | 635 | 152 | 119 |
| 6. West Midland Co. . | 195 | 1723 | 444 | 5100 | 548 | 3407 | 527 | 618 |
| 7. North Midland Co. | 725 | 715 | 442 | 5785 | 702 | 3876 | 467 | 740 |
| 8. North Western Co. | 3221 | 3510 | 3738 | 23193 | 644 | 15841 | 1602 | 5106 |
| 9. Yorkshire . . | 1426 | 2034 | 1314 | 21270 | 948 | 13155 | 3407 | 3760 |
| 10. Northern Counties. | 330 | 116 | 290 | 2918 | 631 | 1533 | 362 | 392 |
| 11. Monmouthshire & Wales . . | 369 | 626 | 542 | 5834 | 102 | 4499 | 717 | 516 |
| 12. Scotland . . | 1875 | 2156 | 1960 | 35189 | 3949 | 20657 | 6584 | 3999 |
| | 9153 | 11745 | 10041 | 132183 | 17368 | 81386 | 16055 | 17374 |

NOTE.—209 Inspectors have not reported this week in time for this return. Among these, and belonging to the county of York, are Messrs. Hoskinson, Stone, Harrison, Pennock, and Holt; to Shropshire, Mr. Benjamin Duff; to Staffordshire, Messrs. B. Duff and Llewellyn; to Cheshire, Messrs. Storrer and Lewis, the latter of whom has, however, forwarded a partial report. The inspectors returned 2304 cases last week, and the apparent decrease of disease is probably more due to their neglect than to any real diminution of attacks.

"THE SPORTING TIMES."—In the annual retrospect of this well-conducted paper the editor states that "it is with no little pleasure, and no small amount of pride, that we are able to point to the fact that the *Sporting Times* is the only newspaper in which quack medicines are not advertised." This is an example which might be followed with great advantage to the community by other journals.

REMOVAL OF A CATARACT OF EIGHTY-THREE YEARS' STANDING IN A MAN 93 YEARS OF AGE.—Mr. W., now 93 years old, when 10 years of age was struck on the right eye by a stone, and cataract resulted. When seen, in 1865, the field of the pupil was occupied by the capsule, most of the lenticular substance having become absorbed. His left eye began to fail in vision five years since, and an operation was therefore proposed for the cataract in the right. The cornea having been punctured with a broad needle, the canula forceps was introduced, and most of the cataract withdrawn, leaving the pupil clear. The patient was enabled to count the operator's fingers immediately afterwards. A few weeks afterwards he was able to see large objects and tell the time by a watch with a glass of four and a-half inches radius, an attack of conjunctivitis from cold preventing him as yet trying reading-glasses.—*Boston Journal*, August 31.

## SECOND REPORT OF THE CATTLE PLAGUE COMMISSIONERS.

THIS Report, laid before the House on Monday night, is divided into five sections.

Section I. treats of the spread of the disease in the United Kingdom, the circumstances affecting it, and of statistical matters with which our readers must be sufficiently familiar.

Section II. refers to the spread of the disease in Continental countries.

Section III. is devoted to a notice of the several orders in Council which have been issued.

In Section IV. there is the following statement of the opinion of the Commissioners as to the nature of the disease. The Report says :—

In our first report we humbly submitted to your Majesty the conclusions at which we had arrived respecting the general character of the disease and the measures which should be adopted with a view to arrest its progress. We agreed (Mr. M'Clean dissenting) in the opinion that the only reasonable hope of effecting this object lay in imposing for a limited period restrictions of a very stringent kind on the movement of cattle, and that these restrictions should be uniform, and should be carried into effect at a time when the disease had not spread to an unmanageable extent, and when they would be attended with fewer difficulties and with far less of loss and inconvenience than must necessarily surround them towards the approach of spring. We differed in some degree as to the amount of stringency which we might reasonably venture to recommend. We think it right to say (Mr. M'Clean still dissenting) that the opinions in which we then concurred not only remain unshaken, but have been materially strengthened and confirmed by the deplorable experience of the last three months.

After laying before your Majesty our recommendations on this head, it remained for us to pursue the investigation which we had already begun into the nature of the disease, with a view to ascertain how far it could be combated by curative or preventive treatment. This investigation included a thorough and minute observation of the symptoms and progress of the disorder, and careful inquiries into its general and chemical pathology and morbid anatomy, a microscopical examination of the tissues and fluids of the bodies of diseased animals, a trial of various methods of treatment, experiments on disinfection and ventilation. It was further desirable to ascertain by actual experiments to what other animals it was communicable.

These inquiries were committed, under the general superintendence of the Medical and scientific members of the Commission, to the following gentlemen :—

1. Nature, Propagation, Progress, and Symptoms of the Disease—J. B. Sanderson, Esq., M.D.
2. General Pathology of the Disease and its Relation to Human Diseases—C. Murchison, Esq., M.D.
3. Chemical Pathology of the Disease—W. Marcet, Esq., M.D.
4. Morbid Anatomy of the Disease—J. S. Bristowe, Esq., M.D.
5. Microscopical Researches on the Disease—Lionel S. Beale, Esq., M.D.
6. Treatment of the Disease—George Varnell, Esq., M.R.C.V.S., and William Pritchard, Esq., M.R.C.V.S.
7. Disinfection and Ventilation—R. Angus Smith, Esq., Ph.D.

On several of these heads no definite conclusions could be formed without long and laborious inquiry. On most of them we have already received reports, and all the reports will very soon be completed. We shall then lose no time in laying them before your Majesty, together with a brief general account of the results reached by the different lines of investigation. This will form our third and last report.

An experimental investigation of the nature and treatment of the disease was commenced at an early period by several gentlemen of high Professional and scientific eminence at Edinburgh, and a valuable report by them has been already published. These gentlemen are continuing their researches, and have undertaken to place in our hands a further report upon the subject.

A large mass of statistical information respecting the progress of the disease has been collected by the Veterinary Department of the Privy Council Office; and the department has also obtained, by printed forms very extensively circulated, information respecting the various modes of treatment which have been practised in different parts of the country, and their respective results. A comprehensive digest of the information so procured under both heads is being prepared under the direction of the secretary of the department, and we hope to be enabled to append this digest, with some illustrative maps, to our third report.

The last Section states some points of practical moment, to which it is thought right to advert. We extract from it the following important remarks :—

"All endeavours to discover a method of treatment on which some reliance could be placed have entirely failed. Innumerable suggestions of this kind have been made or communicated to us, to none of which any substantial value could be assigned, and the knowledge and ingenuity of Practitioners in every part of the United Kingdom have been exerted for this object in vain. The experience of the Dutch Physicians and Veterinary Surgeons, during the present outbreak, appears unhappily to coincide on this point with our own.

Vaccination is not a protection against cattle plague. Careful experiments, conducted at our desire by the most experienced operators, have shown that an animal successfully vaccinated, and in which cow-pox has been fully developed, may, within a few days after exposure to the infection of cattle plague, contract that disease and die of it. We have at present no evidence that vaccination fortifies the system against this new assailant in any degree.

The possibility of mitigating the virulence of the disease by inoculation with the matter of the disease is a subject of much interest, and has engaged our attention. Such inoculation has been tried repeatedly, and on a considerable scale, by the Russian Government, and the effect of a long series of transmissions has been carefully noted and recorded; but the experiment has not been very successful, and it has for the present been abandoned. The Dutch Government, though much pressed to introduce it in South Holland, has refrained from doing so for fear of the consequences. Whether modes of inoculation may not yet be found which will effect the desired object is a question which can only be solved by various and repeated trials. Further information on the subject will be given in our third Report. It is obviously unadvisable that any experiments of this kind should be tried, unless by persons of competent scientific knowledge, and under the strictest precautions to prevent the spread of infection.

The only means of combating the disease which remain consist in the stoppage of the movement of stock and of things likely to be vehicles of infection, in the isolation and slaughter of infected cattle, and in the use of disinfectants.

The careful and thorough use of disinfectants, which attack and neutralise the poison either when floating in the air or when adhering to solid or liquid substances, cannot be urged too strongly. In every locality measures should be taken to circulate information as to the best disinfectants, and to insure their being used.

For the purposes of disinfection carbolic acid and chloride of lime are recommended in a note appended to the Report.

## NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

*A Third Year's Student.*—Permission to attend Professor Huxley's lectures will be given on your making application.

Mr. H. R. Myers, of 30, Melton-street, Euston-square, writes to inform us that he supplies the Profession with perfectly pure vaccine lymph, collected by himself from healthy infants.

*F.R.C.S.*—It is stated on good authority that the gentleman named will retain his seat a year longer, owing to the contemplated resignation of a colleague.

*W. M., B.A. Cantab.*—Dr. Shebbeare was condemned to stand in the pillory at Charing-cross for publishing "An Eighth Letter to the People of England"

*An Old Subscriber.*—Mr. F. K. Hunt was the author of "The Fourth Estate." He was a qualified Surgeon, and at the time of his death a few years ago was editor of the *Daily News.*

*A Provincial Surgeon.*—On inquiry, we learn that no more catalogues of the Museum can be given away. The money value of those lately presented to recognised Hospitals by the Council of the College is represented by £690. The price per set to members is £18; but we think a reduction has lately been made.

*H. S.*—To the late Dr. Valentine Mott, of New York, is due the merit of having been the first to suggest, and the first to effect, the ligature of the common iliac artery.

*E. R., Kennington.*—In the little vestry beneath the organ gallery of the Temple Chapel is, or was, a marble tablet to Oliver Goldsmith, who was buried in the ground east of the choir April 9, 1774.

Dr. James C. L. Carson, of Coleraine, is author of a work on "The Form of the Horse."

Mr. Henry Clark, one of the Committee of the Liverpool Northern Hospital, who appears to be a teetotaller, has published the following return of various Hospitals in various parts of the country, with cost of intoxicating drinks consumed in one year, as follows:—

| | In-patients. | Cost of Beer, Wine, Spirits in One Year. | | |
|---|---|---|---|---|
| Newcastle-on-Tyne | 1720 | £312 | 0 | 0 |
| North Staffordshire | 922 | 109 | 7 | 0 |
| Salisbury | 904 | 162 | 0 | 0 |
| Lincoln | 748 | 112 | 14 | 0 |
| Bedford | 669 | 266 | 15 | 0 |
| South Hants | 642 | 60 | 12 | 0 |
| Adenbrook | 638 | 118 | 18 | 0 |
| Kent and Canterbury | 625 | 193 | 2 | 6 |
| Suffolk | 474 | 124 | 9 | 6 |
| Cumberland | 457 | 72 | 4 | 6 |
| | 7819 | 1532 | 2 | 6 |
| Liv'pool Northern Hospital (1864) | 1735 | 540 | 4 | 2 |

A comparison of the above returns shows that the expenditure of the Liverpool Northern Hospital is largely in excess of other Hospitals, being 6s. 2d. per patient, against 3s. 11d. elsewhere, or about £200 per annum greater on the average than that of many other institutions.

We should conceive that Mr. Clark's wisest course would be to leave the matter in the hands of the Medical Committee.

*An Ingenious Perversion of Popular Physiology.*—Sir Walter Trevelyan evidently "a close observer of nature," has published in the *Gardeners' Chronicle* the following theory in support of the beneficial effects of plants in bed-rooms:—

"Some time ago, thinking that carbonic acid gas might be an active agent in the promotion of sleep, I looked into various authors on the subject, but could not find any allusion to what may perhaps prove an important fact.

"The sedative nature of this gas, as shown in producing drowsiness, has been more or less felt or observed by most persons, when it has been generated by the human lungs in crowded or ill-ventilated rooms.

"With a majority of animals in a state of Nature, sleep comes on about the time when the development of carbonic acid gas from growing vegetation commences, at or soon after sunset; and it relaxes its hold about sunrise, when it ceases, and that of the stimulant, oxygen, succeeds, and rouses into action their nervous and muscular system.

"This applies principally to herbivorous quadrupeds and birds. Those carnivora which are constituted to roam at night in search of prey, resort during the day to deep and narrow caverns, in the recesses of which the air must soon be vitiated by their respiration, and thus be adapted to promote their sleep.

"So that, instead of being a gas which should always be avoided, carbonic acid, however deleterious in large quantities, may serve an important and beneficial purpose in the life of man, as of terrestrial animals in general.

"The presence of vegetation in or near our sleeping apartments, which has generally been deprecated, may be favourable to the promotion of healthy sleep, and only require to be avoided as deleterious, when connected with imperfect ventilation, a damp atmosphere, or with exhalations arising from organic decay and the consequent evolution of sulphuretted or phosphuretted hydrogen.

"That a mixture of the air with carbonic acid gas may be essential for healthy sleep, might indeed almost be inferred from the fact that most animals, including man, when instinctively composing themselves for sleep, do so, not only in a position that gives the greatest ease and relaxation to the muscles, but at the same time they place the head so as to favour the accumulation of that gas about it, and consequently its inhalation.

"The head of man, when at rest generally lies low, on a soft and depressed pillow, those of most quadrupeds couched between their paws, and those of birds nestled among the feathers of their backs or wings, so that, in all these cases, besides the normal nocturnal dilution of the air with carbonic acid gas, that part of it which is breathed becomes necessarily, at every inspiration, still further mixed with a portion of what has been already discharged from the lungs, much of which, from the low and confined position of the mouth and nostrils, must be inhaled again; whereas from the generally erect or more elevated position of the head during waking hours, and from the great specific gravity of the carbonic acid gas expired, very little of it can mix with the fresh air that is then inspired."

### MR. WORMS' SYSTEM OF TREATMENT OF THE RINDERPEST.

### THE RINDERPEST.

In order to discover the disease, the animal's mouth should be opened, and the breath smelt. If the breath be at all offensive, the Medicine should be given without a moment's delay. It is also advisable to examine the dung, which, when the animal is affected, becomes peculiarly offensive. After the Medicine has been administered, the animal should be kept warm, and the stable or shed well ventilated and disinfected with chloride of lime. All infected animals should at once be separated from those in good health.

*Medicine.*

Take a pound of small red pickling onions, and a pound of garlic, peel them, put them together into a mortar, and reduce them to a fine pulp; to this pulp add a pound of ground ginger, and mix thoroughly.

Take three-quarters of a pound of assafœtida, pour sufficient water over it, then allow it to boil till no sediment remains, carefully removing all hard portions. Pour this decoction of assafœtida over the pulp of onions, garlic, and ginger, and stir the whole mass thoroughly. Add to this eight quarts of rice-water, and allow it to cool. This is sufficient for fourteen full-grown animals.

*Dose.*

| | |
|---|---|
| To a full-grown animal | $1\frac{1}{4}$ pint. |
| To a heifer | $\frac{7}{8}$ " |
| To a calf | $\frac{5}{8}$ " |

*Treatment.*

Two or three hours after the dose has been administered, give the animal (if full grown) four or five pints of rice gruel, to a heifer or calf two or three pints; add a little salt to make it palatable and drench with it if the animal refuses to drink. The animal is to be fed, during two days, three times a day with thick rice gruel, and, at each meal, may have a handful of sweet hay. Should the animals be accustomed to roots, they may, on the third day, have a quarter of their allowance in two meals without rice; on the fourth day, half their portion, and so on.

Should the animal's mouth be sore, wash it with a pulp made of the rind of Seville oranges boiled. Should the animal's bowels be confined after twelve hours, and the stomach swollen, administer to a full-grown animal, half-a-pound; to a heifer or a calf, a quarter of a pound, of fresh unsalted lard, made into boluses.

Sufficient stress cannot be laid on the necessity of administering the Medicine the moment the breath is tainted.

27, Park-crescent, London, February 12, 1866.

### ON STERILITY.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Your review of Dr. Marion Sims's book has brought back to my mind an idea which has frequently occurred to me. It seems to be universally taken for granted that the condition of the os uteri is constant and unchangeable, or, in other words, is the same during the time of sexual intercourse as at other periods. Now, it appears to me extremely probable that, in a healthy state, the neck of the womb has the power during sexual intercourse of dilating in such a manner as to permit the injection of the fertilising fluid directly into the cavity of the uterus. I merely throw out this idea at present, reserving my reasons for holding the opinion to another time. If from rigidity of fibre or any other cause the dilatation is prevented, sterility will be the consequence.

I am, &c.

Coleraine, February 12. JAMES C. L. CARSON, M.D.

### SWELLING OF THE LIPS AND NOSE.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Some time ago a patient came to me with his lips and cheeks swelled, hard and brawny, and of a tallowy paleness. The disfigurement of his features was extreme, but there was neither pain, itching, nor any other special symptom. I learned from him that these symptoms were liable to come on quite suddenly and to disappear with almost equal rapidity, after lasting sometimes a few hours, sometimes many days. The exciting cause was always a bout of drinking. I put the case down as belonging to the category of urticaria; but then if I were to try and explain what urticaria is I should soon be out of my depth.

I am, &c. DELTA.

### POOR LAW MEDICAL REFORM.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I shall feel obliged by your giving insertion to the following letter from the Poor-law Board. I strongly advise the Poor-law Medical officers to forward their subscriptions, as it is quite possible we may yet have to fight the battle in the House of Commons, and therefore shall have need of funds. I am preparing a pamphlet explanatory of the various clauses in the Bill, otherwise the members of the House of Commons may be deceived, as the Select Committee were on a recent occasion.

I am, &c. RICHARD GRIFFIN.

12, Royal-terrace, Weymouth, February 10, 1866.

List of subscriptions received by Mr. Prowse:—Hemsted, H., Whitchurch, 10s.; Jeffery, B., Worcester, 10s.; Day, R. W., Epping, 5s.; Robertson, W., Alnwick, 2s. 6d.; Foster, W. F., Isle of Wight, 10s.; Moore, A. J., Henley, 5s.; Cooper, W., Bristol, 5s.; Frankland, T., Ripon, 20s.; Fitch, F., Kidderminster, 5s.; Jeston, A. F. W., Malmesbury, 10s.; Salter, G., Malmesbury, 10s.; Wheeler, D., Chelmsford, 21s.; Francis, W., Yeovil, 10s. 6d.; Hubert, W. A., Hemel Hempstead, 10s.; Fothergill, J. W., West Ward, 2s.; Cooke, R. E., Southwell, 10s.; Taylor, T., Cricklade and Wootton Bassett, 10s.; La Farque, P. A., Meriden, 5s.; Handcock, G., Hunslet, 5s.; Hodges, H., Hertford, 5s.; Pridham, T. L., Bideford, 10s.; Lloyd, Hugh, Machynlleth, 10s.; Pugh, John, Machynlleth, 10s.; Deynes, F., Newport Pagnell, 5s.; Fleming, A., Samford, 20s.; Elliston, W. A., Ipswich, 5s.; Edwards, G. E., Ipswich, 10s.; Manning, F., Samford, 10s.; Reynolds, F., Saffron Walden, 5s.; Wright, U. J., Caxton and Arrington, 5s.; Brooks, T. G., Caxton and Arrington, 5s.; Stamford and Felci, Launceston, 10s. 6d.; Rogers, G. O., Newport Pagnell, 5s.; Taylor, F., Woodstock, 10s. 6d.; White, J. G., Woodstock, 10s. 6d.; Collingwood, J., Bourne, 5s.; Gaye, W., Williton, 10s.; Crish, R., Wokingham, 10s.; Underhill, T., Dudley, 10s.; Clapham, J., Peterborough, 10s. 6d.; Perry, C. H., Aylsham, 5s.; Alderton, T., Aylsham, 5s.; Scarr, R. T., Bishop Stortford, 10s. 6d.; Meade, E., Tunstead and Happing, 5s.; Francis, P., Felstead, 10s.; Wildash, H. C., Elham, 5s.; Rhys, W., Neath, 21s.; Mercer, W., Ticehurst, 10s.; Stawman, W., Barnsley, 5s.; Davies, F. P., Dolgelly, 5s.; Glover, J., Atcham, 5s.; Heaton, C., Leek, 7s.; Turnock, R., Leek, 7s.; Cooper, R., Leek, 7s.; Smith, W. R., Ticehurst, 5s.; Willcock, C., Wareham, 5s.; Daniel, W., Wareham, 5s.; Williams, W., Wareham, 5s.; Prowse, W., Amersham, 5s.

Mr. Griffin has received the following:—Mackie, J., Darlington, 5s.; Clark, H., Sedgefield, 5s.; Clark, D., Durham, 5s.; Tizard, H., Weymouth, 10s.; Brown, F. J., M.D. (not Union), Rochester, 21s.; Shilliter, R. R., Hitchin, 20s.; Wilkin, J. F., Cranbrook, 5s.; Hernan, R., Tavistock, 5s.; Pearce, T., Tavistock, 5s.; Northey, W. C., Tavistock, 5s.; Reeves, W., Carlisle, 21s.; Dordge, T. G., Tavistock, 6s.

Letter from the President of the Poor-law Board:—

"Poor-law Board, Whitehall, February 5, 1866.

"Sir,—I am directed by Mr. Villiers to acknowledge the receipt of your letter of the 3rd inst., together with the draft of a proposed Bill 'for the better regulation of Medical relief to the poorer classes in England and Wales,' and I am to inform you that the provisions contained in the Bill shall receive the consideration of this Board.

"I am, Sir, your very obedient servant,

"Richard Griffin, Esq." "JOHN THORNELY.

### INOCULATION MODIFIED AS A PREVENTIVE IN THE RINDERPEST.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Never, perhaps, has any new theory been received, a few cases excepted, with such universal approbation by the Profession and the public than the vaccination of cattle as a protection in the Rinderpest; and although it has unfortunately failed to stand the test of experiment, it may yet, if properly worked out, lead to a satisfactory issue, and should therefore not altogether be rejected as futile. Had the Rinderpest actually been bovine variola, as was believed by many, the inoculation with vaccinia would assuredly have led to a happy result. The want of success, therefore, only proves that it is not small-pox, but a specific malady, an infection *sui generis*.

If I rightly recollect, it has already been proposed to inoculate cattle with the Rinderpest virus; but as such a process could only produce the same disease, with all its direful consequences, the adoption of such a plan could not be recommended; yet the suggestion, like the vaccination theory, has not been without its use, as it has indicated the proper direction to be pursued in seeking for a preservative.

It is a well-established fact that human small-pox, if inoculated in a cow, will not produce the small-pox, but the cow-pox; and if the latter is inoculated back to man it will produce the ordinary vaccine pustule. This clearly proves that the cow-pox is only a modification of the small-pox, and that the prophylactic virtue of the former consists in so modifying the organism that the varioloid poison, when it reaches the system, has but little or no influence upon the same; according to the principle that no two closely-related forces can exist side by side without the weaker being attracted by the stronger, or where they are of equal strength both being weakened in their intensity. Now, if in the case of the Rinderpest we were to do as in variola—start from the same disease—we might (I am merely speaking theoretically) possibly arrive at an infection that would act as a protection against the cattle plague, the same as vaccinia does in variola.

What I propose is simply this, to inoculate the Rinderpest in a different species—say a dog or a horse, or any other animal that would take it in a modified form—and then re-inoculate the virus thus obtained back to the bovine species. The poison thus altered might in the ox take on a milder form, which, similar to vaccinia in small-pox, would act as a preservative in Rinderpest. I merely offer this to the public as an hypothesis, and only regret having no opportunity of putting the theory in practice and testing it by experiment, which is the only way in such matters of arriving at a just and unbiassed conclusion.

I am, &c.

F. B. JESCHKEN, M.D.

### VACCINATION OF CATTLE.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In looking over the *Medical Times and Gazette* of the 10th inst. I was very much surprised to see that a charge was made against Mr. Wm. Faulkner for supplying lymph that was utterly worthless. I myself have been supplied with lymph upon several occasions by Mr. Faulkner, and the last occasion was in the beginning of January, having been urgently requested by several friends to vaccinate their cows, and having used all my own lymph, I telegraphed to Mr. Faulkner for all he could send me by return of post and regardless of expense. He sent me thirty-six points and one tube, stating that that was all he should be able to send me for three or four days. I used that lymph, and was equally as successful with it as with any I had collected myself.

I and my brother have vaccinated upwards of 2000 cattle, and with carefully-armed points we found in one instance the whole herd except two were unsuccessful, and in many herds we found several were unsuccessfully vaccinated; so that with carefully-armed points and careful vaccination you cannot always ensure success.

I have been tempted to send this for insertion in the *Medical Times and Gazette* as I have generally had success with Mr. Faulkner's lymph, and consider it a great convenience to have some one to send to for lymph that we can depend upon, and at his usually moderate charge. Apologising for the length of my letter, I am, &c.

WM. MATHEWS, M.R.C.S.E.

### ADVERTISING QUACKS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—A few days ago I was asked to see a young man who was said to be very ill. On visiting him I found him in a very nervous state, but could detect nothing calculated in the slightest degree to account for it, there being no real cause of illness about him. I soon learned, however, that about ten days before I saw him he complained of "an uneasiness" in his chest, and was advised to consult "Dr. Watson or his confidential secretary, Mr. William Hill," who advertises extensively in the "Manly Vigour" style. He did so, and in reply to his letter received another, of which the enclosed is an exact copy. Of course, Dr. Watson's letter was the key to my patient's nervousness. It had made him "daily apprehend the appearance" of the evils—or better still, the "serious evils"—mentioned in this remarkable production of "Dr. Watson or his confidential secretary, Mr. William Hill."

Could nothing be done to prevent the publication of those disgusting and mischievous paragraphs which lead to such correspondence and consequences? Could not a newspaper censorship be instituted for the purpose of granting licence to respectable and necessary advertisements and suppressing those of a filthy and insinuating character which are frequently seen in the columns of apparently respectable newspapers? The really respectable require no censor, and would not fear one; but such proprietors and editors as have not decency enough to avoid offence require restraint.

This is not the first case of the kind that has come to my notice, though I must say "Dr. Watson or his confidential secretary, Mr. William Hill," is about the mildest in requesting a preliminary fee. In one case I know the amount of £5 was asked and forwarded before any medicine(?) was supplied; but "Dr. Watson or his confidential secretary, Mr. William Hill," only asks £1 1s. I am, &c.

W. WATSON CAMPBELL, M.D.

Dunse, Berwickshire, N.B., February 7.

⁂ This is the old story. A nervous boy receives a filthy and insidious letter, threatening him with loss of health and virility, and his nervous system receives a shock, which is apt to induce confirmed hypochondriasis, whilst his pocket is a prey to the extortionate quack. As for such a censorship as is proposed, it would be impossible to obtain it in this country, for if public opinion or private sense of decency do not suffice to deter the editors and publishers of respectable and religious newspapers from inserting obscene advertisements there is little chance that a law could be obtained. Our own notion is that the only possible safeguard is such a degree of physiological knowledge and moral firmness as shall enable young people to withstand the lures of the tempter. We cannot publish the quack's letter, which is a *fac-simile* of others with which our readers are only too familiar.—ED.

### GENUINENESS OF MR. FAULKNER'S LYMPH.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—As Mr. F. Duke has called the attention of the public to the worthlessness of vaccine lymph supplied by me, I trust you will allow my version also to appear.

A gentleman called on me for fluid human lymph. I had none, and recommended the cow lymph on points as being more suitable for cattle vaccination, showed him the remarks of the collector, a gentleman of the highest respectability and a most successful operator on cattle, whose letter I enclose for your perusal, together with that of others, who were perfectly successful with the same points, and quite satisfied with all I had sent them. In a few days I received a letter from Mr. Duke, saying he did not like the points; on which I immediately wrote and said if he would return them that fluid human lymph should be sent per return; instead of which he used the points—how he does not tell us, although being a public vaccinator he expected all to succeed—a thing which occurs with but few of the best operators, even from a child's arm; but that is known to the Profession perfectly well, and requires no comment from me. In a few days again he writes demanding back his money, or he would expose me in the *Medical Times and Gazette*; to which I answered that had he put the case differently most willingly would I have sent a further supply gratis; but as he had threatened to expose me he had better do so. Like the little boy who had eaten his bun and wanted his penny back again, so did Mr. F. Duke want his cash; and if I had foolishly sent it, you, Sir, and the public would not have heard anything of my worthless lymph. Out of the hundreds I have supplied last month for cattle vaccination, Mr. Duke stands proudly pre-eminent as the only gentleman who has used my lymph and, failing, demanded back his money. I am quite aware there must have been as many failures as successes with lymph I collected and sold; but the same result occurs to all, and at page 153 of last week's *Medical Times and Gazette* it is stated that M. Lallier observed that of between 30 and 35 vaccinations made at St. Louis from the heifer, only one has succeeded! Also at page 154, of 84 vaccinations made on new-born infants, 59 only were successful. I could multiply such remarks; but any Medical man will know how to value

Mr. Duke's remarks, that because he failed to vaccinate six cows with thirty-six points that therefore the said points were worthless. In conclusion, I beg to state that the points referred to in the letters I send you are precisely the same as those furnished to Mr. Duke, and collected at the same time and taken indiscriminately from the same parcel. Apologising for trespassing on your valuable space, I am, &c.

Wm. Faulkner, M.R.C.S.

⁂ Mr. Faulkner's letter is accompanied by numerous well-authenticated testimonials as to the efficacy of the lymph supplied by him.—Ed.

### The Lung Sickness—a Most Fatal Cattle Disease at the Cape—Prevented by Inoculation, and Mode of Performing it.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I am indebted to a member of our Profession (Thos. Fotheringham, Esq., who has resided eight years at the Cape) for informing me that a disease, well known in that country as the "lung sickness," is prevented by inoculating an ox or a cow by means of a piece of the lung taken from an animal having died of the disease. The operation is performed by making a deep incision about two inches in length in the tail of the animal, and then introducing a piece of the lung, about the size of a walnut, into the wound, and allowing it to remain. In the space of about fourteen days the disease is developed, and the end of the tail drops off.

Mr. Fotheringham informed me that no individual would purchase an animal which had not been inoculated, owing to the disease being so fatal; but instances did sometimes occur when the inoculation failed to protect the animals. Mr. Fotheringham having seen a great deal of the disease, and having inoculated several animals himself, I venture to give, by his permission, publicity to a mode of inoculating which might be worth a trial in the prevention of the Rinderpest, provided, however, it has not been already tried. The lung which is used for inoculating is kept in a jar, and when required for use a portion is cut off and inserted, as I have already mentioned.

It would be interesting to know whether the muscular tissue of an animal affected with lung sickness is infested with entozoa; and it would be also interesting to know whether entozoa are found in the lungs of animals affected with the cattle plague.

To vaccinate an animal for the prevention of the Rinderpest, even if the disease should prove to be small-pox, does not appear so rational as inoculating with human variola. But to inoculate with a portion of the lung, saturated, as it probably is, with the morbid poison, appears more rational, especially if the disease does not owe its origin to entozoa. Should, however, entozoa be the cause or the result of a morbid process in the animal, we may, perhaps, expect to find a remedy in benzine, which is said to kill trichinæ in the human body. I am, &c,

Southampton, July 8, 1866. Henry Osborn, M.R.C.P. Lond.

⁂ Inoculation in the tail has been performed in London dairies for some years for the prevention of pleuro-pneumonia.

### "Grease" and Variola.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—At the present time the following statements may be interesting, and lead to the settlement of the long-disputed question as to the analogy between the true grease in the horse and the vaccine in the cow, and its transmission to the human subject. About a month ago I was applied to by the tenant of a large dairy farm in Shropshire for some vaccine lymph. I forwarded a full supply, but at the same time suggested that if he could find a horse suffering from grease he would have an unfailing supply of matter from which all his stock and that of his neighbours might be inoculated. The results are contained in the following extracts from letters received since January 31:—"Until last Friday Mr. H. was not able to try your suggestion respecting the grease from the horse, but having found a horse suffering with it, the farrier inoculated some cows from it on Friday last, and on Monday it was apparent how well they had taken, so much so that the farrier has done the remainder of the cows to-day." "The vaccination from the human body makes but little show." In consequence of my suggestion, another large stockholder has had all his cows inoculated with this matter, and in every instance it has fully taken, the pock being well developed, and in some animals producing constitutional disturbance. Of its particular power I of course at present say nothing. I am in the receipt of some of the matter taken from the cows, and am testing it on the human subject. If it produces a true vaccine pustule, the question in dispute is at rest, but at any rate it has proved that this matter of grease will develope a genuine cow-pock in the bovine race. A gentleman, in taking some of this virus from a cow, pricked his finger four or five days ago, and I am given to understand that a pustule is forming. Either next week or the week following I will forward you the results of my own experiments.

I am, &c. Thomas Whately.

Egerton-house, Great Berkhamstead, Feb. 7.

COMMUNICATIONS have been received from—

Mr. J. Z. Laurence; Mr. T. Constable; Dr. F. E. Jencken; Mr. Worms; Dr. Fotherby; Dr. W. M. Turnbull; Dr. Edward Crisp; Dr. J. C. L; Carson; Mr. W. Matthews; Dr. C. R. Maxwell; Dr. A. Buchanan; Apothecaries' Hall; Mr. H. Clark; Dr. Earle; Dr. E. Fleming; Mr. R. Griffin; Mr. Alfred Norman; Odontological Society; Mr. Ernest Hart; Army Medical School; Mr. Charles Hunter; Mr. Kimpton; Mr. J. Peeke Richards; Dr. C. R. Bree; Mr. G. Gaskoin; Dr. Ogle; Dr. Morell Mackenzie; Dr. B. W. Richardson; Mr. Haynes Walton; Dr. Lionel Beale; Mr. Lawson Tait; Dr. Bowen; Dr. Hughlings Jackson; Mr. J. Chatto.

## VITAL STATISTICS OF LONDON.

*Week ending Saturday, February* 10, 1866.

### BIRTHS.

Births of Boys, 1166; Girls, 1140; Total, 2315.

Average of 10 corresponding weeks, 1856-65, 1994·7.

### DEATHS.

| | Males. | Females. | Total. |
|---|---|---|---|
| Deaths during the week .. .. .. | 691 | 625 | 1316 |
| Average of the ten years 1856-65 .. .. | 678·5 | 693·0 | 1371·5 |
| Average corrected to increased population.. | .. | .. | 1509 |
| Deaths of people above 90 .. .. .. .. | .. | .. | .. |

## DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

| | Population, 1861. | Small pox. | Measles. | Scarlatina. | Diphtheria. | Whooping-cough. | Typhus. | Diarrhœa. |
|---|---|---|---|---|---|---|---|---|
| West .. | 463,388 | 1 | 12 | 5 | 4 | 4 | 5 | 4 |
| North .. | 618,210 | 1 | 7 | 13 | 3 | 11 | 19 | 2 |
| Central .. | 378,058 | — | 7 | 2 | — | 10 | 8 | — |
| East .. | 571,158 | 2 | 4 | 13 | 1 | 14 | 13 | 3 |
| South .. | 773,175 | 1 | 5 | 4 | — | 19 | 10 | 6 |
| Total .. | 2,803,989 | 5 | 35 | 37 | 8 | 58 | 55 | 15 |

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, February 10, 1866, in the following large Towns:—

| Boroughs, etc. | Estimated Population in middle of the Year 1866. | Persons to an Acre. (1866.) | Births Registered during the week ending Feb. 10. | Deaths. | | Temperature of Air (Fahr.) | | | Rain Fall. | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Corrected Average Weekly Number.* | Registered during the week ending Feb. 10. | Highest during the Week. | Lowest during the Week. | Weekly Mean of the Mean Daily Values. | In Inches. | In Tons per Acre. |
| London (Metropolis) | 3067536 | 39·3 | 2315 | 1400 | 1316 | 55·0 | 35·9 | 45·8 | 0·90 | 91 |
| Bristol (City) . . | 163680 | 34·9 | 117 | 73 | ‡90 | 54·1 | 38·1 | 46 0 | 2·12 | 214 |
| Birmingham (Boro') | 335798 | 42·9 | 264 | 163 | 217 | 54·8 | 37·3 | 45·5 | 0·77 | 78 |
| Liverpool (Borough) | 484337 | 94·8 | 396 | 281 | 347 | 53·8 | 40·3 | 46·3 | 0·97 | 98 |
| Manchester (City) . | 358855 | 80·0 | 285 | 203 | ‡237 | 55·0 | 36·5 | 44·4 | 1·41 | 142 |
| Salford (Borough) . | 112904 | 21·8 | 83 | 57 | 66 | 54·7 | 34 9 | 44·5 | 1·49 | 150 |
| Sheffield (Borough) . | 218257 | 9·6 | 194 | 115 | 140 | 52·2 | 36 7 | 44·1 | 1·19 | 120 |
| Leeds (Borough) . | 228187 | 10·6 | 164 | 116 | 151 | 55·0 | 35·5 | 44·8 | 1·13 | 114 |
| Hull (Borough) . | 105233 | 29·5 | 85 | 49 | 45 | 51·0 | 33·0 | 41·7 | 0·50 | 51 |
| Nwcastl-on-Tyne, do. | 122277 | 22·9 | 61 | 65 | 70 | 53·0 | 35·0 | 42·1 | 0·35 | 35 |
| Edinburgh (City) . | 175128 | 39·6 | 129 | 84 | 70 | 51·7 | 33·0 | 41·1 | 1·50 | 132 |
| Glasgow (City). . | 432265 | 85·4 | 371 | 252 | 230 | 52·3 | 32·3 | 40·7 | 2·21 | 223 |
| Dublin (City and some suburbs) . | 318437 | 32·7 | 178 | †156 | 184 | 55·3 | 34·0 | 45·5 | 0·65 | 66 |
| Total of 13 large Towns . . . | 6122894 | 34·4 | 4642 | 3014 | 3165 | 55·3 | 32·3 | 44·0 | 1·17 | 118 |
| | | | | | Week ending Feb. 3. | Week ending Feb. 3. | | | | |
| Vienna (City) . . | (1863)<br>560000 | .. | .. | .. | 380 | .. | .. | §<br>39·4 | .. | .. |

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·624 in. The atmospheric pressure rose to 29·91 in. on Sunday, and fell to 29·33 in. on Saturday.

The general direction of the wind was W.S.W., W., and S.W.

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* The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.

† Registration did not commence in Ireland till January 1, 1864; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in that city were the same as the averages of the rates in the other towns.

‡ The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

§ The mean temperature at Greenwich during the same week was 45·1°.

## APPOINTMENTS FOR THE WEEK.

### *February* 17. *Saturday* (*this day*).

*Operations* at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free Hospital, 1½ p.m.

Royal Institution, 3 p.m. Prof. Westmacott, "On Art Education and How Works of Art should be Viewed."

### 19. *Monday.*

*Operations* at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.

Medical Society of London, 8 p.m. Clinical Discussion. Mr. Victor De Méric, "On the Use of Mercury in Syphilis." Mr. R. Wm. Dunn, "On the Mercurial and Non-Mercurial Treatment of Syphilis."

### 20. *Tuesday.*

*Operations* at Guy's, 1 p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; St. Peter's Hospital for Stone, 3 p.m.

Pathological Society, 8 p.m. Meeting.

### 21. *Wednesday.*

*Operations* at University College Hospital, 2 p.m.; St. Mary's, 1¼ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.

Hunterian Society (Council, 7½ p.m.), 8 p.m. Mr. Hutchinson, "On Compression of the Brain."

### 22. *Thursday.*

*Operations* at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; West Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.

### 23. *Friday.*

*Operations*, Westminster Ophthalmic, 1½ p.m.

# ORIGINAL LECTURES.

NOTES ON

## SOME OF THE MORE RARE FORMS OF FRACTURES AND DISLOCATIONS,

BEING EXTRACTS FROM LECTURES (CLINICAL AND OTHERWISE) DELIVERED AT

The London Hospital.

By JONATHAN HUTCHINSON, F.R.C.S.,
Surgeon to the Hospital and Lecturer on Surgery.

*Dislocations of the Os Innominatum.*—The case which I shall mention first is that of a young man who was brought to the Hospital having been knocked down by a bale of goods which fell from a crane above him. He was admitted with his right thigh much everted and abducted, and fixed in that position. There was also a laceration of the skin between the scrotum and the left thigh. I was sent for on the supposition that it might probably be a compound dislocation at the hip-joint. As the poor fellow was in great pain and resisted all attempts at examination, we gave him chloroform before proceeding. The strange position of the limb and its comparative immobility certainly favoured the conjecture that a dislocation forwards had occurred. On examination of the wound, however, I found that it led obliquely inwards to the symphisis, and that there was a wide separation at the latter. Two fingers might easily have been placed between the pubic bones. The whole right os innominatum was detached and displaced backwards and outwards. It was very firmly fixed in its new position. On introducing a catheter, we found that the urethra was, as might be supposed, extensively lacerated. I made sure that the head of the femur was not dislocated forwards, it was not to be felt either in the thyroid foramen or on the pubes; and although the fixity of the limb in its new position still remained much as at first, I could only attribute it to the displacement of the os innominatum. On the next day the lad had traumatic delirium, and on the third he died. His relatives refused permission for an autopsy, but by examination of the wound after death and by movements of the limb I confirmed my diagnosis as to there being no dislocation.

During the same week another curious case of fracture of the pelvis was admitted under my care. The man had most extensive injuries, and died a few hours after his admission. I did not see him until he was on the post-mortem table. His left lower extremity was much shortened and everted. We found the head of the left femur projecting into the pelvic cavity through a starred fracture of the acetabulum. I show you the bone; you will observe that it is most extensively fractured. In all probability, the violence which caused such a fracture was received directly on the great trochanter, driving it inwards and upwards.

We have during the last year (1864) had under care several cases of dislocation of the whole of one os innominatum. This accident is always caused by very great violence, and is usually attended by laceration of the urethra or bladder. If the displacement is sufficient to enable us to give a positive diagnosis the case will almost necessarily end fatally. It is possible that now and then a case may recover in which the diagnosis was never established and only contusion suspected. It is an accident which is often overlooked during the patient's life and only discovered on the post-mortem table. Careful examination, first about the pubic symphisis and secondly by the side of the sacrum, in order to detect irregularity or gaping, is the plan by which we seek to establish a conclusion.

Abnormal mobility of the whole haunch is usually a marked symptom, but it is one which, owing to the pain caused and the risk of further damage, we must be very cautious in using. Sometimes I have seen displacement upwards, so that there was positive shortening and so that the crest of one ilium could be distinctly seen to be higher than its fellow. The most useful symptom in practice is the irregularity behind. The posterior borders of the ilium are so immediately subcutaneous that any displacement here is easily appreciated. The patient is usually quite unable to move the limb, and complains of much pain if it is moved by others.

*Case of Recovery after Dislocation of the Os Innominatum.*—Since the lecture from which the above is extracted was given, I have had under care a case of separation of the os innominatum at the sacro-iliac synchondrosis, in which recovery took place. A German, aged about 30, was admitted in November, 1865, having been run over. He had the appearance of having sustained severe injuries, and during the first few days was in a critical state. He complained of much pain about the pelvis, and his motions passed unconsciously into the bed. We could not, however, make out any actual paralysis. The incontinence ceased on the third day. On the fourth or fifth day it was discovered that there was movement of the left iliac bone at its junction with the sacrum, and that its posterior border was displaced backwards more than half an inch. This led us to make more careful examination of the bone in front, but neither at the symphisis nor in any part of the rami of the pubic bone could we find any irregularity.

Our patient went on very well, being simply kept in bed without any appliance. The displacement of the bone backwards was permanent, but at the end of a month he could bear pressure on the lower extremity, and was very desirous to get up. He left the Hospital soon after, able to walk.

*Cases of Fracture of the Pelvis*, if not involving injury to the bladder or urethra, very frequently do well. We have recently discharged two patients in whom the ilium was fractured deeply through its body without any ill symptoms following, and other similar cases have been under the care of my colleagues during the last few months (June, 1864). Uncomplicated fractures of the pelvic bones, and especially those involving only the body of ilium, are, in fact, often attended by very slight symptoms indeed. During the year 1865 I have had three or four such in the Hospital, and in two of them the patients could hardly be induced to remain in bed after the first fortnight. The fragments usually continue to be moveable for a week or ten days, and then rapidly consolidate. I have no doubt that simple fractures of the pelvis often get well without having been diagnosed.

There is now (October, 1864) a man in Talbot Ward, on account of cataracts, who has clearly had a fracture of his left iliac bone. He is a sailor, and his injuries were received in a fall from the mast. The anterior and upper third of his left ilium has been displaced outwards. The irregularity is considerable, but the union is firm, and it causes him no inconvenience.

About two years ago we had under care a man whose pelvis had been crushed by a hogshead of sugar rolling down upon him. At first we recognised only severe contusions, and it was not until three weeks later when the swelling had subsided that I discovered a fracture through the ischio-pubic ramus at about the position of the junction of those bones. There was very considerable irregularity, the ramus of the pubis being half an inch in front of that of the ischium. They were now united together, and quite firm. The man recovered perfectly. With such displacement at that part, it is almost certain that there must have been a counter-fracture at some other part in order to permit of movement. Very possibly the second fracture passed downwards through the horizontal ramus into the thyroid foramen; but of this I could obtain no proof. No doubt that had we carefully examined the ramus at the time, we might have detected the fracture, and I mention the case chiefly to show the importance of a systematic manipulation of such parts of the pelvis as can be felt externally in all cases of so-called contusion of the hips, more especially if the violence received have been severe. It is true that if the fracture be discovered there is little to be done in the way of treatment. Still, it is very possible that a timely recognition of the exact nature of the case may save the Surgeon from subsequent criticism.

A curious case was brought to the Hospital a few years ago, and one which at first sight perplexed us much. A young man had been crushed by a fall of earth, and was carried into the receiving room on a stretcher. The House-Surgeon asked me to see him, and pointed out a remarkable irregularity on his pelvis. On the right side just below the crest of the ilium, and not far behind the anterior spinous process, was a large projecting bony mass. It was quite firmly fixed, and we could not produce crepitus. The movements of his hip-joint were free. When I examined him he was in a state of collapse, and could give us no information. On being got to bed, he rallied, and then told us that the lump which had excited our anxieties had been there as long as he could remember. The case was one of contusions only, and the bony lump an exostosis.

*Dislocation at the Hip-joint.*—We have had several cases of dislocation at the hip-joint recently, and one of them a very peculiar one. The first fact to which I will advert is that in all we have succeeded in effecting reduction by manipulation only. My own experience comprises five cases, all dislocations *backwards*, and in all success was easily secured. Two of the patients were boys and three were adults. In all five chloroform was given. In four out of the five the reduction occupied only a minute or two, in the fourth it took a quarter of an hour, as the bone slipped upwards from the ischiatic notch to the dorsum ilii. The cases of which I speak were of course all dislocations from violence, and they were all recent. In several instances of dislocation from disease of the joint I have also succeeded by manipulation in getting the head of the bone into the acetabulum again, but in these the difficulty is not usually in reduction, but in retention afterwards. I have never once resorted to pulleys in the management of a dislocated hip, nor have I ever seen a case in the hands of my colleagues or friends, in which they became necessary after a fair trial of manipulation. The principle upon which manipulation succeeds is, I think, very simple; it is that of leverage, instead of traction. Some Surgeons prefer that the muscles should be active, believing that they assist importantly in dragging the bone into position, but my own impression is strong that it is better to give chloroform to its full extent; at any rate, to this fact I can speak positively, that reduction is usually very easy when the muscles are fully relaxed. Having drawn the patient to the edge of the bed, you bend his leg at the knee, and then carry the knee upwards to the abdomen. Having the foot in one hand, and your other hand placed on the inside of the knee, you now sway the knee rather forcibly outwards, carrying the foot across the opposite thigh. If the bone do not at once slip into place, you next bring the limb down again, still forcibly pressing the knee outwards. You will see that this is in some respects exactly the reverse of what is attempted by the old traction method. Instead of dragging the bone downwards, we use the shaft of the femur as a lever, and endeavour by its aid to push the head of the bone forwards into place. If the bone were dislocated forwards (either pubic or obturator) we should have to employ our leverage in a different direction, but of its efficiency or otherwise in these forms I have no experience of my own to give you. In our last two cases we were able to appreciate accurately at what part of the process the reduction took place, and in each it occurred when the knee was pressed outwards to the utmost, and the limb was being at the same moment brought down to the side of the other.

In one case in which I succeeded very easily by this method very powerful efforts by extension had been made on the previous day, and without result. I also once saw Mr. Cock, at Guy's Hospital, reduce a dislocation at the hip in like manner very easily, when most persevering traction attempts in the hands of the House-Surgeon and dressers had failed. One caution I must enforce in reference to this plan, and that is, that you must keep in mind that you are employing a very powerful lever, and not use too much force. The reduction is to be by manipulation rather than by force, and if you chance to turn the limb in the right direction it will slip in very readily.

I will next mention the particulars of a very rare case, which most of you will remember, since the man was under care not long ago in Gloucester Ward. The case is important, not as an instance of success by manipulation, but because we had reason to believe that the trunk of the sciatic nerve had been injured in the accident. I am not acquainted with any parallel case on record, though very probably there may be some.

*Dislocation Backwards at the Hip-joint—Easy Reduction by Manipulation—Permanent Paralysis owing to Injury to the Sciatic Nerve.*—In the early part of the present year a middle-aged labourer was admitted, into Gloucester Ward, with a dislocation at the right hip and a fracture of the left leg. The symptoms present, as regards the dislocation, were, very conspicuous deformity about the upper part of the thigh, a slight degree of inversion, and slight shortening. The shortening looked more to the eye than we could prove it to be by measurement. From half to three-quarters of an inch was all that it measured. The great toe pointed to the ball of the same toe of the opposite foot, and the patella looked inwards towards the opposite knee. The great trochanter did not seem to be much out of its normal position, a little higher and a little further back. The whole thigh looked short and twisted, and the muscles were thrown into irregular bulging masses; more especially, the tensor vaginæ femoris was very conspicuous, and its whole mass might easily be isolated and grasped in the fingers. The head of the bone could be felt in the ischiatic region, but only with difficulty. The vessels and other structures in the femoral region had lost their due support, and on pressing backwards in this position a decided hollowness might be appreciated.

As the man was in great pain, and as reduction had been previously attempted by Mr. Weller, I decided to give chloroform before proceeding to any manipulations. In his struggles whilst inhaling the man repeatedly drew up the injured thigh, until the femur was at right angles with the trunk. This I pointed out to those present, and remarked also that the range of motion was much greater in most directions than we usually found it in such cases. When he was fully under chloroform I had him down to the bottom of the bed, and having flexed his leg at the knee, carried the thigh upwards towards the abdomen. Then taking his foot in my right hand and placing my left on his knee, I rotated the thigh outwards, and abducted, and at the same time lifted the limb somewhat. On the first trial it did not move in the least. On the second, Mr. Rossignol placed his hand on the knee, and assisted me in making forcible abduction of the thigh when the femur was elevated, and whilst I was in the act of bringing it down again the bone slipped into its place with a very audible snap. It was quite clear to us both that the vigorous abduction of the thigh whilst it was elevated and moving was the cause of the reduction. Perfect symmetry was restored.

On the third day after the reduction I examined the limb, and asked the man if he could move it. He said he was in no pain, but that he could not move his foot, and on examination I found that his foot and leg were almost completely paralysed, both as regards sensation and voluntary motion. A pin thrust into the palmar aspect of his great toe for a quarter of an inch was not felt in the least. He could not move any of the toes. On the inner aspect of leg and of the instep and foot, almost as far as the nail of the great toe, he could feel well. On all other parts below the knee, sensation, although not wholly lost, was almost so. On the dorsum of the foot he could only just tell when we pricked him with pins.

I think it probable that in this case the dislocation, when I saw the man, was in the spine of the ischium. The slight degree of inversion and of shortening would well fit with this diagnosis. At any rate, it was quite clear that it was low down in the ischiatic notch. The lower down in this position the greater would be danger of injury to the sciatic nerve. Unfortunately, it did not occur to us to test the condition of this nerve before the reduction, nor, indeed, until some days afterwards.

The man had been in great pain from the time of the accident until the reduction; he was, indeed, at the time I saw him, pale and collapsed from the shock and suffering caused. I feel certain that the damage must have been done before our reduction, and not during the latter. My manipulations did not altogether occupy more than two or three minutes, and no material amount of force was applied, excepting just at the last moment, when it had the effect of at once slipping the bone back into its socket. Until it thus slipped back it had never moved.

In ordinary dislocations into the sciatic notch the head of the bone lies above the pyroformis, and, of course, above the trunk of the sciatic nerve. Any pressure upon the latter would only be downwards against the somewhat yielding ligaments. If, however, the laceration of the capsule and escape of the bone were beneath the tendon of the internal obturator muscle, as is the case in dislocation upon the ischiatic spine itself, then the nerve trunk would be above the bone, and might easily be stretched or even lacerated if the latter moved upwards.

One of Maclise's drawings shows the head of the femur in this position, with the sciatic nerve crossing the neck of the bone like a strap. I do not find, however, any reference to injuries to this nerve in the works which I have consulted.

With regard to the permanence of the paralysis, I may state that I examined this man six months after his accident, and that he was still without sensation or motion in the structures supplied by the sciatic nerve.

*General Remarks on the Diagnosis of Injuries at or near the Hip-joint.*—I do not propose to enter here upon any systematic description of the different forms of dislocation or fracture, but to make a few general remarks applicable to cases in which doubt is felt. In the *first place*, let me urge, as I have often done before, that in difficult cases of injuries near joints the Surgeon should always allow himself the advantage of chloroform. Examination is so much facilitated by this agent that unless a clear judgment can be come to without its use it ought never to be neglected. Many an unfortunate mistake would be avoided were this rule of practice adopted. Not only does it aid in diagnosis, but it often gives most material assistance in the treatment also. *Secondly*, let me caution you not to be misled by the patient's statement as to what he can accomplish with the injured limb into the belief that he has sustained no serious injury. Patients with dislocation at the hip are often able to lift the limb from the bed (in two of our recent cases this could be done), and now and then they are even able to walk.(a) Especially we may often note that under the partial influence of chloroform, when sensation is diminished, but the muscles not paralysed, a patient will often use a dislocated limb very freely. *Thirdly*. As a rule, in dislocations the range of motion is diminished, and in fractures it is increased. If in the case of an injury near to the hip you find the range of motion decidedly increased so that you can bend the limb into abnormal positions, you may be almost certain that it is a fracture with which you have to deal. In many cases, however, the converse of this is not true, and you may have much diminished motion although the bone is broken. This may occur either from the patient's muscular resistance, or more frequently from impaction of the fragments. *Fourthly*. Do not expect your cases to conform with exactness to the descriptions given in books. The majority will do so, but a large minority are cases which deviate in one or other direction from the orthodox types of injury. In order to avoid risk of error, you must therefore let each case have its own peculiarities, and very carefully investigate them all. Have the patient stripped, and examine both hips at once. Make your examination systematic, and point by point compare the relations of the bones on the two sides. Always use a measuring tape, but do not trust it too far; unless its results are definite it may easily mislead, for accurate measurements are very difficult to make, especially in reference to the lower extremity, and the eye is often more trustworthy than the tape. *Fifthly*. Take into due consideration the age of your patient and the conditions of the accident. Dislocations may occur at the hip from the earliest periods of childhood, they are tolerably common in adult life, and very rare in old persons. Separations of the epiphysis can only occur under the age of 21. Fractures of the neck of the femur are very common in old age, but may happen at any period. Dislocations are caused by indirect violence, severe twists of the limb, etc., never by direct blows. Fractures of the neck are common both from direct and indirect violence. Impacted fractures can only result from direct violence, *i.e.*, blows or falls on the trochanter. *Sixthly*. Remember that many cases of fracture through the cervix are attended by impaction, and that the unkindest thing you can do for your patient under such circumstances is to make a correct diagnosis at the expense of separation of the fragments. Whenever impaction is suspected examine very cautiously. *Seventh*. Remember that although eversion is the rule in fracture of the cervix, inversion is sometimes met with. With inversion the case might be thought to resemble a dislocation upon the dorsum.

*Separations of the Upper Epiphysis of the Femur.*—The diagnosis of this accident has only been attempted within recent years. Sir Astley Cooper's work does not even mention it. I am not aware that any specimen of traumatic detachment of this epiphysis exists in any of our London museums. It is, I think, a very rare occurrence. Ossification begins in this epiphysis during the first year, and is not complete until the twenty-first or twenty-second. The epiphysis comprises only the articular head, and if the separation were complete it would be left in the acetabulum, attached only by the ligamentum teres, and obtaining its nourishment only through that structure. The epiphysis would about fill the acetabular cavity.

The symptoms which we should expect in this accident would be those of fracture of the neck of the femur within the capsule — *i.e.*, slight shortening, eversion, and abnormal mobility. The facts which would aid us in the differential diagnosis would be, the age of the patient and the absence of rough bony crepitus. At best a plausible guess is all that is possible.

Dupuytren does not record any instances of this accident, but he writes in general terms. "In children and young persons who have been saved by the anatomical peculiarities from fracture of the neck we sometimes find separation of the epiphysis."

In Dr. Hamilton's excellent work on "Fractures and Dislocations" I find three cases of supposed separation of the upper epiphysis of the femur, but none of them from his own practice. In none of them can the diagnosis be considered as conclusive. The first is recorded by Mr. South in his edition of Chelius. A boy, aged ten, fell from a first floor window and hurt his left hip. There was scarcely any difference in the length of the limbs, but the left foot was slightly turned outwards. "The thigh could be moved easily in any direction, and without much pain; but on bending the knee and rotating the limb outwards a very distinct dummy sensation, as it seemed, within the hip joint, as if one articular surface had slipped off another." The boy suffered so little inconvenience that he two or three times got out of bed and walked about for a short distance. In this instance it seems probable that the separation was, at any rate, incomplete, or possibly the symptoms as much resemble a fracture of the pelvis. The second case is recorded by Dr. Parker, of New York, but was only seen by him seven years after the accident. A girl of eleven fell on her hip, abscess followed, and she eventually recovered, with an inch and half of shortening, an everted foot, but perfect motion at the joint. This latter circumstance led to the diagnosis of separation of the epiphysis. In the third case, Dr. Post, of New York, saw the patient, a girl of sixteen, the day after the accident, and found the limb everted, and an inch shortened. Crepitus was detected. The age of the patient renders the diagnosis of separated epiphysis very probable. The patient recovered, with slight shortening of the limb.

I have myself seen two cases under the care of other Surgeons in which this accident was diagnosed. In each the patient was between seventeen and twenty. In one union was delayed for several months; but in both it was eventually completed. The following are the particulars of the only instance of it which has been under my own care. I was sent for one night to the London Hospital to see a patient with a supposed dislocation of the femur. The House-Surgeon believed that he had reduced it more than once, but it had slipped again. I found that my patient was a lad of eighteen, who had been violently knocked backwards by an explosion of gunpowder. His limb (the left) was slightly everted, and shortened to the extent of about an inch. The great trochanter moved with the shaft. We could draw the limb down, but it slipped up again as soon as the traction was remitted. I did not succeed in eliciting distinct bony crepitus, but a somewhat rough grating could be easily produced. In order to facilitate accurate coaptation, we gave chloroform. When the muscles were fully relaxed, we had the limb very forcibly extended, and then carefully secured it at full length on a straight splint with perineal band. No readjustment of the splint was required for a fortnight, and I then had the limb carefully held by dressers whilst it was effected. We did not remove the splint until six weeks had elapsed, and then found that union was tolerably firm. As a precaution, the splint was reapplied, and retained three weeks longer. The result was perfect, the limb being of the same length as the other, and the union quite firm. As regards the diagnosis in this case, I may remark that the only question is, as to whether it was a fracture through the cervix or a detachment at the epiphysal line. That there was a complete solution of continuity at some part of the cervix there could be not the slightest doubt. Whichever view we adopt, therefore, the case is an instance of a very rare occurrence, and of great value on account of the good union which resulted. The mere fact that union resulted will, I know, incline many to regard the case as an extra-capular fracture; thus, Dr. Hamilton writes of bony union after epiphyseal separation, "a supposition which, as far as I can learn, no Surgeon has yet ventured to make."

In close relation with separations of the upper epiphysis we have *fractures of the neck of the femur in young adults*. These are very rare, and differ but little in their symptoms from the same accident in elderly persons. The age of the patient and the detection of bony crepitus distinguish them from detachments of the epiphysis. The chief point of practical interest in regard to them is the question as to whether union may be expected. I believe I have seen at least half-a-dozen cases of fracture of the neck of the femur in patients between the ages of 20 and 35, and I do not remember one in which union did not result; nor do I recollect ever to have met with an instance of ununited fracture through the cervix in a young adult. You will see, then, that we have every inducement to be painstaking in our use of the long splint, and that we must by no means allow the rarity of union in similar cases in old patients to influence our practice in these. We have at present (January, 1866) in Richmond Ward a good instance of satisfactory union of a fracture of the neck of the femur in a young man:—E. C., aged 24, was admitted with a compound fracture of the left femur on the right side; all the symptoms of fracture of the neck of the bone were clearly marked. The limb was shortened and everted, but we could draw it down to full length, and produce crepitus by pressing the trochanter. For a week after his admission he was so ill in connexion with the compound fracture of the opposite femur and other injuries that we did not venture to cause him pain by extending the limb, and it was merely kept steady by sand-bags. At the end of that time the symptoms were as at first, and we now applied a long splint with perineal band, and brought the limb to its full length. The splint was kept on for two months, and union is now complete. He can lift the limb well. Its exact comparative length we cannot ascertain, as both limbs were injured, and probably the other is somewhat shortened. Whether in this instance the fracture was intra- or extra-capsular, I can give you no certain opinion. That there was a fracture through the cervix at some part there can be not the slightest doubt. Some of the facts favour the opinion that it was external to the capsule. As regards the infrequency of fracture of the cervix at this age, I may give you the following facts. Dr. F. Hamilton records twenty-four cases of fracture of the cervix, the average age of the patients being 60, and the youngest patient being 39. Dupuytren writes—"I have never seen a fracture of the neck of the femur in a child, and they are extremely rare in young people generally. . . . With few exceptions, the individuals under treatment in the Hôtel-Dieu are above fifty years of age." Sir Astley Cooper states that the accident rarely occurs before the age of 50.

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(a) Sedillot, of Strasbourg, has recorded two cases proving that patients suffering from dislocation into the thyroid foramen can occasionally walk well. One man did duty for years as a soldier with an unreduced dislocation of this kind, and an autopsy at length verified the diagnosis. In another instance a man walked about (lame slightly) for three days before it was diagnosed. Reduction was then effected.

Why detachments of the epiphysis in children and fractures of the cervix in young adults should be so rare, whilst fractures of the cervix are so common in the old, it is not very easy to say. The clinical fact is, however, undoubted, that in children and young adults dislocations at the hip are much more easily produced than fractures through the cervix. Mr. Canton denies that the neck of the femur in old persons is in any material degree altered in its direction as regards the shaft; and Mr. Bransby Cooper has shown that the relative proportion of earthy to animal matter is not increased in the bones of the aged; and we thus seem to lose two of the chief conditions which it is customary to allege in explanation of the fact alluded to. There can, however, be no doubt that if the earthy constituents of the bone are not altered in quantity, they are in quality, and that the bones of the aged are more brittle. In this fact of atrophic brittleness we must seek the main reason for the frequency of these fractures in old persons.

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**Fever in Newcastle-on-Tyne.**—Typhus fever, which has been fatal in some of the more neglected parts of the east end of Newcastle-on-Tyne during the winter, seems to be travelling into the more wealthy quarters of that town. Last week Dr. Watson, a highly respectable Medical Practitioner, was carried off by it, and on Monday Dr. Hawthorn, a gentleman in large practice, fell a victim to the same disease. On Monday also Mr. John Benson, a Town Councillor, and a gentleman taking a very prominent part in the public movements of the town, died of typhus fever, after a very few days' illness.

**Fever in Cheshire.**—A correspondent of the *Guardian* newspaper, signing himself H. R. B., reports an outbreak of fever at Buglawton, Cheshire. He writes:—"A month ago we had four or five cases, the next week perhaps twenty, last week above eighty, and now above one hundred. Our silk mills appear to be poisoned with the infection. One after another whole rows of young workmen and workwomen are carried out of the mills in a fainting and prostrate condition. I shall be very much obliged if any reader will kindly inform me of the best way of disinfecting mills and dwellings." The fever is said to be typhus. He states that the employment of wine, brandy, and stimulants has not been attended with favourable results.

## ORIGINAL COMMUNICATIONS.

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# ON THE FORMATION OF ANEURISM IN CONNEXION WITH EMBOLISM OR WITH THROMBOSIS OF AN ARTERY.

By JOHN W. OGLE, M.D., F.R.C.P.,
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In the summer of 1855, whilst considering some cases of acute rheumatic fever in our Hospital, in which the loud cardiac valvular bruit that unmistakeably came on during the course of the disease entirely vanished, the *rationale* of this event engaged the attention of myself and others working in the wards. In the cases alluded to it appeared to me to be most probable that the bruit had been produced by the deposition of fibrine from the blood on the valvular apparatus of the heart,(a) and that its disappearance resulted from the final removal of the precipitate by the force of the blood-stream, which, after undergoing the necessary changes (or, in the language of histologists, the necessary involution), had decayed, become diffluent, and again been re-absorbed or incorporated with the blood, inducing no ultimate evil effect.(b) Such an interpretation was quite in accordance with what we know of the molecular transformations or retrogressive metamorphoses which often occur in coagula of blood formed under some conditions in arteries and veins, in the conical obturating clot or thrombus consequent upon the ligation or continued pressure of blood-vessels, and in fibrinous effusions in various parts of the body. Wishing to try how far the possibility of the disintegration and removal of fibrinous masses which have been liberated into the general blood-current could be determined by experimental research, I resolved to seek the opportunity of artificially injecting portions of fibrine into the arteries of some animal, and of killing it after a certain time for the purpose of discovering what had become of the injected material. Accordingly, having prepared a sufficient quantity of fibrine (partially drying and comminuting it) removed from the interior of an aneurism, by the kind assistance of Prof. Gamgee, I performed the experiment of introducing it low down into the ascending aorta of an ass, so that, if possible, it should reach the left ventricle of the heart. The following are the notes which I possess of this procedure, recorded at the time of observation, and bearing date December 14, 1855:—

"The operation was performed at 11.30 a.m., the fibrine, by means of a long flexible tube arranged for the purpose, being passed down one carotid artery as far as the heart. A quarter of an hour afterwards there was much quivering of the muscles of the neck, body, and limbs. Both pupils were rather contracted, but equal in size. The heart's sounds were natural, its action rapid, and the respiratory movements quickened. The pulse at the jaw was indistinct and uncertain. At a quarter past 4 p.m. the animal looked dull, but the appetite was good, and it had eaten a quarter of a peck of bran. The respiration was normal, but the pulse was rapid and very indistinct; the valvular sounds of the heart were somewhat confused. After this the animal progressed satisfactorily, and eventually became in all respects well; the wound healed, and in twenty-one days it was killed for the purpose of examining the various organs. The wound of the artery was found to have quite closed and healed, and the heart, lungs, and every part of the animal was found healthy, *excepting one branch of a mesenteric artery, which was found to be the seat of an aneurism*, in which one or two strongyli were coiled up."

Whatever the relation may have been between the setting free of the fibrinous masses into the blood-current and the disease of the mesenteric artery of the ass, the result of this experiment led forthwith to the suggestion in my mind that in man a not uncommon cause of so-called spontaneous aneurism in the smaller arteries might be the impaction of coagulated fibrine in the canal of the artery, whether, on the one hand, such mass of fibrine may have been carried thither, having previously been dislodged from the surface of the valves or lining membrane of one of the cavities of the heart, or, on the other hand, may have been originally deposited from the blood (owing, it may be, to its stagnation, determined by some local cause, or to disease of the vessel, etc.), and formed at the portion of the artery affected. (c) Reflection has since strengthened this suggestion.

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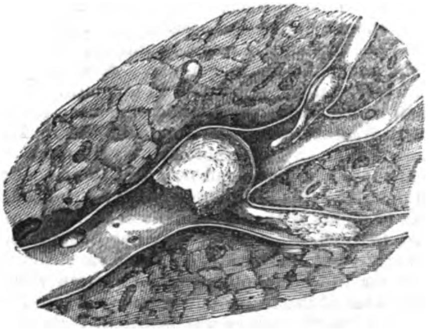
(a) I am aware that in some cases other explanation of the subsidence and removal of endo-cardiac murmurs which supervene during the progress of rheumatic fever has been offered.

(b) Admitting the possibility of the complete removal, without subsequent detriment, of such fibrinous masses from the valvular apparatus as give rise to endo-cardiac murmurs, it is very clear that in certain instances at least the gravity of prognosis which attends cases of rheumatic fever complicated by cardiac murmurs must be modified.

Let me suppose, for instance, that a mass of solidified fibrine becomes migratory, dislocated from its connection with the inner surface of the heart (or other part of the arterial system,—it may even be from the interior of an aneurism), and driven centrifugally to a part of some vessel where it becomes arrested and fixed, the constant pressure of the blood *a tergô* cannot fail (whilst wedging the mass more firmly in the blood-vessel) to have a tendency to dilate the yielding walls of the vessel, as well at the part exactly corresponding to the plug as on the proximal side of the plug; and this will be in proportion to the completeness with which the canal is occluded, and resistance offered to the impulsion of the blood, until, of course, collateral circulation is established. Such a dilatation of an artery in connection with embolism I have occasionally observed in post-mortem examinations. It is incidentally mentioned by Mr. Shaw in a case of obstruction of the right middle cerebral artery, related at page 34 of the sixth volume of the London Pathological Society's *Transactions*. Mr. Shaw there describes the artery as being obstructed "by a firm white substance," "*causing it to be stretched to about a third above its usual size.*" This condition is also well figured in the same *Transactions*, volume ix., page 93, in connection with a case described by Mr. Callender of clots in the pulmonary artery; and by that gentleman's kindness I am enabled here to reproduce the woodcut showing the dilatation of the bloodvessel at two parts where plugged up by fibrinous masses.



Now, assuming that the entire calibre of the artery is not quite occluded by the fibrinous mass, but that the passage of a certain amount of blood is permitted; or should the calibre of the tube have been completely filled up, supposing that the blood has subsequently forced its way *through* the plug (I here allude to the well-known process of tunnelling, so-called) or *alongside* of it, still the onward current of the blood, tending to widen the aperture for its transit, acting in a lateral direction,(d) will dilate yet more the vessel at the seat of the plug. This dilatation progressing, the disturbance of equilibrium between the force of the circulating fluid and the arterial walls augmenting, a disposition to paralysis of the coats of the vessel from over-distension and prolonged pressure, and consequent loss of contractility and elasticity, must ensue (especially if the size of the plug is maintained or increased by fresh exogenous accretions of fibrin from the surrounding blood); and this the more if the parietes of the vessel become structurally affected by actions resulting from adhesion of the plug to its inner surface and organic fusion therewith, or again if the tunics of the vessel have been previously diseased owing to their occupation by atheroma, or calcareous, or oily material. Of course, the tendency to dilatation or the formation of aneurism would be proportionate to the yielding character of surrounding structures and their looseness of connection.

Such is the process to which I have conceived the formation of aneurisms may, in certain cases, and chiefly in small arterial trunks, especially those of the viscera, be referred; and this, to my mind, has specially seemed to apply to the formation of aneurisms on the intra-cranial and the coronary or cardiac arteries. I have repeatedly been struck in considering such cases with the immunity from other disease which the affected vessel showed; and, in truth, in any instance wherein a single non-traumatic aneurism in any small artery exists (especially if it be from its position particularly free from liability to outward injury)(e) no disease of the coats of this, or, perhaps, of any other arterial vessel existing, we find it a puzzling matter to offer any plausible account of its production. Of such conditions we have one or two instances in the St. George's Hospital Pathological Museum. Thus preparation No. 129, series vi., shows an aneurism of the posterior tibial artery full of laminated coagulum, whose walls are remarkably smooth and healthy. The patient died with symptoms of *heart disease*, and after death the aortic and mitral valve-flaps were found to have extensive fibrinous deposits attached to them. Another case is the one, which I have previously quoted in a foot-note, of aneurism of the superior mesenteric artery, in which similar deposits were found on the same cardiac valves. (See preparation 115 in the same series.)

I cannot help thinking that in proportion as an aneurism occurs in a vessel which elsewhere and in every way is quite natural, and at a part where bifurcation exists, or subsidiary branches are given off (a part—*i.e.*, at which fibrinous masses would most likely be arrested in their transit), or in a subject free from other lesions of the arterial system, and of an age and sex at which aneurismal formations are least wont to appear—I say in proportion as these conditions obtain, I cannot help thinking that we have sufficiently reasonable grounds for conjecturing that a fibrinous plug, embolic or thrombic, may have been the ground of the mischief. This position would also be strengthened by evidence that the valvular apparatus or some part of the inner surface of the heart had been the seat of fibrinous deposit, or that the patient had been the subject of rheumatic fever.

I have ventured to make the above suggestions regarding the possible mode of formation of aneurisms, and to commend them to the attention of pathologists, hoping that the observations and experience of others may correct or substantiate them.

## NOTE ON ACUPRESSURE.

By Mr. LAWSON TAIT.

A few days ago Sir James Simpson showed me a case where he had removed the breast for a scirrhus tumour. The result is so successful that I do not remember ever having seen or heard of its parallel. The patient was only 28 years of age, and very cachectic-looking before the operation—indeed, on the whole, a rather unlikely subject for a large wound to heal by first intention.

The operation differed in some respects from the ordinary method of excision of the mammæ. In the first place, the direction of the wound was at right angles to the direction of the fibres of the great pectoral muscle, while most operators prefer that the direction of the wound should be parallel with that of those fibres. Why this latter should be the usually adopted method I have often asked, and always met with the answer—"Because in that direction the pectoral muscles can exert no evil influence by tearing up adhesions." It does not seem likely that a patient with such a large wound in her breast will exert her pectoral muscles to any great extent; and although I have watched often for it, I never saw any spontaneous movements in them under such circumstances. Besides, the result of this case will show that such a reason is useless; while the direction of the wound across the muscular fibres affords exit at the depending end for the oozing, and prevents the large baggy wound from remaining full of fluid, which rapidly decomposes. This seems to me an important point in this case; but there were others more important—

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(c) I alluded to the experiment on the ass described above, and to the impression which it left upon my mind, when relating to the Pathological Society a case of aneurism of the superior mesenteric artery May 5, 1857. (See the *Transactions* of the Society, vol. viii., page 168.) In this case, in addition to the aneurism discovered, soft recently-formed granulations of fibrine were found attached to the aortic and mitral valve-flaps of the heart.

(d) An action by the concurrence of which, in part at least, an aneurism, under certain conditions, tends to burst externally.

(e) The *Transactions* of our London Pathological Society contain the records of two cases of aneurism bursting *in the substance* of the brain, one being the case of an aneurism of the posterior cerebral artery, related by Dr. V. der Byl, vol. viii., p. 129; the other of the right superior cerebellar artery, related by Dr. Bristowe, vol. x., p. 4. Dr. Crisp also relates a case of aneurism of the right anterior cerebral artery which burst in the anterior lobe of the brain. (See his work on the Bloodvessels, 1847, p. 165.)

viz., acupressure was employed. The stitches were deep, being introduced by a handled needle, and embracing a large amount of muscular substance. Again, there was no dressing employed—none whatever, and the wound *was not allowed to be fingered:* the only interference with it being that when it felt hot or uncomfortable it was blown upon gently by an ordinary pair of bellows. It was on the thirteenth day that I saw it, and the wound then was perfectly healed—glued together by *primary adhesion* in the strictest sense of the term; and there never had been a drop of pus. Some one who saw it said that he thought it would have been the better for a few sloughs; but had the lady been his wife, I question if this would have been his opinion.

Last week there occurred a case of scalp wound, where the temporal artery was divided by a blow from a paraffin lamp. The wound was closed with two stitches, and the hæmorrhage was checked by a long needle. The wound was healed and the man at his work on the second day, when, as the needle was annoying him by catching in his cap, he removed it himself, without the occurrence of any secondary hæmorrhage. The pressure exerted by the needle in this case must have been very slight, as there was a large extent of skin involved, fully an inch from the entrance of the needle to its exit.

On Saturday night another wound of a branch of the temporal turned up, and was secured in the usual way. I removed the needle in fifteen hours, when the wound was quite closed, and it has remained so up till now.

Bathgate.

# REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

## SPECIAL REPORT ON THE EXISTING TREATMENT OF FRACTURES IN THE LONDON HOSPITALS.

In reporting on the treatment of fractures, no independent description of the various forms of splints need be given. These will be most conveniently noticed under the head of the particular fractures for which they are required. There are, however, two important accessories in the management of fractures which may be referred to in our first paper—namely, beds, and the so-called stiff apparatus.

That a mechanical contrivance to come into general use must be simple in its construction and easy of application is well illustrated by what is at present the fact with respect to beds (and we may add, in passing, to splints also) in the Hospitals of London.

It is remarkable, and, at the same time, to those who are engaged in practice where what is elaborate cannot be secured, reassuring, that although several of the Hospitals are in no way pinched for funds, although any kind of bed or apparatus could be had almost for the asking, there are very few instances indeed in which any but the common French bedstead(a), or the simplest forms of iron or wood splints are in use. This but indorses Mr. Erichsen's statement that "a Surgeon of ordinary ingenuity and mechanical skill may be fully prepared to treat successfully every fracture to which he can be called by having at hand a smooth deal plank half an inch in thickness, a sheet of gutta-percha, undressed sole-leather, or paste-board, to cut into splints as required."(b)

### BEDS.

It is often very difficult in private practice to get a suitable bed on which to place a patient who has sustained a fracture. The ordinary sleeping beds, which come first to hand, are wholly unfit for the purpose. Feather beds are not, as far as we have seen, used in a single London Hospital. A sufficient reason for this, no doubt, is that they are very expensive; but were they cheap they would be equally discarded. A good fracture-bed (1) must be firm, so that it does not sink in under the weight of the patient; (2) it must not become knotty or uneven. It must remain in such a state that the patient can lie as well in one part of it as another.

1. The firmness of a bed depends chiefly on what supports it beneath. We find three contrivances in common use:—

(*a*) Strong webbing tightly strained to the framework of the bedstead by strong cordage. We venture to think this is open to objection. It is liable to yield to some degree under the weight of a heavy person, so that the bed 'sags' in the middle.

(*b*) Iron laths placed longitudinally and transversely.

(*c*) Wood laths lying transversely. These last two are very satisfactory—unyielding, durable, and easily cleaned. It is usual where the webbing is employed to place a board, like the spare leaf of a dining table, under the mattress, to secure the requisite firmness.

2. The evenness of a bed rests with the material of which it is made. The following substances are in use:—

(*a*) Horsehair.—This is allowed to be the best of all. It does not readily become knotty; it has a considerable resiliency under pressure; it is durable, and it can be cleaned. It is, however, expensive: an ordinary Hospital horsehair mattrass, we are told, costs 30s.

(*b*) Flock.—This is the material of which a very great majority of beds are made. It has the advantage of being cheap: a flock bed costs, without the tick, about 5s. 6d.

(*c*) In a few instances straw is used for ordinary cases, but there is frequently placed above the straw mattress a thin flock bed.

It is a curious fact, which all may not have observed, that perspiration from a person collects, not on the upper surface of the bed, next the patient, but on the under aspect, where it may sometimes be seen standing in drops. It is therefore necessary, in examining the condition of a mattress, to look to its under surface. The upper half-thickness, of which we should judge by passing the hand beneath the patient, may be dry and in a fair condition, while the under half is wet and unfit for longer use. A stout person, who perspires freely, will rot a mattress in a month.

We shall now describe the method of making up a bed for a patient with fracture which we found in use in Mr. Paget's accident ward at St. Bartholomew's Hospital. We are aware that those who have had fractures to manage will have mastered details of this kind for themselves; indeed, we must often refer to points with which many readers are quite familiar; even to such, however, it may not be uninteresting to know exactly what means are, by those in authority, considered best for the accomplishment of certain ends. In the case of fractures of the femur and of many severe fractures of other bones, a board, such as was mentioned above, is placed beneath the mattress. The mattress is of horsehair. Upon this are placed a blanket and a sheet. The sheet is very carefully strained tight, and tucked in as far as possible beneath the mattress, in order that there may be no 'rucks' or 'creases' in it. This seemingly trivial matter is of great importance—the starting-point of a bed sore has frequently been a crease or a coarse seam in the sheet. Covering the patient are a sheet, blankets according to the season, and a coverlet. Pillows are sparingly allowed: they are single, and only wide enough for the head and neck. Patients, if left to themselves, always place their shoulders upon the pillow: when this is the case, the body is in a sloping posture, and so has a tendency to slide down towards the foot of the bed. It would probably be an advantage if it could be made customary for patients to dispense altogether with pillows.

In many instances it is desirable to change the bottom sheet with as little movement of the patient as possible. It may be done thus:—The sheet to be removed is "untucked" at one side of the bed and rolled inwards close up to the side of the body. The fresh sheet is rolled up for half its width, after the fashion of a window blind (or it may be narrowly folded up), and the roll is placed side by side with that of the soiled sheet. The two rolls together are then carefully and gradually pushed beneath the patient, when the one can be removed while the other is put in order.

The way of managing the action of the bowels when the patient is not in a condition to sit up in bed is very important. Here Hospital nursing, where plenty of help is at hand, has, as is so often the case, a great advantage over that in private houses, where everything must be done by one person. In some of the Hospitals the evacuation is passed into a draw-sheet, or into a hollowed-out mass of tow, which is then removed, the skin being afterwards washed and carefully dried. In the generality of cases, however, some kind of bed-pan is used. This utensil, which is best constructed in the form of a wedge, should be as shallow as possible, since it can then be readily slipped into place when the patient is slightly rolled over upon the side. The "Liverpool slipper" and a very good pan made by Weiss are constructed upon this principle.

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(a) We shall notice the beds named respectively after Luke, Earle, and Arnott when we refer to the fractures for which they are most often used.

(b) "Science and Art of Surgery," 1861, p. 204.

### STIFF APPARATUS.

We find that there are in the practice of different Surgeons three distinct periods at which fractures are put up in the stiff apparatus. 1. As soon as possible after the accident. This applies, however, with the great majority of Surgeons(c), only to the most uncomplicated cases, in which there is simply a breaking of the bone, with little or no displacement of the fragments, and little injury of the soft parts. 2. After the lapse of ten days or a fortnight (splints having in the meantime been used), when all spasmodic action of the muscles has passed off, and all swelling has subsided. 3. At the end of a month or five weeks in the case of the bones of the leg, after a longer interval in the case of the femur, and when union is becoming tolerably firm. There can be no doubt that the stiff apparatus is perfectly adapted for simple fractures of single bones, as the fibula, and also for the more uncomplicated fractures of two contiguous bones, such as the tibia and fibula.

There are some details in the application and management of the stiff apparatus, whatever material is used in making it, which we may refer to. The limb should be washed with soap and water, thoroughly dried, and dusted with starch powder, in order that the skin may be in as good a state as possible to resist the ill effects of long-confined perspiration. A thick sheet of cotton wool, or a flannel roller, in one or two layers as the case may be, should be applied first as a padding beneath the stiff splint. As few turns or reverses as possible should be made in laying on the bandage containing the stiffening material. These, if present, are apt to form ridges, which are a source of irritation to the parts beneath. If the free edge of the bandage is stiffened it is likely to excoriate the skin, especially above the heel; a margin of half an inch should, therefore, be left unstiffened. In some instances the stiff splint is cut up as soon as it has "set," and is afterwards reapplied by means of straps as a bandage. Both the glue and the starch casing mentioned below are readily so managed. This method, although it has the advantage of allowing a more close watching of the repair of the fracture, is not generally followed; the splint is commonly left entire as at first applied. Seutin's pliers (d) are the most convenient instrument with which to cut up the plaster-of-Paris bandage, but strong scissors, or an old pair of cutting bone forceps answer almost equally well. It is worth mentioning that it is as well to introduce a broad tape longitudinally under the first or flannel bandage next the skin, with its ends projecting above and below, so that when the casing is slit up, either with stout scissors or Seutin's shears, the skin may not be wounded.

Four materials chiefly are used in making a stiff apparatus—namely, plaster of Paris, gum and chalk, starch, and glue. *Plaster of Paris* is recommended by the following circumstances:—It is very cheap—good plaster costs 6s. per cwt.; it keeps good if placed in a *dry* atmosphere for almost any time; it forms a very strong and light splint, and it "sets" very quickly. A great deal of the success which attends the use of this apparatus turns on (*a*) the material of which the bandage is made,—this should be coarse soft muslin, or cotton of very open texture; common flannel or cotton rollers are unsuitable; (*b*) the "preparation" of the bandage,—this consists of rubbing as much as possible of the dry plaster powder into the meshes of the bandage through its whole extent. The application is thus made:—One bowl of cold water and another of dry plaster being at hand, two or three feet of the prepared bandage are evenly rolled upon the limb in a single layer; this applied portion is then thoroughly wetted, and some of the dry powder, taken in the hand, is well rubbed into it; more bandage is applied, and the same process of wetting and rubbing in of fresh plaster is gone through. A single thickness of the bandage is of sufficient strength in many cases, but more may be added if it is thought desirable.

*Gum and Chalk.*—The mixture is readily formed by making equal parts of powdered gum and finely-powdered prepared chalk into the consistence of thick batter by the gradual addition of water; or powdered chalk may be stirred to the requisite amount into a moderately thick solution of gum in water. It is applied by being painted into the meshes of an ordinary roller.

The starch bandage, as at present in very common use, is so fully described by Mr. Erichsen(e) that we need not specially dwell on it.

*Glue.*—This is the best commercial French glue. It is first softened by being soaked in cold water, and is afterwards heated over the fire till it liquifies. A fifth or an eighth part of methylated spirit is added in order that it may "set" more rapidly. This substance makes a very good stiff splint—light, strong, durable, and when carefully put on, very presentable in appearance.

Leather and gutta percha are in very general use for the lighter kinds of splints. We need only say of leather that it is frequently not soaked long enough. It should be kept in cold water for several days, or in moderately warm water for some hours before it is used. It will then be thoroughly softened, and rendered mobile in its texture, so that it can be turned evenly round a prominence, or be fitted to an angle or into a depression. Gutta percha should be of sufficient substance. A good deal that is in the market for other purposes is not stout enough for splints; that which answers best is about one-eighth of an inch in thickness. In making large splints of either of these substances—as, for example, for hip disease in children—holes may be here and there punched to allow of ventilation.

A "leather-felt" splint (a patent of Mr. Hides, of Mortimer-street) has lately been introduced into some of the Hospitals. It is made of thick felt lined with wash-leather. The felt, being first moulded to the limb, is stiffened by the application to it of a mixture which is sold with it. It is a very convenient material, and sets very quickly.

E. B., F. H. M.

(To be continued.)

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MEDICAL TIMES AND GAZETTE.

SATURDAY, FEBRUARY 24.

## PROFESSOR GAMGEE ON THE CATTLE PLAGUE.

We recently alluded to the investigations that were being carried on with the object of making out, as far as possible, all that could be of the nature of Rinderpest. We have now to notice the labours up to the present in this direction of no less an authority than Professor Gamgee. The volume(f) he publishes containing the results of his investigations appears most opportunely at a time when the public acts of the country are rendering a tardy testimony to the sound wisdom and clear foresight of the measures he has so long advocated in the face of so much opposition.

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(c) Mr. Erichsen ("Science and Art of Surgery," 1864, p. 229) says:—"During many years, however, I have followed Seutin's plan in some hundreds of fractures of all kinds, putting the limb up in the starched apparatus *immediately* after the reduction of the fracture, and have found the practice an extremely useful one, even in fractures of the thigh. . ." We shall hope to give some results of Mr. Erichsen's practice when we notice particular fractures.

(d) Erichsen's Surgery, p. 205.

(e) "Science and Art of Surgery," p. 205.

(f) "The Cattle Plague." By John Gamgee, Principal of the Alber Veterinary College, London, etc., etc. Pp. 859. London: Robert Hardwicke. 1866.

The work is divided into three parts; of which, however, the first and second only refer immediately to the cattle plague. The official Reports of the International Veterinary Congresses held, one in Hamburg in 1863, and the other in Vienna in 1865, form the third part of the work. These Reports, which are published for the first time in this country, contain much matter referring to the prevention of the spread of Rinderpest.

A definition of the disease opens the first part. Cattle plague is a specific, malignant, and highly contagious fever; it never originates spontaneously beyond the Russian frontiers, and within these it is probably not generated at any time *de novo*. It is essentially a bovine disease; it never attacks any animal more than once. Its period of incubation does not exceed ten days. Among the symptoms is mentioned fever-heat preceding all other symptoms. The skin affection is defined as a "scaly eruption on the back and loins, and a characteristic eruption on the inside of the thighs and on the mammæ."

Bearing on the statement that it is a specific malignant fever, we find these passages at p. 80 in the admirable dissertation on the nature of the disease:—"The cattle plague is not a local disorder; it is not an affection of any special organ or group of organs. It is a systemic disease—a fever in which the mucous membranes and skin are specially implicated. . . . It is, however, something different, and something more than an inflammation of the breathing, or digestive, or generative systems. The cell growth, fatty and molecular disintegrations, desquamation, and discharge of the epithelial and epidermic cells, are typical of this disease. In this way it can only be classified amongst general diseases, with fevers of a specific kind, and which originate from specific causes, run a definite course, manifest a singular periodicity in their progress, and have a marked tendency to destroy life."

At page 79 we are told that it never attacks men, horses, dogs, and the great majority of warm-blooded animals. The poison does pass through the system of some ruminants besides those of the bovine race, but it appears to be deprived of much of its force until it returns to members of the ox-tribe. Concerning the proposition that from some peculiarities of the soil of the Steppes, or of the Russian breeds of cattle the cattle plague may be generated *de novo*, the author remarks, when treating of the causes of the disease, that "as yet no one has demonstrated that in the Steppes cattle can be placed under such circumstances, apart from being subjected to the influence of contagion, as can induce the disorder;" that "the disease is always there, roving to and fro, winter and summer, amongst cattle of all kinds, sometimes killing many, and at other times attacking few." "There are periods of recrudescence," he states, "which are to a great extent accounted for by periodic and extraordinary movements of stock, as in times of war or by an activated cattle trade; but neither cold nor heat, rain nor drought, storms nor severe frosts, affect the propagation of the malady, except in so far as they affect the movements of people and the traffic in cattle."

We have mentioned among the characters selected by the author for defining the disease fever-heat preceding all other symptoms. We have in this symptom another proof of the value of the use of the thermometer in disease, to which we have directed our readers' attention elsewhere. To the experimental inquiries of Dr. Arthur Gamgee and the author of the work before us we believe we owe our first knowledge of the important fact that a rise in the temperature of the animal attacked with Rinderpest takes place, and that before any other symptom is manifested. The subject is of so much interest, and not only so, but of so much practical importance, that we give the following extract from the author's remarks:

"A delicate thermometer indicates an elevation of temperature in the earliest stage of the disease, varying from 1° to 4° Fahr. The elevation precedes the acceleration of the pulse and every other symptom. I have usually inserted the bulb, and about two inches of the stem, of the thermometer, within the vagina or rectum, and kept it in a couple of minutes, using the precaution of dipping the instrument in water at 100° Fahr. between each observation, so as to prevent discrepancies. When one of Casella's registering thermometers is used, the warm water into which the thermometer is dipped should not exceed 90° Fahr., and I commonly add a little Condy's fluid to the water so as to disinfect the instrument. The normal temperature varies from 100° to 101°, and may rise to 102°. It is not uncommon to find it in healthy animals varying one or two degrees at different periods of the day, so that reliable observations can only be made on a number of cattle at the same time, obeying in all the same conditions as to the instrument used, the part in which the observation is made, whether it be the rectum or vagina, and the lengh of time the instrument is inserted, &c. Sometimes, when animals are excited on a hot day, and are hurried into a shed from a field, the thermometer may rise one or two-tenths more than usual; but if a whole stock be examined, any animals suffering, however slightly, from the disease, indicate an elevation amounting even to 5° or 6°. Such an exaltation of temperature is generally incompatible with health, and the only exception yet known to this rule is that observed during œstrum or sexual excitement; the temperature then rises 3° or 4°, and the same may be seen just after parturition. It is probably preferable to introduce the thermometer into the rectum, as animals are restive when the bulb is inserted in the vagina."

In the section treating of the symptoms, we read at p. 50, that "in favourable cases we find a cutaneous eruption on various parts;" that "we sometimes find a desquamation of the epidermis which indicates a morbid process of the skin, similar to that affecting the mucous membranes;" that "the surface of the skin over the neck and withers is often moist or greasy from an abundant sebaceous secretion;" that "there are no vesicles, and an entire absence, as a rule, of pustules."

The changes undergone by the blood, milk, and urine in Rinderpest, according to the experiments of Dr. Arthur Gamgee, made some months ago, form a valuable part of the book. From these experiments it appears that the amount of serum is remarkably diminished, the amount of fibrin and corpuscles is increased; that of the latter in a very decided manner. The great increase in the quantity of the corpuscles Dr. Gamgee thinks can only partially be accounted for. It seems to us, however, that the increase of the corpuscles, and the diminution of the serum, *in a given quantity of blood*, are only different expressions of the same fact—an altered ratio of one of these matters to the other. It would require us to know the total amount of blood in the animal's body to enable us to decide whether the absolute quantity of corpuscles had been increased or diminished by the disease.

The examination of the milk showed principally a remarkable diminution in the amount of sugar, and an enormous increase of butter. These results, we may remark, must be taken in connection with the fact that the total yield of evening milk was only a few ounces. The conclusion to be drawn is, that in this disease the secretion of sugar is checked the most, that of butter the least, of the ingredients of milk.

As he could not obtain the whole of the urine passed in twenty-four hours, Dr. Gamgee has not been able to ascertain the actual quantities of the different constituents of this fluid passed daily. He records the presence of albumen in varying quantity, of bile-colouring matters, and of traces of bile-acids.

In an addendum to the section on the nature of the disease, the author gives a detailed confutation of Dr. Murchison's small-pox theory. A full account of the preventive and curative treatments that have been proposed are also given; but we need hardly add that the author has no belief that any successful method has been, or is likely to be, discovered.

The section on the prevention of the cattle plague gives a full account of the measures to be adopted to arrest its spread, and a long and important account of the effects of inoculation. The Government measures for the prevention of cattle plague and the First Report of the Commissioners complete the first part.

Part II. gives a full and exhaustive history of the cattle plague, both in past times and during its present outbreak in this country. The history of the Revel cargo is given, and on such evidence as will surely satisfy any impartial reader, that by this cargo the disease was introduced into this country.

The account which we have given can afford but an imperfect notion of the valuable contents of this volume; but we have already exceeded the limits of our space. We confidently recommend it as a contribution to the history of Steppe-murrain, and a record of its present visitation to this country, not likely to be surpassed.

## NOVEL PHASE OF MEDICINE.

We frequently hear it stated in extra-professional circles that Medical men are not men of business—that a Professional training is a bar to success in the mercantile world—that if Doctors are taken out of their Profession and placed in the mart or exchange they will generally be found unfitted for pushing their way and making their fortunes by commerce or speculation. We own that we have felt, on the whole, flattered by such criticisms. A profession, we have said, is certainly not a trade. It exists for higher ends than mere money-making. It cultivates higher intellectual powers than are required for calculating profits, and appeals to higher moral faculties than are of necessity developed in the shop or counting-house. Certain facts, however, are from time to time forced upon public notice which seem to prove that the general opinion which we have quoted, like many other general opinions, may be quite wrong, and that our estimate of the character which Medical training and practice develope is becoming antiquated and Quixotic. So far from a Medical man not being a good man of business, he is found in actual practice to be so sharp that those acute bodies, the railway companies, avail themselves of his talents to conduct the delicate monetary arrangements which their misfortunes may render necessary, between those of Her Majesty's subjects whom they have mangled or shaken and their shareholders, in preference to the abilities of subtle lawyers or specially trained agents. Take, for instance, the report of a trial which we publish this week under the head of "Legal Intelligence." What a perfect picture of commercial art it exhibits, the artist being a diploma'd Surgeon. The evidence gives us the Medical man who "represents" the Midland Railway pursuing his avocations. It is Sunday, and his ministrations, combining those of agent and Doctor, take a benevolent tinge, befitting the character of the day. His errand is to one of the victims of the Colney Hatch accident. Storing with blank cheques his pocket-book, which he appears to use sometimes as an instrument of diagnosis and sometimes, like Mr. Ralph Nickleby did his cash-box, as a delicate allurement, he calls on the patient. In what honeyed terms he introduces the subject of compensation; how, to pave the way, he assures the patient of the deep sympathy which the company, collectively and individually, feel for his sufferings; and then, after the requisite degree of softening is supposed to have been produced, how he gently slides into the subject which he has at heart. It is only for the sake of the peace of mind of the sufferer—only for the sake of the marvellous effect that it must certainly have in hastening his recovery, that he, as a Medical man, ventures to allude to it. Then lightly descending from his Professional eminence, how gracefully and condescendingly he takes his stand on the same level with the Custom-house officer. He touchingly appeals to their common humanity, and talks to him as "man to man." He, as a Surgeon, keeps a carriage; the railway company keep a number; if his carriage had knocked out the poor man's teeth, what compensation would be due? The responsibilities of the railway company are exactly those of his own coachman, and on this fair and honest basis between "man and man" why could they not come to an agreement? To our minds, the whole thing shows a masterly acquaintance not only with the laws of commerce, but with those of diplomacy. As Medical critics, we might demur to the statement that injury of the spine is always accompanied by fixed pain, and that impairment of its functions is always followed by paralysis; but any mere scientific misgiving of this sort is completely overcome by our admiration for the transcendent genius for *finesse* displayed by the Medical representative of the Midland Railway.

## THE THERMOMETER IN DISEASE.

It has been seen that the only constant symptom of fever is preternatural heat, and that the other symptoms are calculated to mislead us in many cases. A disease in one part of its course may have strongly marked and characteristic symptoms. These may all disappear except the preternatural heat, and thus, unless the temperature be noted, a very erroneous impression regarding the condition of the patient will be formed. This sometimes occurs in ague.

The following case illustrates our remarks:—A young man, 18 years of age, was admitted into Hospital. He suffered from well-marked tertian ague. The symptoms of the cold, hot, and sweating stages were strongly developed. His spleen was greatly enlarged. He was very anæmic. The fits occurred in the middle of the day and lasted several hours. After resting in bed a few days all his symptoms disappeared, and at no period of the day did he feel ill. His appetite, which had been bad, returned. He got up daily. He was convinced that the fits had ceased. In a few days' time he was kept in bed, that his temperature might be observed. This was found to rise as formerly, and to reach a point equal to that attained when the symptoms were all present and were well marked. Many such cases are on record. Quinine not unfrequently disassociates the symptoms from the disease, while the fever, tested by the thermometer, still continues. Sometimes it makes the disease very irregular in its course, so that it conforms neither to the quotidian, tertian, nor quartan type.

Such elevation of the temperature with the absence of the other symptoms in ague, continues for a considerable time. Probably this fact partly accounts for those cases, apparently cured, in which, however, on a return to work, exposure to the weather, or to other causes, the symptoms return.

It is obvious, therefore, that the temperature is the only true guide to the condition of the patient, and that the patient must be kept under treatment if the temperature continues to rise above the standard of health.

Sometimes quinine, when given to persons ill with ague, removes the symptoms and greatly lessens the daily elevation of the temperature. But some elevation occurs. In such cases from slight causes, the disease returns with its original severity. Such patients cannot be pronounced to be cured.

What amount of elevation is sufficient to show that the disease continues? It is necessary to remember that in *health* there occurs a daily elevation of the temperature. Such an elevation often amounts to 2° or 2·5° Fah. The minimum temperature often falls to 97°, and the maximum rises to 99° or 99·5° Fah. The daily variations of the temperature in health are greater in young people than in adults.

The lowest temperature is reached usually between 12 p.m. and 4 a.m. After the latter hour the temperature again rises, and reaches its maximum usually about 12 at noon. Hence a mere rise does not prove the continuance of the ague. It must attain a point higher than the maximum temperature of health. If a temperature of 100° or higher be marked by the thermometer, the patient is not cured.

The following case shows that a frequent pulse (which, apart from the temperature, is the most important symptom) cannot be relied on as evidence of fever:—

A girl, aged 18, was admitted into Hospital in the following condition :—She lay in an apparently insensible state; when roused, she would answer questions; she spoke in a whisper; her lips and teeth were covered with sordes; her tongue was dry and brown; the pulse beat 160 in the minute; she had a peculiar movement of both hands, which disappeared when she slept. From the peculiarity of her manner, from the whispering tone of her voice, and the strange movement of her hands, hysteria was suspected. But was this the only condition present? Did the frequent pulse, the dry lips and tongue, and apparent prostration indicate fever? By the aid of the thermometer her temperature was proved to be normal, and thus all febrile diseases were excluded. By the use of galvanism she was at once cured, and the pulse was reduced greatly in frequency, though it continued to beat about 108 in the minute for some days longer.

On the other hand, a pulse of the frequency of health by no means proves that fever is absent. Thus, not unfrequently whilst the pulse beats with the frequency of health the temperature may be 103° or 105° Fah.

A case has lately been narrated by Dr. F. W. Gibson where the pulse beat only 52 in the minute, and the temperature of the body was judged by the Physician in attendance, who relied on his touch, to be normal. By the thermometer this was found to be 103° Fah. This was a case of acute jaundice.

The chief causes of a frequent pulse are,—1st, General weakness; 2nd, Fever. There is no character of the pulse by which it can be told to which of these causes the increase in frequency is due. When elevation of the temperature of the body occurs, the pulse is mostly increased in frequency. Such increase is proportionate to the amount of the elevation of the temperature; that is—the higher the temperature, the more frequent the pulse. If the pulse beat very quickly, if its increased frequency cannot be accounted for by the rise in the temperature of the body, the other cause—namely, weakness—is present, and hence information in respect of treatment is obtained.

But the frequency of the pulse is greatly dependent on age, temperament, sex, etc., and thus it is difficult to lay down exact rules respecting its relative frequency to the temperature of the body. But if, the temperature continuing the same, the pulse increases in frequency, we learn that the patient has become more prostrate, and we learn that stimulants are required.

A rapid and considerable increase of the beats of the pulse in febrile patients, while the height to which the temperature daily rises remains the same, is always a most serious symptom, and often precedes and foretels the death of the patient. We need hardly mention that the excitement caused by the visit of the Medical attendant may considerably accelerate the pulse.

The circumstances that influence the pulse are—1. The condition of the heart. 2. The condition of the arteries. 3. The amount of blood. The state of the arteries influences the size of the pulse. If there be want of tonicity the pulse is large; if, on the other hand, they are contracted, the pulse is small. The arteries generally sympathise with the general condition of the system. When this is weak, their coats are relaxed, and the pulse is large. Thus a large pulse often indicates the reverse of a vigorous condition of system. But on the heart depends the strength of the pulse; from it the blood receives its impulse.

The heart, like the arteries, sympathises with the condition of the system. When this is weak, the heart beats proportionately feebly, and the pulse, though it may be of considerable size, is easily compressed. If the system be vigorous the heart beats strongly, and the pulse is compressed and arrested with difficulty. It is, therefore, compressibility that gives us the greatest information respecting the general condition of the patient. Thus in febrile patients the two circumstances to be carefully looked to are, the relative frequency of the pulse to the temperature and its compressibility. Neither alone is to be constantly relied on; they mutually correct or confirm one another. From these two circumstances we gain most important information in respect of the prognosis and treatment of the patient—whether stimulants should be given or withheld—whether they should be given sparingly or freely. The question the Physician has to decide is—given a disease of a certain duration and intensity, has the patient sufficient strength to withstand the disease. The pulse, judged in the manner just mentioned, estimates the strength of the patient. We have seen that the temperature affords an exact measure of the intensity of the disease, and we shall find subsequently that it also gives much information in respect of the duration of the attack. The nature of the disease must also be borne in mind, as diseases of a different nature, which may produce the same degree of elevation of the temperature, may vary greatly in their danger.

It is to be hoped that the sphygmograph, by virtue of the information it will give regarding the condition of the pulse, may make our knowledge in this respect still more exact.

All of our readers will be able to call to mind the difficulty they have experienced to decide whether a patient was suffering from hysteria or was the victim of a serious disease. It is true that those most experienced can usually detect the true nature of the case. Nevertheless, cases occur where hysteria so closely simulates other disease that a diagnosis is at first impossible. Such a case has been already given. Here there were many symptoms that were suggestive that the patient was the victim of fever. But by the use of the thermometer the error made from the symptoms that were present was corrected. The instrument is often of service in other cases of hysteria.

Hysteria often simulates inflammatory disease, but the temperature of the body of persons suffering from acute inflammation is always raised. *The temperature of hysterical patients is normal.* Hence we possess a means of discriminating between these two conditions. If the temperature be normal the patient is not the subject of an acute inflammatory disease.

## THE WEEK.

### DR. RICHARDSON'S METHOD FOR LOCAL ANÆSTHESIA.

Dr. Richardson's process for local anæsthesia, first described in this journal on February 3rd of the present year, has been successfully carried out several times this week. Dr. Richardson has used it at nine operations of various kinds, and several others have had recourse to it. The operations in which it has been successful have been fistula in ano and removal of polypus from anal orifice by Mr. Gowland; phymosis, by Mr. Erichsen; incision of an abscess of the breast and eversion of a diseased nail, by Mr. H. Thomson; and removal of a tumour from the sole of the foot, by Mr. W. Adams. In the last-named case the tumour removed was about the size of a large walnut, and had been a cause of much suffering. The incision was carried round the tumour, the extent of skin surface divided being over two inches, and the dissection being carried downwards nearly to bone. The patient, a lady, thought she was conscious of the line the knife took through the skin, but said it caused no pain whatever. During the deep dissection she felt nothing at all. The results, so far, of this new method are satisfactory beyond expectation; but we learn that Dr. Richardson is still actively engaged in devising further improvements with the view specially of making the process applicable to more important operations.

### PROPOSED PENSION TO THE WIDOW OF THE LATE DR. R. D. THOMSON.

Some months ago we had the gratification of announcing to our readers that Lord Palmerston had promised to recommend Her Majesty to grant a pension to the widow of the late Dr.

R. Dundas Thomson, not as an eleemosynary gift, but as a recognition of the deceased Physician's lifelong devotion to science, and of much unpaid labour in the public service. For example,—during several years he analysed the waters supplied by the various water companies to London, and furnished the Registrar-General with the results for publication in his Weekly Returns. A better thing for the public health was never done; and these analyses are now continued both by Professor Frankland, on behalf of the Registrar-General, and by Dr. Letheby, on behalf of the Medical Officers of Health of the Metropolis. But such analyses are worth two hundred and fifty pounds per annum at a very moderate computation. We learn with regret that Earl Russell, not being, perhaps, sufficiently informed of the nature of Dr. Thomson's claim, has expressed doubts as to his ability to carry out his predecessor's good intentions; but we are sure that such of our readers as have been interested in the progress of Medical science and of sanitary reform will join us in hoping that Earl Russell will consent to pay this graceful tribute to the memory of a man whose labours benefited others more than himself.

### INDIA-RUBBER ENEMA APPARATUS.

On looking through an illustrated catalogue of Surgical and obstetrical instruments and appliances which we have received from the Messrs. Maw, we are struck with the immense advance made during the last few years in the cheapness and excellence of many articles which are indispensable to the health and comfort of invalids. Of all human inventions, there is scarce one more serviceable than the enema. Some time ago we happened to be attending an Eton boy of ten years old, the son of an eminent statesman since deceased, and proposed that he should have an enema. The child roared at the supposed indignity, when his mother said, "Don't be so silly and frightened, for I know that your papa does so every day before he goes to his office." What the particular connection between the posterior region of humanity and the brain may be we do not pretend to say; but we know that it is impossible to give undivided attention to business or study when the rectum is irritated with what it can't readily expel, and that health and comfort of mind, and body, and temper may be promoted by the simple operation of washing out with a pint of cold water(a). If this were done more frequently, we suspect that St. Mark's Hospital would lose half its patients. It is a great object, therefore, that enema apparatus should be cheap, easily worked, able to be used in private, and effective. Now, as to cheapness. A few years ago no enema apparatus could be got for less than 10s. to 20s. Now they can be had at from 3s. to 6s. Formerly, the brass syringes in common use required to be put together and taken to pieces, and required three hands for comfortable administration, whether to self or others—*i.e.*, two hands for the pump and one for the delivery pipe. Now, Higginson's india-rubber enemas are workable with one hand, and the construction requiring a simple act of expansion and contraction, like a reptile's heart. Formerly if a seedy creature, staying perhaps in a strange house, wished to perform such an act for himself, he must go to a great expense to get a "fountain reservoir" enema, which he could put into his pocket. Now, with one of Higginson's, which cost 3s. 6d, he can twist it up and put it into his pocket, and with a mere jug of water has all he requires. These are small matters, courteous reader, but a good many people's comfort depends on them nevertheless. Whilst we are on the subject, let us advise the Messrs. Maw, and all other manufacturers of enema machines, to take particular pains with that pipe which is inserted into the orifice of the bowel, for the shape of many in common use, and especially of those attached to india-rubber bottles for children, is the reverse of what it should be. They ought to be inverted cones—made of the smoothest metal, and largest at the extremity, so that when introduced through the sphincter they may not slip out readily.

### FROM ABROAD.—NULLITY OF MARRIAGE IN THE INSANE—MORTALITY AT MATERNITIES.

M Legrand du Saulle relates an interesting case in which a marriage was recently annulled by the *Cour Impériale de Paris*, in consequence of the intervention of a Medical Practitioner. M. J., formerly a captain of engineers, having at various periods of life exhibited remarkable eccentricities, when 46 years of age, after a reverse of fortune, left France for Mexico in 1860, accompanied by his servant, Eliza S. Some months after he had an attack of acute delirium, which quite shattered his faculties, so that from that time he became the victim of hallucinations of the senses and mystical ideas. Sometimes, too, he was immersed in ambitious projects, and at others, plunged into the depths of despondency, yielding like a child or a sick person. In November, 1861, he twice attempted suicide, his mental disturbance still continuing after he had recovered from the effects of these attempts. In less than a month after he was married at Mexico to Eliza S., who, not satisfied with a legacy of 40,000 fr., bequeathed by a prior will, induced him to present her with a marriage gift of 25,000 fr., and eventually to declare her universal legatee. Immediately after the marriage, Dr. Schultz applied at the French Legation at Mexico, declaring that he had long attended M. J., suffering from insanity, with threatening paralysis, and that in his opinion advantage had been taken of his state of mind to induce him to marry his servant, against which marriage he consequently entered this protest. In January, 1862, M. J. resolved to return to France, and during the voyage was constantly thinking of drowning himself. When he arrived in Paris (March, 1862) he was pronounced by competent Practitioners to be suffering under dementia and general paralysis, and was placed in an Asylum. Proceedings having been taken on the part of his friends to declare his marriage with S. null and void, the civil tribunal of the Seine, in July, 1863, pronounced the marriage valid. This led to renewed Medical investigations being made at Mexico as to his state at the time of marriage, and, by a judgment of the *Cour Impériale* in 1865, M. J. was pronounced at the time of, and prior to, his marriage to have been in a state of dementia, and the marriage consequently declared void.

"It is evident, therefore," says M. Legrand, "that a marriage may be dissolved in France, and we must admit that this is only justice. In face of so equitable a decision, and of an attitude so loyal and courageous on the part of M. Schultz, we can only regret that it should unfortunately be so difficult to oftener protect the interests and honour of families. We very frequently, in fact, find individuals contracting disproportionate, unreasonable, scandalous, or infamous marriages under the certain influence of the accidents which herald in the commencement of general paralysis. In such cases the marriage contract is drawn up entirely in favour of the woman, and, before long, the husband dying, his fortune passes into such unworthy hands. Should the contract contain some restrictive clauses, a will is quickly suggested, and still more eagerly accepted. The same occurrences are also observed during the suspensory phases of general paralysis, which have been termed *remissions*, and which, in a Medico-legal point of view, are so well deserving of the attention of Medical Practitioners and magistrates. It is well known that as soon as, under the influence of senility or disease, a man begins to lose his mental faculties, he becomes the object of cupidity. Spoliative measures are projected, robbery is organised around him, intimidation is exercised over his weakness, and all resistance is in vain. Is it possible to efficaciously remedy such a state of things? Yes. To this end let not the Practitioner accord too preponderating a part to theoretical superfluities and micrographical subtleties, let him employ himself less with therapeutical experiments on his patient, and endeavour to acquire a more exact recognition of the precise state of his intellect. He will then no longer see these catastrophes taking place, which have brought ruin to more than one domestic hearth, without recording his protest. Is this to ask too much at his hands? Surely not, as he then may, in imitation of Dr. Schultz, secure the triumph of science and truth."

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(a) There is somewhere an anecdote that Voltaire one evening, in conversation with a friend, appeared very miserable, and said he should hang himself. In the morning the friend called to inquire if he had put the threat into execution. "Not so," was the answer. "*Mon lavement a bien opert ce matin.*"

At the request of the Société de Chirurgie, M. Le Fort gave some account of his new work on Maternity Hospitals, the result of the visits he has paid to the various establishments of this kind in Europe. His conclusions are based upon 1,800,000 accouchements, 883,312 of the number having been effected in Hospitals, and 934,781 at the patients' own houses. The difference in the mortality is most striking, for while in the former category it amounts to 1 death in 30 deliveries, in the latter it is only 1 in 150, or 200, or even less still. So great is the difference in Paris itself, that in the years 1862-63-64 the charitable lying-in institutions only return a mortality of 1 in 187, while the Paris Maternité, during 1860-61, lost 1226 women of 9886 who were delivered within its walls—*i.e.*, 1 in 8! Although less marked, this difference is also found throughout Europe. This excessive mortality in maternities is chiefly due to the great development of puerperal fever which takes place, the appearance of the disease seeming but very little influenced by season, climate, concomitant epidemics, individual conditions, or the amount of concentration of the patients. The epidemics which arise are, moreover, not due to germs diffused through the atmosphere or meteorological conditions, for the sanitary condition of two neighbouring maternities in the same town may be very different. While the Paris Maternité was ravaged by frightful epidemics, and that for more than a year, the mortality at the Clinique continued below its ordinary mean. The same facts have been observed in the two maternities at St. Petersburg, and in those of Vienna—where they are situated within the same Hospital, without, however, any personal communication with each other, the one being attended by Medical students and the other by midwives.

On the occasion of the presentation of M. Le Fort's work to the Academy of Sciences, General Morin observed that the Consulting Hospital Committee of the Ministry of the Interior had been occupied with this question, and had arrived at the same conclusion as M. Le Fort's figures led to, that it was preferable that women should be delivered *à domicile*; but, as many of these women had no homes, it was impossible, even for their sakes, that maternities should be suppressed. The most that could be done was to ameliorate their condition by diminishing the number of beds and very much enlarging the space occupied by each. The plan, too, found so efficacious at Dublin will also be adopted—viz., the assigning four wards, each capable of holding ten beds, to thirty patients, so that there shall always be an empty ward, which, in its turn, is cleansed and whitewashed. He added that public opinion had suffered a great shock from this frightful mortality at lying-in establishments, and that it was very important that it should be made acquainted with the solicitude with which the administration was endeavouring to remedy so sad a state of things. M. Velpeau observed that the reform had been commenced by opening a lying-in ward in every Hospital, and deliveries had been even allowed, in spite of the regulations, to take place in the ordinary wards, in the midst of other patients. He also pointed out that the *morale* of the patient had as much to do with her recovery as the hygienic condition of the patient. Delivered *à domicile*, she was surrounded by the faces of those she knew and hearts she loved, while her abandoned state when in the Hospital, and her anxiety as to the fate of herself and child, singularly aggravated the redoubtable crisis she had to pass through. The women who were delivered at home recovered in spite of the deplorable conditions their misery may have reduced them to.

### PARLIAMENTARY.—THE SEWAGE OF LARGE TOWNS—CATTLE DISEASES BILL—THE STATISTICS OF FOOD—THE REMOVAL OF THE BRITISH MUSEUM COLLECTIONS—DWELLINGS FOR THE LABOURING CLASSES.

On Thursday, February 16, in the House of Commons,

Mr. Schreiber asked whether it was the intention of Government to propose any additional legislation with regard to the sewage of large towns?

Sir G. Grey said that the Government did not entertain any such intention, and that for this reason. In the course of last Session an Act was passed to give municipal authorities power to acquire land, and a Commission was also appointed to inquire into the state of rivers in the United Kingdom. Until some experience had been obtained of the operation of that Act, and until a report had been received from the Commission named, the Government did not think it expedient to propose any further legislation on the subject.

The Cattle Diseases Bill was committed. Various verbal amendments were made in the earlier clauses without much discussion, and on Clause 13, which relates to the slaughter of diseased animals and the compensation to be given to the owners,

Mr. Bright renewed his protest against indiscriminate slaughter and against the principle of compensation out of rates raised from the whole community, particularly to the extent proposed by the Bill. He objected altogether to retrospective compensation, and urged the Government to reconsider the compensation clauses.

The Chancellor of the Exchequer proposed to alter the clause so as to provide that compensation may be given up to one-half the value of the animal when sound, the amount not to exceed £20.

After considerable discussion this amendment was agreed to.

On the 16th clause, which gives discretionary power to the local authorities to order the slaughter of cattle herded with diseased animals,

Mr. Bright proposed an amendment to the effect that this slaughter should not take place without the consent of the owners. He read a letter describing the successful treatment of Baron Rothschild's cattle at Mentmore by Mr. Worms' process.

Sir G. Grey said that the authorities in many cases insisted that the slaughter of these animals was quite as important as that of the diseased cattle.

Mr. Hunt warned the House not to trust too much to these remedies, which had hitherto proved delusive.

Mr. Tollemache informed the House that Mr. Worms' remedy had been tried on his and his brother's farm in Cheshire, and had proved a failure.

Some further discussion took place, and on a division the amendment was rejected by 388 to 50.

On the motion of Sir G. Grey a proviso was added to Clause 17 excluding from compensation persons who have violated the orders.

The clause relating to retrospective compensation was negatived with a view to its reconsideration.

On Clause 21, which relates to the movement of cattle,

Mr. Hunt moved the first of a series of amendments prohibiting the total removal of cattle until March 25, and announced that if he carried it he should then propose to insert in the clause a string of exceptions to this general rule.

Sir George Grey objected to the proposal, on the ground that sufficient facilities did not exist for the supply of dead meat to the great centres of population, and he feared, therefore that it would have the effect of raising the price of the food of the people.

Mr. Henley believed that the amendment, on the whole, would be attended with the least inconvenience.

Mr. Headlam referred to the case of Newcastle to show what inconvenience the total prohibition would cause in the great towns.

Mr. Lowe pointed out that the question was not with what degree of strictness or laxity the movement of cattle should be permitted, but whether Parliament should not embody in this Bill the regulations under which it thought this movement should be permitted, instead of leaving them to be settled by a number of local authorities. He earnestly exhorted the House not to let slip the present opportunity of checking the disease, and warned them that if it were not checked by the middle of April the calamity would exceed the worst apprehensions.

The discussion was continued by Captain Jervis, Lord

Elcho, Mr. H. A. Bruce, Sir J. Simeon, and Mr. Weguelin; and on a division the amendment was carried by 264 to 181.

On the suggestion of Mr. Bouverie, the Chairman was ordered to report progress.

In the House of Lords on Friday,

The Earl of Ellenborough asked Earl Granville whether he would consent to lay on the table a copy of a letter which had been published in the newspapers, he apprehended by the authority of the Government, about three weeks after the plague first broke out. It was from the Consul at Warsaw, stating that a disease had broken out in Poland in 1857, such as was represented now to exist in this country, but in no case did it extend itself to any part of the country where the water was impregnated with iron, and cures had been effected in other parts of the country by giving animals water in iron vessels. He was astonished to find that a letter so remarkable had failed to attract public attention, and that so simple a method of treatment had not been resorted to, at all events, experimentally.

Earl Granville promised that the noble lord's suggestion should not be forgotten, but did not anticipate any very favourable results from the course of treatment indicated in the letter.

In the House of Commons, in answer to a question from Mr. Hunt,

Sir George Grey said that the Government would acquiesce in the decision of the House last night, and the mode in which they proposed to carry it out was by embodying in one bill the provisions as to compulsory slaughter, compensation, and the rates to be levied for that purpose, and Mr. Hunt's amendment absolutely prohibiting the removal of cattle by railway. This would leave the movement of cattle by road and the exceptions to be dealt with in a separate bill. He acquiesced in the committal of Mr. Hunt's bill *pro formâ*.

The House then went into committee on Sir G. Grey's bill.

After a long discussion on the compensation clauses,

A clause was added, enabling the Queen in Council to suspend at any time the operation of the Act as regards the slaughter of animals.

The Bill was ordered to be reported on Saturday, and the Chancellor of the Exchequer intimated that he should ask the House to read it a third time.

Mr. Hunt's Bill was committed *pro formâ*.

On Saturday Sir George Grey's Bill was read a first time in the House of Lords and a third time in the House of Commons, and passed in the Lower House.

In the House of Lords on Monday the Bill was read a second and third time, and passed.

The House of Commons went into Committee on Mr. Hunt's Cattle Plague Bill.

Mr. Hunt explained the exceptions to the general prohibition of the removal of cattle which the Bill proposed to allow.

On Tuesday, in the House of Lords,

The Royal Assent was given by commission to the Cattle Diseases Bill.

After some conversation respecting various points in connection with the cattle plague,

Lord Derby inquired what measures had been taken to prevent the spread of the small-pox in sheep which had recently broken out in Northamptonshire.

Lord Granville replied that measures had been adopted which it was hoped would prevent the extension of the disease; and, in answer to further questions, he stated that at present it had not been precisely ascertained whether the disease had been imported from abroad.

In the House of Commons,

Sir S. Northcote asked the President of the Board of Trade what amount of information the Government could give respecting the consumption of articles of food, especially corn and meat, at various periods in the present century.

Mr. Milner Gibson: I am sure that any estimate that could be furnished of the quantity of corn and meat consumed either now or at any former period during the present century would be very loose and unsatisfactory. We have returns of the importations of foreign corn which may be depended on, but we have no returns of the home-grown corn consumed, and no statistics of the extent of land under cultivation. We are now taking a cattle census, and it is possible, if it be true that one-fourth of the cattle are annually slaughtered, and if we get this census completed, we may be able to estimate the consumption of butcher's meat. But with respect to corn, those acquainted with the subject tell us that no information which can be depended on exists.

Mr. C. Bentinck asked the Chancellor of the Exchequer what course Her Majesty's Government intended to pursue relative to the vacant ground at South Kensington, and the erection of a building there; and whether any bill was to be introduced this session for the removal of any of the collections now forming part of the British Museum.

The Chancellor of the Exchequer: The intention of Her Majesty's Government, as I think my hon. friend will perceive from the Civil Estimates which will very shortly be laid upon the table, is to propose two votes for the disposal in part of the site at South Kensington, one of which will apply to the reception of certain collections of the British Museum, and the other to patents. With respect to the introduction of any bill this Session for the removal of those collections, that would not come on until we have disposed of the vote. It must necessarily follow; but until I know how that question has been disposed of I am not able to speak of the time when the bill will be introduced.

Mr. M'Cullagh Torrens, in moving for leave to bring in a bill to provide better dwellings for artisans and labourers, described at some length the straits to which working men were put in the metropolis and other large towns to obtain house accommodation, and the evils which resulted from overcrowding, and showed that hitherto private speculation and private charity had failed to supply anything like an adequate remedy. He explained that the Bill would give power to the Home Secretary, when he had reason to suspect, or was informed by a corporate body, or by a certain number of ratepayers, that any district by reason of overcrowding was exposed to the danger of pestilence, to cause that district to be inspected, and an estimate of the expense of the necessary removals and rebuildings to be drawn up; and it also would empower the Public Works Commissioners to advance money for the purpose of carrying the necessary improvements out, on the security of the local rates.

Mr. Locke seconded the motion, which was supported by Mr. Kinnaird, and after a few words from Mr. Childers, leave was given to bring in the Bill.

## MEDICAL MANNERS IN THE NINETEENTH CENTURY.

Practitioners of the present day have no small reason to congratulate themselves upon the change which has taken place of late years in Medical manners; or, perhaps, it would be more correct to say upon the gradual decay of Medical mannerism. There was a time when more thought was bestowed by the fashionable Doctor upon his external appearance, figure, behaviour, and manner than upon the ills of his patients; and even now many a rising Doctor feels more anxiety as to the impression his mere manner may produce upon his patients, and his capability of pleasing them, than he does concerning his practical experience in the treatment of disease, or his Professional knowledge and skill. In former days a man might, indeed, learn the art of satisfying his patients by studying mankind as it was then, far better than by working in Medical schools, or watching the treatment of the sick in the wards of a Hospital. In former days the public could judge of us solely by our manner, and they looked for a particular manner in their Medical adviser, and if they found it not they were dissatisfied; but all this has changed. Not that manner is not required in these days, or that it is a thing to be trifled with or entirely disregarded by any one who aims at even a moderate share of Professional success; but it is no longer the *one thing only required* to ensure success. Nay, in these days high acquirements, associated with bad manner, may command some success, while the most perfect manner, with only an empty head to support it, will pretty certainly bring failure to its possessor. We all have our little peculiarities of manner; but these are far more indicative of the individual gentleman than was formerly the case, and they are often natural peculiarities rather than cultivated conventional oddities or ridiculous caprices. We seem to aim at being thought gentlemen and being real Doctors, instead of affecting to play the Doctor, and studying how to impress the patient with the profundity of our wisdom, although painfully conscious of our deficient information. In short, it is quite certain that in these days there is far greater simplicity and honesty of purpose in Professional manner than was formerly the case. We really do more, and think more, while we pretend to very much less. We seek to gain the confidence of people rather by conveying information than by clever acting, or boasting of power over disease which no mortal can possess, and taking every opportunity of puffing ourselves in a manner which would now be considered vulgar, even by not very sensitive persons.

A type of Practitioner occasionally to be met with early in the present century was the following:—A very stout, but ignorant, bustling person, who spoke in a loud, blustering, authoritative tone, and gained the confidence of his patients by a system of terrorism—"It is well that you sent for me, ma'am, when you did, for had you delayed but another day there would have been little chance of saving you." The Professional knowledge of such a Doctor, and his powers of diagnosis, may be easily estimated. Plenty of self-confidence rendered real knowledge to him a worthless superfluity, and not a little bluster soon overawed patients who asked unpleasantly minute questions about the nature of their cases. As may be supposed, our friend was a terrible coward at heart, and when he supposed himself ill he appeared what he was—a cringing ignoramus—and laid aside for the time the character of an offensive bully. Happily, the type is gone, there being no further demand in these days for the sort of article, nor for the shrewd discerning sort of Professional adviser with very decided manner, who, when asked respectfully by his timid patient if he might eat beef, said "Beef! d—— it, Sir, no." If for "beef" he had said mutton, or chicken, or port, or sherry, or claret, the answer would have varied only in the repetition of the word. A generation or two has passed since then. Medical mannerism is completely changed, and most assuredly neither the Profession nor the public has lost by the altered fashion.

Gold-headed canes, with the vinaigrettes, have likewise long since disappeared, and the last pair of Hessian boots, after lingering for some time in solitary lustre, finally vanished. But one solitary Jabot (frill) erects its unblemished crest in Medical London, and its respected owner, who was never wrong in his opinion, forms the only remaining link which connects free and progressive Medical science of the present day with the unyielding Medical rigidity of the past.

The individual peculiarities now noticed among the different classes of Practitioners, although often laughable enough, seldom amount to actual bad taste. They seem rather to partake of harmless affectation, and for the most part might be indulged in by other than Professional men, and are therefore not peculiar to Medical practice. Still, slight differences of manner may be observed among existing Physicians, Surgeons, and general Practitioners. Thus, one walks into his patient's room, hat in hand, with a dignified air, and slow, measured step; another in the quickest possible manner, with every limb dancing about as if it were hung upon wires, and every muscle of expression nervously quivering and twitching with emotion excited by the extreme interest he takes in the condition of his patient. One enters the patient's room in his overcoat; another leaves it in the ante-room; a third leaves his hat and coat in the hall, like the singing master; but there is now no rule in this matter, although some masters of Professional etiquette think it a breach of good taste to enter a ladies' room with a great coat on their back. Another frowns and looks severely upon the patient, or very grave and thoughtful; some appear pompous, and a few jaunty. And when the patient begins to detail his or her aches and pains how one Doctor's face lights up, another's appears imperturbable; another looks knowing; some bland, some obsequious, some expressive of superior wisdom or calm dignity.

What ample room is there for the display of individual Medical peculiarity in the mode of receiving a patient in the consultation-room! One Doctor rises and courteously offers the patient a seat; another appears overwhelmed with business, and without raising his hand from the letter he is writing says, curtly, "Be seated, sir," or "Sit down;" a third dances about, shakes the patient by the hand, tells him how very glad he is to see him, stirs up the fire, and hopes there is not much the matter, etc., and after entering into conversation a little, pats him on the back, and assures him he can give him a little tonic which will just brace up his nerves and set him quite to rights. Some of us give definite and rigidly exact directions in a few carefully-worded sentences; others write down on paper the number of teaspoonfuls of water that should be added to the one of wine; some go over and over the same ground in order to impress the patient more strongly with the importance of this or that recommendation, and succeed in sending him away in a happy state of confusion; some talk in a gossiping way, and give no directions after all; some detail the number of cases of the same kind brought under their notice before, and tell the patient how Lord or Lady B.'s case differed in this or that point from his own.

Occasionally Doctors give complete clinical lectures to their patients, some adopting the familiar, others the grandiloquent style of imparting knowledge. Some try to give the patient the impression of being cheery and hopeful about his case; others give him the notion of being doubtful; some are actually dismal, and a few—obviously never intended by nature to be Doctors at all—seem to be utterly uninterested with every particular piece of information afforded by the patient.

One Doctor exhibits the greatest interest in secretions, and deems it of pressing necessity to examine with the greatest attention the quality and quantity of the excrementitious matters in all cases; another Practitioner considers this attention important only in some cases. Some take the actual vessels in their own hands; others allow the nurse to perform this part of the operation, while they look intently and perhaps smell and test the compound. On the other hand, a highly-eminent Practitioner regarded all this as very unnecessary, and the lifting the vessel in his own hands so derogatory to his Professional dignity, that he wrote two letters to prove that this was actually the nurse's and not the Doctor's business. The most sensitive and elegant of Doctors would, however, scarcely consider it right to run the chance of allowing hæmorrhage from kidney or bowels to escape observation.

And how differently we signify to the patient that we have actually listened to what he has to tell us. Some say "Yes," although the patient asked no question whatever, or "Yes, I see," or "Yes, quite so;" some, "Indeed!" some, "Ah!" some, "Oh!" some, "'hm;" some give a slight cough; some grunt, and correct it a little too late by a benignant smile. And while all this is going on, some of us stand up with back to the fire, some sit down. Some, whether sitting or standing, maintain an erect stiff posture, never rotating the head without turning the body, and bend as if all the vertebræ were anchylosed; while others incessantly nod the head and assent to ten times as many statements as have been made, seeming to have understood the whole story even before the preliminary and introductory matters have been gone over. Some gently incline the head at a particularly graceful angle, others nod in a common-place style. Some listen to every word with the utmost attention, so that when called upon to rejoin they may afford evidence to the patient that each minute particular has been weighed and considered in its proper order, and will not be lost sight of in the elaborate prescription about to be written. Others, of a more cogitating and less amiable disposition, who perhaps have been a little more accustomed to real thought, sit near to the patient and display the most imperturbable patience, because they have learned the art of travelling a long, long way off till the story is finished, trusting to their well-practised intelligence to seize important points, or to their ingenuity to supply any links in the story they have neglectfully lost.

Although conventional manners are for the most part unnecessary in our day, it cannot be denied that the success of some Practitioners is to be attributed more to their confident manner and self-assertion than to any higher or more desirable qualifications. But as the education of all classes advances, Medical vulgarisms will become less patent, and patients will be no more influenced by vulgar boasts than they would have been by gold-headed canes. We shall be more free to exercise our natural manner, and less disposed to study mannerism for the mere purpose of pleasing silly people. We may hope that their taste will improve, and that they will cease to require us to talk nonsense. At any rate, we may feel sure that among the rising Physicians, Surgeons, and General Practitioners are men earnest and thoughtful, with manners like those of other gentlemen, who are determined to leave to the quacks all the profits to be derived from vulgar boastings and common-place mannerism. S. P. E.

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THE Poor-law Board have assigned to Dr. Edward Smith, F.R.S., the duties of Medical Officer to the department, in addition to those of a Poor-law Inspector.—*Globe.*

THE FEMALE DOCTORATE.—Two young Russian women are at present studying Medicine at the University of Zurich. —*Guardian.*

## REVIEWS.

*Guy's Hospital Reports.* Third Series. Vol. XI. London: John Churchill and Sons. 1865. Pp. 466.

NOBODY, we imagine, requires to be told that the new volume of these Reports maintains the character established by its predecessors. The Guy's Hospital Reports are now again one of our Professional institutions, and we all look for the issue of the annual volume as certainly as we look for the arrival of Christmas. There is no fear of their suspension again. The only suggestion for improvement in the plan of the Reports that we should wish to make is, that there should be added a general summary of *all* the cases treated, such as it might be the duty of the Registrar to draw up; and this upon a system and in a form to give practical results, and to be uniform with registers kept and published by other London Hospitals. This is no new suggestion of ours. We have over and over again pressed the importance of such uniformity upon the managing authorities of the Metropolitan Hospitals; and we sincerely hope that some agreement upon this subject may be come to in the course of the next year. Dr. Wilks and Mr. Bryant are the largest contributors to the new volume; but we recognise also nearly all the familiar names. Two of the most important papers are, to our mind, those of Dr. G. O. Rees and Dr. Sutton, who have recorded a number of cases of rheumatic fever, complicated and simple, treated without recourse to active medicines. We say "treated" because we hold that rest, a regulated diet and temperature, together with due attention to the state of the bowels, such as should be had in health, and the general system of management of sick persons in a well-conducted Hospital, are no mean or inefficient aids to recovery in any acute disease. Although hating from the bottom of our hearts, and detesting with all our mind and soul every form of "pathy," every deception practised upon the uninformed or half-informed in the name of Physic, we yet hold that there is something in each of the quackish systems now in vogue—let us add that ever has been in vogue —which legitimate Practitioners may draw a lesson from. None of us forget, we presume, and are not likely to forget, the outburst of wrath which some years ago fell upon the head of that accomplished and benevolent Physician, Dr. Forbes, when he published in his Review the startling article on "Homœopathy, Allopathy, and Young Physic." Since then the author has been gathered to his fathers; but the seed that he then sowed has germinated in the soil in which he deposited it; the young plant has grown rapidly and vigorously, and its fruit is seen in the daily increasing dependence of British Practitioners, Physicians and Surgeons, upon the restorative powers of nature, in the triumphs of Conservative Surgery, and in the acceptance met with by such works as that of Mr. Hilton on Pain and Rest. No one can compare the simplicity of Medical and Surgical practice in the present day with what that practice was even when some of us were students in the Hospitals a quarter of a century ago without being struck with the revolution that has been undergone. We do not give Dr. Forbes credit for the whole of this, but his advocacy of a logical reconsideration of our therapeutical system went very far to rouse the Profession to the selection of a new and better path than it was then pursuing. Holding, then, such views as these, and valuing above all things every effort to establish what Dr. Forbes termed the "natural history" of disease, we shall be pardoned if, on the present occasion, we seize upon this one characteristic of the volume before us, and point out what it has to tell us of nature's cures.

But first of all let us do a little stock-taking, and see in the practice of Physic alone what advances we have made in the direction of natural therapeutics. 1. As to the exanthemata, such as small-pox, measles, and scarlatina. We are not about to depreciate the endeavours of those who are striving to discover an agent which will counteract the specific cause of these diseases. We say to such, go on and prosper. You have a noble and legitimate object in view, and whether you find what you are looking for in ammonia, or among the class of antiseptics, or elsewhere, we shall be among the first to welcome your discovery. But in the meanwhile, let us recognise the truth that these maladies are admitted to exhibit a spontaneous evolution naturally terminating in health; that unless life is endangered by some remarkable depression of vital force, the Physician of the present day contents himself in the cure with watching for the earliest indication of lowered vitality, and confines his administration of drugs to the relief of such disturbances of natural functions as his experience teaches him tend powerfully to reduce the powers of life. 2. The same may be said of our modern treatment of the continued fevers. Unless some special reason is seen for more active interference —and this rarely occurs—all that the Physician has to do is to take care that his patient has as much as he requires of such appropriate nourishment as his weakened digestive powers can manage; and he looks for recovery in uncomplicated cases almost as a matter of course. We have no nervous fear in such cases now of leaving nature (not unaided by hygiene) to work out her own cure in her own way. 3. Then there is among inflammatory diseases of internal organs the typical disease pneumonia, which we used to treat first by taking away the blood which we supposed in our ignorance fed the flames raging within, and then by half poisoning our patient with tartar emetic and calomel. Who in his senses would dream of pursuing such a practice now, unless in cases as exceptional as they are dangerous? Who does not know that the majority of pneumonic patients, notwithstanding the temporary inconvenience they suffer, will get well when kept in bed in a regulated temperature and with a regulated diet, and get strong again, too, and fit for their daily labour in a far shorter time than they did when pneumonia was regarded as inevitably fatal unless knocked down by the powerful weapons wielded by the resolute hand of the Doctor? 4. And may not something of the same revolution be seen in our management of peritonitis, and some similarly acute diseases? True, we give opium commonly and largely to many a peritonitic patient, but how many mild cases there are that are cured with nothing or little else besides rest and external applications. And when we do give opium, is it so much because we believe that it has any powerful influence upon the pathological changes in the membrane, as because it is the most effectual means we possess of ensuring rest? And this sort of treatment is, so far as we can see, quite as effectual, and far safer for the patient, as the repeated full bloodlettings and mercurialising till the gums were sore, which we regarded as necessary elements of our treatment in our younger days. We might carry on our demonstration into the domain of non-inflammatory and chronic maladies. But it is, in view of the present volume of Reports, with acute disease that we have only to do at present, because in the papers of Dr. Rees and Dr. Sutton we have to record an additional proof of the powers of the *vis medicatrix naturæ.*

Dr. Gull and Dr. Rees, be it known to all that it may concern, have been treating acute rheumatism successfully with mint water. We wonder whether mint water ever produced symptoms resembling acute rheumatism; perhaps the homœopaths can tell us, for, if not, then they must look to the stability of their theory. Details of Dr. Gull's cases, sufficiently full for the purpose of establishing his point, are given in twenty-one instances by Dr. Sutton, and four cases are detailed by Dr. Rees. The following is Dr. Sutton's summary of results as affects the duration of the disease:—"The average duration of the acute symptoms in the first seven cases, in which there was no evidence of the heart being involved, the abstracts of which have been just given, was 8·5 days, while in the last six cases, in which the heart was evidently affected, the average duration was 23·6 days. The recorded experience of other Hospital Physicians confirms what is here shown, that cases in which there is not, on admission into the Hospital, evidence of much heart affection, tend to get well in from six to fourteen days, that is, within twenty days; cases, however, in which there are very early indications of severe heart affection, tend to last over twenty days. In the cases with little or no cardiac disease, the shortest duration of the acute symptoms was six days; the longest sixteen days. Where the cardiac disease was great, the shortest duration of acute symptoms was seven days; the longest thirty-eight days. The cases marked No. 1, 5, and 12 in males, and No. 6, 9, 7, and 17 in the females, tend to confirm the experience, as late years have shown, that acute rheumatic pericarditis does not, as regards the recovery of the patient and the successful termination of the disease within a reasonable time, require any special treatment, and more than that, it shows that a patient may have rheumatic inflammation of both pleuræ and effusion into the right; the heart also may be involved; yet in thirteen days all the acute changes may subside and the patient be convalescent, and out of bed on the twenty-fourth day, and the only treatment adopted be a grain of extract of opium every night, and mint julep with extract of dandelion three times a day. Such facts also tend to teach that acute rheumatic pericarditis may subside without any treatment except rest in bed and careful diet in fourteen days; that rheumatic pericarditis, complicated with albuminous urine, may, without medicine, except mint julep and a grain of opium for one night only, have so far recovered as scarcely to be detected on the seventh day of treatment; and the patient afterwards continued steadily to improve and able to go out of the Hospital within a month."—P. 413. Now, although these cases do not show that rheumatic fever ought to be treated in all cases without medicine (and it has yet to be demonstrated what effect such abstinence from active medication has upon consecutive heart maiming), we think that Dr. Sutton has established this—viz., "That the best treatment for rheumatic fever has still to be determined, and that it is absolutely necessary to understand the natural progress of the disease before any conclusion can be arrived at concerning the operation of remedies. The cases show that too much importance has been attached to the use of medicine, especially in those acute cases where the tendency to a natural cure is the greatest."—P. 428. Dr. Rees says—"For my own part, the results have firmly impressed me with the belief that the old plan of treatment, consisting in the exhibition of calomel, opium, and antimony, and the free use of colchicum, did great harm (might not Dr. Rees include blood-letting?), not only by retarding recovery, but by leaving the patient greatly debilitated. The duration of cases of acute rheumatism when I first became a student at Guy's Hospital was certainly far longer than at present, when, whatever may be the treatment adopted, it partakes less of the heroic character than that which was practised by our predecessors."—P. 430. We are told that a series of comparative observations are about being instituted by Dr. Rees upon the relative efficacy of mint-water, alkalies, lemon juice, etc., in the treatment of this disease. We await the result with some impatience.

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### *Clinical Lectures and Reports by the Medical and Surgical Staff of the London Hospital.* Vol. II., 1865. Churchill and Sons, 1865. Pp. 415.

We have much pleasure in reviewing the second volume of the "London Hospital Reports." The contributors to it are Mr. Adams, Mr. Curling, Dr. Letheby, Mr. Heckford, Dr. Fraser, Dr. Davies, Mr. Hutchinson, Mr. Maunder, Mr. Couper, Dr. Woodman, Dr. Hughlings Jackson, and Mr. Little, and in addition to the papers and lectures of these gentlemen there is a series of cases recorded by the gold medallists of the Clinical School, Messrs. Walker, Llewellyn, Rogerson, and Thorp. We do not propose to notice here all these papers, although none are devoid of such interest as will induce our readers to study them. We shall allude only to a few which have specially attracted our own attention.

Mr. Curling has appended to his admirable paper upon the Treatment of Painful Cancer of the Rectum a tabular statement of ten cases in which the colon was opened in the loin. One of the patients lived for two and a half years afterwards, one for nine months, one for eight months, one for five months, one for three months, one for two months, one for five weeks, and one for three weeks. All these died from exhaustion consequent on the disease. One died on the thirteenth day of exhaustion from persistent vomiting due to chloroform, and the remaining patient from peritonitis set up before the operation. We quote some of Mr. Curling's final remarks:—"That an artificial anus in the loin is not a constant source of trouble and annoyance, as many persons imagine, is amply shown by several of the cases in the table, and by others in which the patients have lived for years after the operation. The bowels act at regular periods, and the escape of flatus and feculent matter at other times can be prevented by a well-adjusted pad and bandage. When diarrhœa occurs, or when unhealthy gases are generated, then annoyance is experienced. The chief inconvenience liable to occur arises from prolapsus of the upper part of the colon, which occasionally happened and gave trouble in the case detailed in this paper. . . . Indeed, prolapsus rarely occurred in this case after a proper pad and bandage had been constructed and kept applied. . . . As a minor matter in connection with these cases, though not unimportant, I must call attention to the remarkable efficacy of iodine lotion in rendering the feculent discharges inodorous, and in keeping the wound sweet. The lotion used was composed of about four drachms of the compound tincture to eight ounces of water. Some spongiopiline wetted with this lotion and applied over the wound soaked up the feculent matter, and kept the part tolerably clean as well as sweet, and the lotion was injected into all recesses and sinuses."—P. 12.

A very suggestive paper is furnished by Dr. Letheby on liquid diffusion in relation to physiology and practical toxicology. We strongly recommend its study to our readers.

By far the largest contributor to this volume is Mr. Hutchinson, who publishes here no fewer than six instructive papers. We shall notice some of them. One relates to a case of fibroplastic tumour of the scalp, in removal of which a tourniquet was employed around the head, being placed just above the ears, with a compress upon the right temporal artery, in order to restrain hemorrhage. In an excellent paper upon Lupus, Mr. Hutchinson gives a statistical summary of conclusions obtained from the collection of notes of seventy-seven cases which have come under his own observation. We cannot refrain from copying this summary:—"*Age at which the disease began.*—The average age for the whole seventy-six cases is sixteen years. The youngest patient was six months, and the oldest fifty-six years. *Duration of the disease.*—The average duration of the cases when seen by me was nearly seven years. This fact well demonstrates the very chronic nature of the inflammation. *Sex of patient.*—Thirty-one of the patients were males and forty-six females. *State of health of the patient.*—Dividing the cases into three classes, as "good," "medium," and "decidedly feeble and cachectic," we assign thirty-three to the first, twelve to the second, and eleven to the last. In twenty-one cases the notes are defective. *Tubercular diathesis.*—There was proof of active tubercular dyscrasia in one in every six of those in whom this fact is noted. *History of tubercular diathesis in the patients' family.*—In sixteen cases there was the history of phthisis in the patients' nearest relatives (parents, or brothers, or sisters). In fourteen cases I have not kept any note on this point. *Local injury assigned as a cause.*—In eighteen cases the patients stated that the disease had followed local damage to the part. *Was the disease single or multiple in its manifestations?*—In thirty-four cases only a single part had suffered, that is, there was only one lupus patch. In forty-one cases there were several patches, and in two cases the notes are indefinite on the point. *Other symptoms of struma present in the patient.*—In eighteen cases there were present other diseases of the kind usually classed as "strumous," but in nearly half of the seventy-seven cases I have no positive information on this point. *Inherited syphilis as a cause.*—In only two of the cases was there reason for believing the patient to be the subject of inherited syphilis. *Position of the patient in his or her family.*—In seventeen cases I have no note on this point. Of the remaining fifty-eight, the patient was the eldest born in eleven instances, the second in fourteen, the third in nine, the fourth in seven, the fifth in five, the sixth in two, the seventh in four, and a yet higher position in the remaining four."—P. 137.

Another very important contribution by the same writer is entitled "New Facts and Opinions as to Inherited Syphilis." After giving a summary of his views respecting the indications of inherited syphilis furnished by the shape of the upper incisor teeth, the physiognomy, and the occurrence of chronic interstitial keratitis, on which his diagnosis of inherited syphilis is habitually based, he proceeds to discuss the following points:—"Can syphilis be transmitted to the third generation?" Of the cases he relates bearing on this question, there are seven in which the offspring of persons with inherited taint manifested no syphilitic symptoms. In only one case were they observed, but the facts of it are so extraordinary that he cannot avoid concluding that some source of error was present. "To what extent does the diathesis of inherited syphilis protect against subsequent contagion or modify its results?" The general conclusion is that when such persons acquire the disease anew it occurs after a very different fashion to what is met with in others, and that such subjects are not liable to contract the indurated form of chancre. "Severe organic disease in connexion with inherited syphilis." Mr. Hutchinson maintains that heredito-syphilis does not in any way predispose to phthisis. He then discusses the subject of "Diseases of the bones in connexion with inherited syphilis," and next the question "Do the symptoms presented by infants bear any close relation to the stage of the disease in the parent?" The pith of his entire answer is conveyed in the sentence, "It matters little what may have been the stage of the disease in the parent, the offspring will present first symptoms of the secondary class, and only at a much later period of life those of the tertiary group." As regards the question, "Will the mercurial treatment of a syphilitic parent increase the chance that his offspring will escape?" the reply of the writer is in the affirmative. "I should have no hesitation in advising the parent of a syphilitic child to at once submit himself to an efficient and prolonged course." Then follow sections "On the phenomena of latency in respect to inherited taint," "On the forms of lupus which occur in connexion with inherited syphilis," "Cases of ulcerative destruction of the palate, etc.," and, lastly, "A contrasted parallel between the course of symptoms in acquired and inherited syphilis." In the course of this last subject Mr. Hutchinson discusses the question, "Why chancres differ?" He thus explains his views of the origin of the soft non-infecting sore in the indurated chancre:—"If we may be permitted to suppose a time when the true virus—that which produces the indurated sore and secondary symptoms—was the only one extant, the following results might be predicated:—Certain individuals who had already had true syphilis would contract the disease a second time, and in these the sore would not assume its typical characters. Some of these would probably transmit this modified sore to others who were, like themselves, already protected, and thus a second diminution in power of the virus would result, and we should, after a few such inter-communications, have a virus quite incapable even in a healthy person of producing anything more than a local sore. Exactly the same chain of events would occur in those whose protection was the result of inherited disease. Keeping these probabilities in mind, we can easily explain the origin of the virus by which 'soft sores' are produced, and can also readily suggest reasons why there should be, as there are, many varieties of these."—P. 203. We might with advantage to our readers almost confine this review to Mr. Hutchinson's contributions, but must with regret pass by the remainder in order to do some justice to his colleagues.

Mr. Heckford has a paper on "Circumcision as a remedial measure in certain cases of epilepsy, chorea, etc.," alluding, of course, to those cases (especially of children) where these maladies originate in masturbation. He insists, not only on the free removal of the prepuce, but on delaying the process of healing as long as possible.

There is a capital statistical paper by Dr. Fraser on "Stimulation *versus* Depletion," showing that at the London Hospital there has, for some years past, been a steady rise in the employment of stimulants in the treatment of disease and injuries. Dr. Fraser adds, that "Whatever be the cause, we may rest assured that the practice is imperative and needful, for it would be a monstrous assumption that a whole staff could be blindly following an objectless routine."

A lecture by Dr. Herbert Davies gives "The results of the Blister Treatment in Fifty Cases of Rheumatic Fever." We are disposed to regard this as rather a merciful treatment, for really the pain of the blistering is not to be compared with the inconvenience arising from the local lesions, and whatever its effect may be in shortening the duration of the disease and preventing cardiac complication (about which we would reserve our opinion until the results of the comparative experiments at Guy's Hospital are published), there is little question that the condition of the patient is rendered on the whole more tolerable.

In Mr. Maunders' paper "On the Removal of Cartilage in Operations about Joints" he makes the following remarks:—"The large share in predisposing to pyæmia, which I think the protracted healing of a large wound may take, induces me to offer the suggestion that Hospital Surgeons, in selecting a method of operation in any particular case, should, in unhealthy seasons and in unfavourable subjects, choose that plan which will insure the most rapid closing of the wound rather than one which might, all other circumstances being favourable, be deemed slightly preferable. Thus amputation of the thigh should be performed rather than excision of the knee; tibio-tarsal amputation instead of excision of the ankle-joint. In this way the deterioration of a patient's health, by shortening his stay in the Hospital, is reduced to a minimum, and the prospect of a successful issue is increased. . . . In selecting a special case for the attempted preservation of the cartilage, the Surgeon would be guided by the size of the articular extremity of the bone, preferring the smaller to the larger—*e.g.*, that of the tibia to that of the femur; but if the patient be a bad one for surgical operation, or the season unhealthy, he will do well to cut away the cartilage with the adjacent layer of bone, in order to expedite the closure of the wound. *I believe confinement in the unwholesome atmosphere of a Hospital to be more prolific of blood poisoning than the presence of oven cancelli in a wound.*"—P. 213.

Dr. Woodman has an interesting paper headed "Cases of Malingering, with remarks," in which he maintains the following propositions:—"1. That nearly all those who feign diseases or accidents are really in some way or other in ill-health, or, in other words, that a basis of truth underlies most attempts at malingering. 2. That the difficulties in the detection of these cases are only to be fully met by a comprehensive knowledge of the real diseases, and by a constant study of human motives and actions. 3. That the resources of our art have been of late years so enriched by the microscope, ophthalmoscope, stethoscope, and laryngoscope, and other aids to physical diagnosis, and the apparatus of the chemist, that the detection of frauds is now much easier than before. But that, 4, in all cases of doubt it is better to assume for the time that the patient's statements are true than to run the risk of maltreating or neglecting a real case of disease."—P. 257. The same writer supplies a table of fifty-five cases of hernia operated on between October, 1860, and January, 1862, inclusive, during which period no official record was kept, and no statistics were published.

Dr. Hughlings Jackson publishes some instructive "Lectures on Hemiplegia." We cannot speak too highly of them as a sample of the teachings at the London Hospital.

The volume concludes with a list of the more important preparations added to the Museum during the past year, and a statistical Medical Report by Dr. Woodman, followed by one by Mr. Maunder, "On the Major Operations performed for the year 1864."

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*Electro-Therapie, mit Besonderer Rücksicht auf Nervenkrankheiten.* Von Dr. Carl Frommhold, in Pesth. Pesth: 1865. Pp. 418.

*Electro-Therapeutics, with Special Regard to Nervous Affections.* By Dr. Carl Frommhold.

A Medical book from Hungary is such a *rara avis*, that we should feel inclined to notice it even if there were no great intrinsic merits in the performance of the author. Hungary, although entirely dependent upon Germany for its Medical information and instruction, yet boasts of a good national University, and a few Medical periodicals written in the national language. For some time past extraordinary efforts have been made by Hungarian patriots to destroy the German monopoly of science, and to show to the world that there is scientific as well as physical and political vigour in this small but high-spirited nation. Unfortunately, few people out of Hungary will be found willing to endeavour to master the difficulties of the idiom, and authors are therefore obliged to resort to the German language if desirous of addressing a large audience. The present work is one of this class, and we have much pleasure in stating that it is highly creditable to the author, who has evidently taken great pains to produce a good sound treatise on his subject.

A really useful literature on Medical electricity has only commenced to exist within the last ten years, for it is not too much to say that all books published prior to 1855 were devoid of scientific or practical value. In that year, M. Duchenne published his researches on the effects of the induced current, and succeeded in thoroughly rousing Professional attention to the study of Medical electricity. He was soon afterwards followed by Professor Remak, of Berlin, who investigated chiefly the properties of the continuous galvanic current. Both these authors were staunch partisans of the special form of electricity to which they had devoted their attention, professing the greatest contempt for any other forms, and giving their own pet agents an undue prominence in a therapeutical point of view. Dr. Althaus was the first who contrived to keep aloof from the enthusiasm in which specialists are apt to indulge, and applying much critical acumen to the question, restricted the use of galvanism considerably, and made the *rationale* of its beneficial action in certain diseases intelligible to the Profession. Since then a number of other treatises have appeared on the same subject, but it cannot be said that any very decided progress has been made. Dr. Frommhold, without ignoring the labours of his predecessors, has applied considerable originality and research to the study of these questions; but as he is not a great adept in literary composition, his book is very difficult reading; moreover, he has committed the mistake, while entering sometimes with a tedious detail into matters which would have only required a passing notice, to hurry over more important subjects about which we should liked to have received full information. Thus, for instance, he describes a new proceeding for treating aneurisms by the continuous galvanic current, and which looks very plausible on paper; he goes on to say that such operations were performed on patients by Dr. Balassa, the Professor of Surgery at the University of Pesth, yet he does not detail a single case, nor does he inform us of the ultimate result of these operations. With these and other drawbacks, the work is one of real value, and will be read with interest by those who are engaged in the therapeutical application of electricity.

The contents of the book are arranged as follows:—Physics and electro-physiology occupy the first hundred pages, after which the author discusses the subject of electrolysis with special reference to the treatment of aneurisms, and describes some new appliances for using the galvanic cautery. The body of the work is taken up with a consideration of the Medical use of galvanism in hyperæsthesia, spasm, paralysis, gout, rheumatism, and deafness.

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*A System of Instruction in Quantitative Chemical Analysis.* By Dr. C. Remigius Fresenius. Fourth edition. Edited by J. Lloyd Bullock, F.C.S., and Arthur Vacher, F.C.S. London: John Churchill and Sons. 1865.

This, the fourth English edition of Dr. Fresenius's classical work on Quantitative Analysis, extends over pp. 782, exclusive of tables of contents and index, Mr. Bullock says of this, as compared with the earlier editions, that it is almost a new work, and a brief comparative examination is sufficient to convince us that he is correct. The work, however, remains the same in method and principle; its renovation having been performed for the almost sole purpose of making it accurately represent the present condition of the quantitative department of analysis. Many new processes and improved modes of procedure have been introduced, together with "not fewer than fifty" additional engravings of instruments and apparatus. The processes may often appear to be tedious, and even complex in their execution, but it must be borne in mind that the author only gives those methods which yield as nearly as possible accurate results, and that, unfortunately, in many cases, processes combining accuracy with simplicity and rapidity of execution, are as yet unknown. The methods described have been invented by many chemists, but all, we believe, have been submitted to careful trial by the author before they have received admission into his work, so that they carry with them additional authority, due to his own verification of their correctness. It is an excellent work, having no equal in our language.

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## REPORTS OF SOCIETIES.

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## ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, February 13.

Dr. Alderson, F.R.S., President.

**Mr. Henry Thompson** related a case of

### PHOSPHATIC CALCULUS IN THE MALE BLADDER, WITH A NUCLEUS OF BONE (PROBABLY A SEQUESTRUM DETACHED FROM THE INNOMINATE BONE).

A man, aged 40, was sent to the care of Mr. Thompson, at University College Hospital, by Dr. R. Uvedale West, of Alford, Lincolnshire, in June, 1865, for a urinary affection of two years' standing. On examination a stricture near the orifice of the urethra and a stone in the bladder were found. On June 27 the stricture was divided by the bistoury, and the first crushing was performed on that day. All going on well, the stone was again crushed on the 30th. On this occasion the *débris* withdrawn in the jaws of the lithotrite was remarked at the time to be unusual in character, but was not then minutely examined. Four days after this, retention was caused by a fragment impacted in the urethra; this was withdrawn by means of the forceps, and it was at once seen to be a fragment of bone. Other small pieces followed, and the patient went out cured on July 15. He remains perfectly well at the present time. It was not until after the appearance of the bone that a minute history of the case was taken. The following circumstances were then elicited:—The patient had had severe pain in the right hip seventeen years ago, and was lame for more than a year. Then an abscess broke externally, the cicatrix of which, among many others, is seen about the joint. Another attack took place three or four years after, from which several abscesses and much pain and lameness resulted. Two years ago another attack laid him up for several weeks, but no external abscess resulted. When recovering from this, he became the subject of some pain and frequency in micturition; and finally the ordinary symptoms of stone appeared, and continued up to the time of his admission. The author made reference to some analogous but not precisely similar cases, no example of the latter having been at present discovered. The conclusion which he arrived at after full investigation was, that the origin of the calculous formation in this case was the existence of disease in a part of the os innominatum, resulting in necrosis of a small portion; and that this portion ultimately exfoliated and detached itself, to be extruded, not externally by the surface of the body—not by means of abscess which should follow the usual course along the tracks of muscles or vessels, but by one which communicated directly with the bladder, so that the sequestrum made its way into that cavity, and formed the nucleus of the phosphatic stone for which the patient was subsequently successfully operated on by lithotrity.

**Mr. William Lawrence** communicated a paper by **Mr. Joseph Allen**, on a

### CASE OF LITHOTOMY—MULBERRY CALCULUS WEIGHING EIGHT OUNCES AND A QUARTER—DEATH.

The author was summoned to the Rev. T. C——, a thin spare man, of nervous temperament, aged 56 years, on November 16, 1864, and found him suffering great pain and irritability of the bladder. He was a married man, of temperate habits. Had been married seventeen years and a-half, and had three children growing up. A few days previously he had caught cold whilst performing the funeral service at the cemetery, and had suffered considerable pain in the body since, accompanied with frequent and painful micturition. He had tried several remedies without avail. Opiates and other anodynes, etc., were prescribed, but with only temporary relief. His history was as follows:—He was born in Surrey, and from his boyhood was fond of exercise, running, jumping, etc., but frequently suffered great pain afterwards, and often passed blood in his urine; this he concealed lest he should be debarred from such pursuits. As a young man, hunting had the same effect, but his love for the sport was too great to allow him to give it up. He resided at Calais for eleven years, and enjoyed good health all the time. He afterwards spent seven years in London. He was ill for about three weeks shortly before leaving London with inflammation of the bladder, according to his account. Has resided in Norwich about five years. His health generally has been good, dyspepsia being his chief ailment, which a little carbonate of soda mostly removed. He confessed, however, to great irritability of his bladder for some years past, having been compelled whilst in London to micturate every two hours, and latterly had been unable to retain the urine more than one hour, so that he was compelled to time his visits in the parish accordingly. On December 5, 1864, he was sounded by the author in the presence of Dr. Eade, having previously refused to permit it through false delicacy. The sound, immediately on entering the bladder, came in contact with a large and hard stone. The urine contained lithic acid in considerable quantity, also pus-globules. It was determined to perform lithotomy, which was accordingly done on December 8. The ordinary lateral incision was made, and the stone readily seized with the forceps. On attempting to extract it, however, it was found to be one of no ordinary size. Larger forceps were then introduced, and a firm grasp obtained, but without avail. In order, therefore, to avoid laceration of the parts as much as possible, the fibres of fascia on either side were carefully cut with a blunt-pointed bistoury by Mr. Cadge, traction being made on the stone at the same time. The perineum was enormously distended during the extraction of the stone. After a short time a mulberry calculus, weighing eight ounces and a-quarter, was removed. There was scarcely any hæmorrhage, and very little laceration of the parts. The patient was remarkably well after the operation, and for a time progressed most favourably, the wound presenting a healthy appearance, and gradually closing. He was able to retain his urine in the bladder for three hours, a thing he had never done before for years. After a time, however, his spirits began to flag, and he became fidgety and impatient; and although well supplied with nourishment and stimulants from the first, he gradually became weaker, and at last sunk from exhaustion on Jan. 20, 1865, six weeks after the operation.

Mr. Holmes Coote said the case related by Mr. Henry Thompson was worthy of great consideration. There was one point, however, on which information was desirable, viz., as to the microscopic structure of the nucleus of the calculus. This would remove the possibility of doubt as to its being bone. Mr. Thompson had said that there was no specimen in the museum of St. Bartholomew's Hospital of a calculus with a nucleus of bone. He (Mr. Coote) remembered a case in which Mr. Lawrence had removed a calculus from the bladder of a woman. In this instance the bone was that of a sheep, and, of course, had been introduced from without. He could scarcely understand how the piece of bone in Mr. Henry Thompson's patient's case could have got into the bladder in the way suggested by the author, with so little irritation. Mr. Coote then spoke in eulogistic terms of the operation in the case brought forward by Mr. Allen. It was probably the largest oxalate of lime calculus that had been removed by the lateral operation of lithotomy. Mr. Coote also remarked that although Mr. Allen had not alluded to the fact, the history of the case clearly showed that the patient did not die of the mere operation. That was skilfully performed, and reflected the greatest credit on the operator. Had there been an autopsy, he (Mr. Coote) had no doubt it would have revealed other diseases as the cause of death. The coma pointed to renal disease. Mr. Coote concluded by saying that the operator was worthy of great praise.

Mr. Erichsen agreed in the main with Mr. Coote. He thought it a matter of great importance to distinguish cases of stones in the male and female bladder as regards the source of their nuclei. We know, he said, that in the female bladder the nuclei may be most various substances introduced from without; but a piece of bone was scarcely likely to be introduced by the male urethra. He agreed with Mr. Thompson that it most probably came from the pelvic bone in his patient's case. With reference to the second case, Mr. Erichsen said the stone was very large, although he was not prepared to say that it was the largest oxalate of lime calculus which had been removed by lithotomy. The case was of importance as regards the question of removing a stone through the prostate. In cases in which we hear of such great difficulty in removal, he could not help thinking the gland had been divided beyond its limits. The case introduced the question of small and large incisions in the prostate. No doubt in Mr. Allen's case the best method of getting the stone out was adopted; but he could not think it could have passed through the lateral lobe without extending beyond its limits. Mr. Erichsen concluded his remarks by expressing his opinion that death was caused by renal disease, and not by the operation.

Mr. Charles Hawkins had no difficulty in coming to the same conclusion as Mr. Thompson had; he had very little doubt that a foreign body could make its way into the bladder from other parts of the body. He referred to a case in the practice of Sir Benjamin Brodie, in which the nucleus of a calculus removed from the bladder of a female consisted of a small portion of bone and two imperfectly-formed teeth, and to another case in which large quantities of hair, covered with calcareous matter, had been passed. Mr. Hawkins believed that these foreign bodies had come from tumours connected with the ovaries. Mr. Hawkins then referred to cases in which fæcal matter had found its way into the bladder, and gave brief particulars of a case of calculus in the bladder, the nucleus of which calculus was some vegetable substance derived, he believed, from fæces. In this case, Mr. Hawkins had removed the calculus by lithotrity with success.

Mr. Spencer Wells said that, without in the smallest degree criticising the mode in which the very large oxalate of lime calculus had been removed—feeling, indeed, that the operation was a very creditable one to the Surgeons concerned —he still wished to ask the author of the paper, simply as a guide to future practice in a similar case, whether it would not give a patient a better chance of recovery, in a case where a stone was known or be believed to be unusually large, either to perform the high operation, or to be prepared with some powerful crushing apparatus, by which, after the bladder had been laid open, the stone might be broken and removed in fragments. Either of these plans would seem to be less hazardous than the forcible dilatation or the large incisions necessary for the removal of a very large unbroken stone by the lateral or bi-lateral perineal operation. With regard to the curious substances found as the nucleus of calculi, he (Mr. Wells) might add that he had recently removed a phosphatic calculus from the bladder of a patient who had undergone an operation for vesico-vaginal fistula, and a loop of silver wire which had got into the bladder had formed the nucleus of the calculus.

Mr. Henry Lee said that Mr. Erichsen implied in his remarks that the best plan to deal with large stones was to cut them out, rather than to tear them out. In this opinion he (Mr. Lee) concurred. Mr. Lee then referred to a case of lithotomy of his own at St. George's for the removal of a very large stone. In this instance he cut, no doubt, beyond the limits of the prostate, and the result of the case showed that the practice did not always lead to bad results. The calculus was phosphatic, and weighed four ounces and a quarter, and there was another stone in the bladder, extracted at the same time, which weighed a quarter of an ounce.

Mr. Propert said that twenty-five years ago he had under his care a young gentleman who had a knack of driving things up his urethra. At last he passed up a long piece of sealing-wax. The specimen of wax afterwards removed from the bladder would be found in the museum of St. George's Hospital. Sir B. Brodie, who was consulted, could not discover any foreign body in the bladder, and the patient went to India. After remaining in India some time, symptoms of stone in the bladder came on, and the patient came home for operation. Sir B. Brodie operated, and removed a calculus, the nucleus of which was a piece of sealing-wax. The patient recovered, and went out again to India, when, unfortunately, he was drowned.

Mr. Moore had had under his care at the Middlesex Hospital a patient, above 30 years of age, who had a similar strange fancy for passing foreign bodies into his urethra. He one day introduced a piece of sealing-wax. He afterwards had mucous and phosphatic urine, and suffered so much that lithotomy was performed. The piece of sealing-wax was removed and placed in the museum. The fragment was bent on itself, and had the ordinary flattened oval shape of a calculus. It was creased and compressed, as if it had been squeezed into its form by the contractions of the bladder. As regards the source of the nucleus in Mr. Henry Thompson's patient's case, he could not conceive that there could be any great difficulty in the way of the belief that it had been detached from the pelvic bone, and had made its way into the bladder. He did not think the passage of purulent matter from an abscess into the bladder was likely to produce any injurious consequences, and he referred to cases which served to show that the action of urine on abscesses communicating with the bladder did not affect them injuriously; on the contrary, the stimulating effects of the urine appeared to produce salutary effects.

In reply to a remark by Mr. Holmes Coote, Mr. Moore said that he did not mean that pelvic abscesses were not serious, but that the mere entering of matter from an abscess into the bladder was not serious.

Mr. Solly agreed with the other speaker as to the great probability that the bone was an exfoliation from the ischium, and he agreed with Mr. Moore that an abscess might empty into the bladder without producing any striking disturbances. In illustration, he referred to the case of a patient lately under his care in St. Thomas's Hospital, who had paralysis of the legs consequent on disease of the spine, and who had quite recovered, after having passed much purulent matter in the urine. The case related by Mr. Allen introduced the question whether it would not be better to crush a stone when it was found to be so large, as in that case, before attempting to extract it. On one occasion he had had prepared beforehand an instrument for this purpose, but it turned out that the stone was not so large as had been expected. He thought the Surgeon ought to be prepared with a crushing apparatus, in order to break up the stone when it was very large.

Mr. Charles Hawkins described an instrument—a pair of strong forceps with large teeth—made by the direction of Sir B. Brodie for use in a case of lithotomy, but the instrument was not required, as the stone did not prove to be as large as was expected.

Mr. Solly said the instrument he had had made was like the one spoken of by Mr. Hawkins.

Mr. Thompson thought the evidence all but complete that the bone had had its origin in the body of the patient himself. Still he should be glad to submit the fragment to microscopical analysis to determine accurately that point. He was, of course, quite alive to the various sources of error on this point. It was not long since he performed lithotomy for the removal of sealing-wax introduced by a patient into his own bladder, and he had more recently removed a hair-pin from the bladder of a male, who had so introduced it. With reference to the important and interesting case of Mr. Allen, there were two points well worthy to be considered with regard to it. First, was it possible to crush that stone through the wound, and so withdraw the fragments, instead of enlarging it? He had seen no instrument which he thought capable of crushing a large oxalate of lime stone, certainly none by way of compression. He had cut a gentleman last summer and removed an oxalate of lime stone weighing 3¼ oz. Before withdrawing it he had applied forceps of great strength, and with a powerful screw in their handles, and he had screwed the handles together, bending the iron, but no impression was made on the stone. The best method he had seen was one employed by Civiale, who, after trying it and perfecting it on twelve or thirteen cases, had just introduced it to the Academy of Medicine at Paris. Mr. Thompson had seen all those calculi so crushed and removed, and considered it a very valuable instrument. It was accomplished by means of perforation by a drill, which split up the stone. Secondly, there was the question of the high operation for such a stone. Could it have been ascertained to be so large—and no doubt such information it was possible to attain—he believed the high operation would have been preferable. The bladder was nearer to the surface above the pubes in a thin individual such as this patient was; less important parts were in the way than in the perineum, and the depth of this region, which is exceedingly embarrassing with so large and spherical a stone, was avoided by that procedure. Altogether it was well worthy of consideration whether such stones should not be removed by the high or supra-pubic rather than by the lateral operation. He inclined to the belief that the former was preferable for these cases.

Mr. **Joseph Allen** explained how it happened that leave to make a post-mortem could not be obtained. Although the post-mortem might have revealed renal disease, there had been no positive evidence of it during life. The patient seemed to sink from nervous depression. As regards the prostate, as no post-mortem examination had been obtained it was impossible to speak positively. He was glad to find that Mr. Henry Thompson, in his reply, had relieved him (Mr. Allen) of the necessity of replying to several questions which had been put to him. Mr. Allen said that the largest stone—not an oxalate—which had been removed in Norwich had been removed by the lateral operation, and the patient recovered. For this reason he did not think of the high operation; moreover, it was not easy to ascertain the size of a stone before the operation.

### NEW ARTIFICIAL ARM.

After the meeting, Mr. **Uren**, of Cornwall, exhibited an artificial arm which he had invented, and which had been made by Messrs. Weiss and Son. This seems to be as useful an artificial arm as any we have yet seen. Movement of the elbow, opening and closing of the fingers, are maintained by the movement of the stump of the upper arm acting on some cords which are connected to the arm and to straps across the trunk. The man who wore it said it was comfortable, and that it was of considerable use to him.

## LEGAL INTELLIGENCE.

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### COURT OF EXCHEQUER.—Feb. 20.

*(Sittings at Nisi Prius, at Guildhall, before the* Lord Chief Baron *and a Special Jury.)*

#### MEAKIN *v.* THE MIDLAND RAILWAY COMPANY.

Mr. Montagu Chambers, Q.C., Mr. Horace Lloyd, and Mr. Waddy were counsel for the pliantiff; Mr. Bovill, Q.C., and Mr. Alfred Wills, appeared for the Company.

This case was resumed. The plaintiff is a gauger in the Customs, and receives a salary of £250 a-year. Last year he was travelling on the defendants' line of railway, and was in the collision at Colney-hatch, when 300 passengers were more or less injured. The plaintiff had his lip cut and some teeth damaged, and was for a short time rendered insensible. On his arrival at King's-cross he was taken home and placed under Medical charge. The defendants admitted that the accident had resulted from the negligence of their servants, and the only question for the jury was the amount of damages the plaintiff was entitled to under the circumstances. The plaintiff was described as having been previous to the accident a man of vigour both in mind and in body, an active member of the Customs Volunteer Corps, and an occasional contributor to literature. The plaintiff was entitled under the rules for Civil Service pensions to an annuity in the event of his retiring from office of £62, calculated upon his present salary. He is a clerk in the third class, and could, should circumstances favour him, rise to a salary of £400 per annum. The plaintiff appeared to be suffering very severely from the effects of the accident, and had great difficulty in using his legs at all. Several Medical gentlemen of great eminence—Mr. Ingolby, Mr. Hutchison, Mr. Sweeting, Mr. Hall, and Mr. Adams—were called, and described the plaintiff's case as a very serious one, and of course the evidence differed a little as to what was likely to prove the result of the plaintiff's injuries. They all agreed that he had been very seriously injured, and that some very considerable time must elapse before he would be able to resume his duties at the Custom House, if he ever could, as one or two said, resume them at all. It appears that if an officer of Customs is incapacitated from doing his work from ill-health he is usually allowed six months' leave of absence upon full pay, and if he is not then sufficiently recovered to resume his duties the term is extended another six months, but the pay is reduced by one-half. The plaintiff's wife said that the accident had made him a wreck of what he formerly was. An effort the plaintiff made to resume his duties was ineffectual, and after some days he was obliged again to lie up. The plaintiff was said to have received an injury to the spine, and was otherwise so seriously hurt as to make it a mere matter of speculation whether he ever could resume his duties, failing which, after the expiration of one year, the Board of Customs would remove him from the list of effective officers and force him to retire on his pay of £62 per annum.

On the part of the defendants, Mr. Skelding, a Surgeon, was called, and swore that he had examined the plaintiff, and was of opinion that the plaintiff's brain had received no lasting injury, neither was there any injury to the spine. There was no reason why the plaintiff after a few months should not return to his work and be as good a man as ever he was in his life.

In cross-examination the witness said that he was in the employ of the defendants. He called upon the plaintiff to examine him, and he said that he was requested to say that the company desired to express their sympathy with him, and afterwards touched upon the matter of compensation, and put the case to the plaintiff thus:—"Suppose my carriage had caused the mischief, what do you think it right between man and man that you ought to receive under the circumstances?" The plaintiff replied that as the day was Sunday such a matter had better not be mentioned. To this the witness said that he should not have mentioned the matter had not Mr. Hall, the plaintiff's medical adviser, consented to his doing so, and rather wished him to do so, under the belief that the question of compensation might be weighing upon the plaintiff and would retard his recovery. The witness said he had settled many compensation cases with patients. It was part of his duty. He always put the case as between "man and man." He carried cheques in his pocket for the purpose of settling cases, and had some with him then. The plaintiff had never complained twice of pain in the same place. He had asked the plaintiff to point out the seat of pain, and the spot indicated by the patient he had put his pocket-book upon, and then asked him again where the pain was, and the plaintiff had fixed upon another spot, and so he had gone on from place to place. The pains were "flying pains." Any impairment in the functions of the spine was followed by paralysis. In injury to the spine the pain was constant.

Mr. Barnard Holt, the eminent Surgeon of Saville-row, examined the plaintiff on behalf of the Railway Passengers' Insurance Company, and he now stated that, after a thorough examination of the plaintiff, he had no hesitation in saying that, with quiet and fresh air, he would in the course of a very few months be sufficiently restored to health to return to and discharge his duties, and that the plaintiff's ultimate recovery was not very far distant. The lameness the plaintiff exhibited was the result of want of power in the muscles of the leg, brought about by the injury the leg had received. The plaintiff's pulse was uniform, and the same volume on both sides. The plaintiff had undressed himself for the examination, and he used both arms with freedom. There was no doubt that the excitement as to the result of the trial retarded his recovery.

Mr. Haynes Walton, also a Surgeon of high position, entertained the same opinion as Mr. Holt. He saw no reason at all why the plaintiff should not entirely recover from the accident, but of course he could not say when. The plaintiff might in the course of three or four months be reasonably fit to resume his work.

A certificate written by Dr. Jeffreson, who declined to appear as a witness, was read. The Doctor was particularly guarded in the expressions he used. He said, after having examined the plaintiff, he saw no reason why he should not "eventually" recover. Of course, if the plaintiff should not recover within the time allowed by the Customs for leave of absence, he would be struck off the roll of effectives, and compelled to retire on the £62 a year, when he is only about 43 years of age, and be obliged to seek other employment to make up the great difference between his £250 a year and his pension.

Mr. Bovill summed up the defendants' evidence, and urged that the Medical testimony he had called must have satisfied the jury that the injuries sustained by the plaintiff were not of a permanent character. The mode adopted by the company as to settling compensation was done out of kindness to the injured parties, as it removed as soon as could be done all anxiety that men would naturally have as to what was likely to be in a money sense the result of their case, and when that anxiety was once removed it did a great deal towards the patient's recovery.

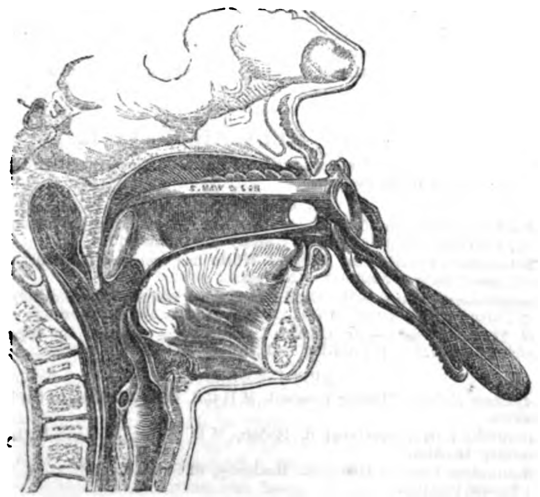
Mr. Chambers, in the course of an admirable reply, ridiculed the notion of the company, from feelings of compassion, having the cheque-book produced to an injured man, in the moments of his agony as a means of soothing his pain, relieving his anxieties, and pushing him on to recovery. He supposed the offer of £30 or £40, or even 100 guineas, was given as a golden pill, the "heal-all" and "cure-all" of the company. As to the notion of the petitioner suffering from flying pains, he was poked here with the pocket-book, "Does that hurt you?" Then somewhere else—"Does that hurt you?" Then another poke—"Does that hurt?" And because the poor man said "Yes" to the questions, then the jury were asked to believe that all his pains were flying ones, and that he had no permanent pains at all.

After the Lord Chief Baron had summed up, leaving the question of damages to the jury, they retired, and after a short absence returned into court, assessing the damages at £800.

## NEW INVENTIONS.

### NEW BI-VALVE SPECULUM FOR EXAMINING THE LARYNX, INVENTED AND PATENTED BY DR. LABORDETTE, OF LISIEUX.

We have received from Messrs. S. Maw and Son, of Aldersgate-street, a specimen of the instrument whose use is depicted in the accompanying wood-cut. It will be seen that it combines the functions of mirror and depressor of the tongue in one instrument; that the handle is placed out of the way of the eyes; that a great deal of light is economised by reflection from the polished interior of the speculum tube.



The description of the instrument given by the inventor is as follows:—

"The posterior blade, which is curved to fit closely the back of the mouth, descends more or less deeply into the pharynx; the inferior blade, which is shorter, penetrates as far as the base of the tongue, which it depresses by means of the lever spring fixed to the handle.

"The instrument, introduced into the mouth, is pushed as far back as possible; the posterior blade being in the pharynx serves as a point d'appui; the tongue is then immediately depressed in the manner before described by means of the lever-spring acting upon the anterior blade, and exposes the orifice of the larynx reflected in the mirror.

"There are two sizes, one for children and one for adults, which may be obtained, price 31s. each, through most chemists, or direct from S. Maw and Son, 11, Aldersgate-street, E.C."

So far as our own short and hasty trial goes, we have found no difficulty in warming the instrument, or in cleaning it after use; and for autolaryngoscopy we should consider it less fatiguing than the ordinary laryngoscope. But on these points we shall be glad to hear what is said by such of our readers as are adepts in the art of laryngoscopy.

## BOOKS RECEIVED.

The Dublin Quarterly Journal of Medical Science. No. 81. February, 1866. Dublin: Fannin and Co. 5s.

*** Contains ten original communications, all apparently of great value. In addition to a translation by Dr. Moore of a paper by Donders on Food and its Relation to Heat and Work, Mr. Porter gives some observations on crushing stone in the bladder; Dr. Smyly, some notes in Medicine and Surgery, including a case of ovariotomy, of strangulated hernia, forcible flexion of the knee-joint, compound fracture of the clavicle, and a new mode of fixing the larynx in laryngoscopy. But we must tell Dr. Smyly that Dr. Labordette's instrument does in one piece what his invention does in two. Dr. Hayden gives cases of typhoid pneumonia with a striking photograph. Dr. Stokes speaks of the treatment of granular ophthalmia by pressure, with figures of pressure instruments. Mr. Colles has a paper on Injuries of the Larger Joints. Dr. M'Clintock gives cases of scarlatina complicating childbed—a coincidence which we shudder at on this side of the Channel. Dr. Wynn Foot publishes a very scholarly thesis on chromidrosis; Dr. Gordon, an examination of the inside of the pleura by the endoscope; Dr. Fleming, some remarks on lithotomy and lithotrity; and Dr. Baxter, on sunstroke. In his opinion sunstroke does not depend upon heat absolutely, but upon that kind of atmosphere which opposes perspiration.

Where Shall We Get Meat? The Food Supplies of Western Europe. By Joseph Fisher. London: Longmans.

*** An account of a tour over the greater part of Europe by a man who went to see the quantity and quality of animal food procurable.

The Dropped Arm, a paper read before the Brighton and Sussex Medico-Chirurgical Society, Dec. 7, 1865. By J. A. Hingesten, M.R.C.S., L.S.A., Registered Practitioner. Author of "Topics of the Day," etc. etc. Brighton: Wakeling, 1866. Price 6d.

*** The writer treats of muscular debility of the arm from granular degeneration of the spinal cord.

On the Anatomy of Vertebrates, vol. 1, Fishes, and Reptiles. By R. Owen. London: Longmans and Co.

*** This is the first volume of a work on the vertebrates, to rank with that on the invertebrates. It shall be reviewed soon.

The Magnetic Purification of River Water, and the Report of the Sewage Committee of 1864. By Thomas Spencer, F.C.S., etc. Third edition. London: Stanford, 1865. One shilling.

*** One of our contributors is preparing an account of Mr. Spencer's process for purifying water, which has not attracted the attention it merits.

Noveau Treatment de l'Augine Conenneuse des Croup et des autres Localisations de la Diphthérie, par le Baume de Copabu, et le Poivre Cubèbe, Medication anti Catarrhale, Substitutive Générale. Par M. H. Trideau. Paris: J. B. Baillière et Fills, 1866. Pp. 32.

*** Recommends copaiba, or cubebs suspended in emulsion, for diphtheria.

Cincinnati Journal of Medicine. Edited by George C. Blackman, M.D., Theophilus Parvin, M.D., and Robert Bartholo, M.D.

*** The editors of this journal have borrowed without acknowledgment the device of a bunch of grapes with the motto "*fructû cognoscitur arbor*," which appear on the title-page on a "Report on Cheap Wine" from the pen of one of our contributors. We do not think that an article on spermatorrhœa is the sort of fruit that speaks well of the tree whence springs the *Cincinnati Journal of Medicine.*

The Australian Medical Journal. December, 1865.

*** Two cases of the falsely-called hydatids of the uterus by Dr. Gunning, and a good practical paper on homœopathy by Dr. Bird.

Journal of the Scottish Meteorological Society. January, 1866. Edinburgh: Blackwood. 2s. 6d.

*** An interesting paper on the popular weather prognostics of Scotland.

Pharmaceutical Journal. February, 1866.

*** Unusually full of interesting and useful matter.

Introductory Address Delivered at the Opening of the Winter Session at St. Thomas's Hospital. By Wm. M. Ord, M.B.

First Annual Report of the Borough of Newcastle Pauper Lunatic Asylum, 1865.

Report of the Health of Liverpool during the December Quarter of the Year 1865. By W. S. Trench, M.D.

Observations on the Present Epidemic of Typhus. By R. Perry, M.D. Glasgow: W. Mackenzie.
Braithwaite's Retrospect of Medicine, vol. 52. London: Simpkin and Co.
Worms' System of Cure of the Rinderpest.
British Journal of Dental Science (February).
Unfittlichkeit und Anmahig Kert.
Braithwaite on Cholera.
Braithwaite on Affections of the Eye.
Braithwaite's Commentary on Midwifery.
Carson on Capital Punishment.

## NEWSPAPERS RECEIVED.

Buffalo Commercial Advertiser.
The Nelson Examiner.
The Western News.

## MEDICAL NEWS.

Royal College of Physicians of London.—At a general meeting of the Fellows held on Monday, February 19, the following gentlemen, having undergone the necessary Examination, and satisfied the College of their proficiency in the science and practice of Medicine, Surgery, and Midwifery, were duly admitted to practise Physic as Licentiates of the College:—

Joseph Burn, Bourne; Henry Cribb, Bishop's Stortford; Hamilton De Tatham, 40, Dorset-square; George Edgelow, Kensington-square; George Jackson, Plymouth; John Morrill, Guy's Hospital; John Holden Webb, St. Mary's Hospital.

At the same meeting, the following gentlemen were reported by the Examiners to have passed their Primary Examination for the Licence:—

William Perceval Magor Boyle, Guy's Hospital; Henry Cheesman, Guy's Hospital; Charles Gôte Gurdon, Guy's Hospital; James Robert Hill, St. Mary's Hospital; William George Kemp, St. Bartholomew's Hospital; George Welland Mackenzie, London Hospital; John William Morris, Guy's Hospital; Arthur Wolcot Nankivell, University College; John Ockenden, St. Mary's Hospital; John Robert Perkins, King's College; John James Ridge, St. Thomas's Hospital; Eldred Noble Smith, St. Mary's Hospital; John Davies Thomas, University College; William James Todd, King's College; Arthur Tudor Humphreys Trevor, King's College.

Apothecaries' Hall.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, February 15, 1866:—

Charles George Edmonds, Southampton-street, Camberwell; Robert Andrew Bolt, Blackman-street, S.E.

Pharmaceutical Society of Great Britain.—Names of Candidates who passed the Major Examination Feb. 21, 1866, as Pharmaceutical Chemists:—

Thomas Fitzgerald Bulmer, Preston; Osborn Chubb, Taunton; Thos. Harris Cruse, Warminster; Walter Dyson, Pendleton; Arthur Thomas Horton, Scarborough; Edward Jones, Ryde; Andrew MacInnes; Ardrossan; James Stewart, Kirkcaldy.

### APPOINTMENTS.

⁂ The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Bird, William V., M.D., has been appointed Honorary Surgeon to the Bootle Dispensary, Liverpool.

Foster, Balthazar W., M.D., has been elected Physician to the Birmingham General Dispensary.

Knox, John, M.B., has been elected Physician and Surgeon to the Bakewell Dispensary, and Surgeon-Accoucheur to the Ladies' Charity.

evey, John, M.D., has been elected Medical Officer to the Workhouse of the Bailieborough Union.

Mapleson, Horsley T., M.R.C.S. Eng., has been elected Medical Officer in ordinary to the St. Marylebone Resident Dispensary.

Pode, Charles C., Mr., B.A., of Exeter Coll., has been elected Radcliffe Travelling Fellow.

Reed, Walter Hugo, M.R.C.S. Eng., has been appointed Assistant Medical Officer to the Derby County Asylum.

horp, D., L.R.C.P. Edin., has been elected Resident Surgeon-Accoucheur at the General Dispensary, Birmingham.

Thorp, Henley, M.D. St. And, has been elected Medical Officer to the Letterkenny Union Workhouse.

### BIRTHS.

Borman.—On January 30, at Derby, the wife of Allan Borman, M.R.C.S. Eng., of a daughter.

Bristowe.—On February 19, at 2, Queen-square, S.W., the wife of John S. Bristowe, M.D., of a daughter.

Broster.—On February 17, at Marland-place, Southampton, the wife of Edward B. Broster, Assistant-Surgeon, R.N., prematurely of a daughter.

Brunton.—On February 13, at 207, Caledonian-road, the wife of John Brunton, M.D., of a daughter.

Gains.—On January 21, at Newcastle, Jamaica, the wife of George E. Gains, M.R.C.S. Eng., Surgeon 6th Royals, of a daughter.

Greenwood.—On February 13, at Penryn, Cornwall, the wife of N. Greenwood, L.R.C.P.L., of a son.

Grimshaw.—On February 2, at Molesworth-street, Dublin, the wife of T. W. Grimshaw, M.B., of a son.

Hicks.—On February 13, at Old-street-road, the wife of Dr. G. Borlase Hicks, of a son.

Jones.—On February 6, at Dolgelly, the wife of Edward Jones, M.D., of a son.

Long.—On February 16, at Barham House, Leamington, the wife of C. F. Long, M.D., of a daughter.

Mackay.—On February 10, at Elgin, N.B., the wife of J. W. N. Mackay, M.D., of a daughter.

Ogle.—On February 9, at 13, Upper Brook-street, W., the wife of John A. Ogle, M.D., of a son.

Riding.—On February 16, at 36, Euston-square, N.W., the wife of Dr. Riding, of a daughter.

Swift.—On February 7, at St. Helen's-park-crescent, Southsea, the wife of Dr. B. Swift, Surgeon-Major 14th Regiment, of a son.

Tizard.—On February 10, at Weymouth, the wife of Henry Tizard, M.D., of a daughter, prematurely.

Walker.—On February 16, at Peterborough, the wife of Dr. T. J. Walker, of a daughter.

Watkins.—On February 17, at 11, Chandos-street, W.C., the wife of C. S. Watkins, M.R.C.S. Eng., of a son, stillborn.

### MARRIAGES.

Curtis—Ashby.—At Staines Church, Albert Curtis, M.R.C.S. Eng., to Augusta, daughter of the late Charles Ashby, Esq.

Garstang—Wardley—On February 14, at Over Darwen, Lancashire, Walter Garstang, M.D., to Matilda Mary, second daughter of James Wardley, Esq.

McKellar — White. — On November 16, at Umballa, India, Edward McKellar, Staff-Surgeon 10th Bengal Cavalry, to Elizabeth, only daughter of the late Colonel White.

Mouncey—Wilson.—On February 13, at St. George's, Hanover-square, James A. Mouncey, Surgeon, to Emily Georgina, eldest daughter of William Wilson, Esq.

Ross — Nightingale. — On February 17, at St. Michael's Church, St. Martin's-in-the-Fields, John T. Ross, M.R.C.S., R.N., to Mary Julia, second daughter of the late Thomas Nightingale, Esq.

Russell—Tim.—On February 13, at Eccleshall Church, Sheffield, John Russell, M.R.C.S. Eng., to Elizabeth Mary, eldest daughter of Charles Tim, M.D.

### DEATHS.

Adair, Ponsonby K., M.R.C.S. Eng., at Kurrachee, India, Medical Superintendent Indo-European Telegraph Establishment, on January 18, aged 28.

Griffin, William H., M.R.C.S. Eng., at Banbury, Oxon, on February 5, aged 26.

Henderson, Alexander, H.M. Bombay Medical Service, at Church-hill, Edinburgh, on February 6.

Hobson, Thomas, L.S.A., at Kirk, Ella, Hull, on February 1, aged 55.

Leach, Henry, M.R.C.S. Eng., at Leigh, Essex, formerly of Sandgate, on February 20.

McGlashan, John, L.F.P.S. Glasg., at 46, Wilson-street, Middlesborough, on February 15.

Morris, William, M.D. St. And., at Newbury, Berks, on February 20, aged 33.

Pollard, Tempest, M.R.C.S. Eng., at St. Helier's, Jersey, on January 31, aged 46.

Sarasin, Felix W., M.D., at Bale, Switzerland, on February 12.

Stedman, Silas S., M.D. Lond., at Christchurch, Canterbury, New Zealand, on December 4, aged 45.

Sutcliffe, Charles, M.R.C.S. Eng., at Todmorden, Lancashire, on February 12, aged 44.

## POOR-LAW MEDICAL SERVICE.

⁂ The area of each district is stated in acres. The population is computed according to the last census.

### RESIGNATIONS.

*Basford Union.*—Mr. John H. Osborne has resigned the Calverton District; area 7430; population 3101; salary £25 per annum.

*Birmingham Parish.*—Dr. Edward White has resigned the Fourth District; salary £150 per annum. (No fees.)

*Kidderminster Union.*—Mr. Cecil Webster has resigned the Bewdley District; area 9006; population 4141; salary £70 10s. 10d. per annum.

*St. Thomas's Union.*—Mr. Charles T. Tothill has resigned the Topsham District; area 4239; population 4361; salary £52 16s. per annum.

### APPOINTMENTS.

*Aylsham Union.*—Thomas Daurant, M.R.C.S. Edin., L.S.A., to the Third District.

*Droitwich Union.*—Serjeant S. Roden, M.D. Edin., M.R.C.S.E., to the Hanbury District.

*Nottingham Union.*—Henry R. Hatherly, M.R.C.S.E., L.S.A., L.M., to the Second District.

*Sheffield Union.*—Wm. Skinner, jun., L.R.C.P., M.R.C.S.E., to the North District.

*Great Yarmouth Parish.*—Thomas H. Moxon, M.R.C.S.E., L.S.A., to the South District.

**ACADÉMIE DE MÉDECINE.**—At the election to replace the late M. Beau in the Section of Pathological Anatomy, M. Behier was the successful candidate, polling 43 votes, against 36 given for M. Barthez.

**HYPOSULPHITE OF SODA IN CATTLE PLAGUE.**—Mr. J. T. Noakes, of Brockley Hall, Lewisham, states that his herdsman has successfully used hyposulphite of soda as a preventive of cattle disease. He recommends that a solution of the strength of five pounds dissolved in 100 gallons of water be given as an ordinary drink to cattle. Those of his herd thus treated escaped the infection, although not isolated. The remainder died.

**CAMBRIDGE. — RESIGNATION OF THE PROFESSOR OF ANATOMY.**—A meeting of the friends of Dr. Clark, who, after fifty years, has resigned the Professorship of Anatomy, was held at Christ's College Lodge on Tuesday afternoon last for the purpose of considering some mode of showing how much his long-continued services to the University and to science are appreciated. The meeting was well attended by influential members of the Senate; and the following resolution, proposed by the Master of Trinity College, was unanimously adopted:—"That, in order to recognise the great services rendered by Dr. Clark to science and to the University, a marble bust of him be offered to the Senate, to be placed in the Museum of Comparative Anatomy, and that it be suggested to the Senate that for the future the Museum of Comparative Anatomy be called the Clarkian Museum."

**CAMBRIDGE.** — An election to the Professorship of Anatomy, vacant by the resignation of Dr. Clark, will take place in the Senate House on the 1st of March. Dr. Humphry and Mr. Lestourgeon were candidates for the chair, but the latter having withdrawn, the former will most likely be elected without opposition. The candidates who have issued circulars offering themselves for the Professorship of Zoology and Comparative Anatomy, which has been recently established, are Dr. Drosier and Mr. Newton. The chair is open to scientific men generally. We have seen Dr. Cobbold's name mentioned as that of a probable candidate, but we believe it is not that gentleman's intention to come forward.

**FEVER IN WHITECHAPEL.**—The Medical officer of health for the Whitechapel district, Mr. Liddle, has made a report to the Local Board of Works, in which he states that during the past year the number of deaths in the district from fever has been 167, exclusive of those which occurred in the Fever Hospital of those belonging to the district. Fever has been epidemic since 1862, in which year the number of deaths from it was 250; in 1863, the number was 158, and in 1864 it was 170. During the past year the Medical officers of the Union attended 573 cases of fever, and in the preceding year 395 cases; in the workhouse during the past year there have been 535 cases of fever. These melancholy facts, the Medical officer remarks, clearly indicate that our sanitary arrangements are very imperfect, and that much greater exertion must be made, and further scientific inquiries must be instituted if this plague is not checked.

**MR. WORMS' "CURE" FOR THE CATTLE PLAGUE.**—Mr. T. Archer, of Arndean, Dollar, N.B., in a letter which appeared in the *Times* of February 22, gives the following account of his reasons for incredulity in reference to Mr. Worms' diagnosis and mode of treatment:—

"Will you kindly give me space in your columns to express my entire disbelief in Mr. Worms' so-called cure for the Rinderpest, notwithstanding the many successful applications of it that are almost daily announced in the *Times?* My incredulity is based, not alone on my own want of success in applying the remedy—which the advocates of Mr. Worms' system may attribute to my having followed his original directions contained in the letter to Lord Leigh, instead of the second prescription, where pickling onions are substituted for shallots, or the third, where I observe that one of the ingredients (assafœtida) is nearly quadrupled—but also on my experience of the disease, and on information I have been able to gather from neighbours who have been heavy sufferers.

"In the first place, I cannot detect what Mr. Worms calls the very first symptom - viz, an offensive tainted breath. I have subjected ten animals in various stages of the disease to rigid and repeated tests, and find the breath is as sweet as when they are in perfect health. From this I infer that the disease which Mr. Worms has been in the habit of treating in Ceylon is not identical with the Rinderpest, and I attribute the apparent cures to the fact that the afflicted animal will, during the first three or four days after the disease has unmistakably shown itself, occasionally rally, take its food greedily, chew its cud, and appear as if nothing ailed it.

"If, however, the attack be of a severe type, a reaction will set in and speedily dispel the hopes of the sanguine operator. Should the disease, on the contrary, be of a mild type, the animal may, doubtless, recover from it and the treatment alike. It will be interesting to learn how many can be pronounced cured in ten days, instead of twenty-four or forty-eight hours, after the Worms cure has been administered. The percentage of recoveries is now, I am glad to say, much higher in this neighbourhood than at the first outbreak of the plague. Whether this is attributable to the disease, like some other epidemics, assuming a milder form as it progresses or to a new system of management, that has very generally been adopted, I cannot say, but, in any case, I consider it a subject for congratulation that the new Act leaves the slaughtering of cattle in some degree to the discretion of local authorities."

**A GIGANTIC BIRD.**—The fossil remains of a gigantic bird, estimated to have stood twenty-five feet high, have been discovered in some beds of limestone at Nelson, in New Zealand. The remains consist of a head minus the lower jaw, the dimensions of which are 3 ft. 4 in.; the orbit of the eye measured 4½ in. by 2½ in.; also a body minus the neck; the thorax is highly developed but rather flat, the tail long, and body bulky; the wings, which are well defined, are large and close to the body, and are separated by a saddle or cradle very graceful in form; the feathers covering the body are of a large size and lying close.—*Australian Paper*. The following letter on this supposed discovery from Professor Owen appeared in Thursday's *Times*:—

"Sir,—Paragraphs like that on the 'Gigantic Bird' usually include elements which the naturalist sees to be fatal to the interpretation attached to the facts; yet these may be well deserving attention and inquiry. New Zealand was undoubtedly the land of huge birds, but, like their few existing congeners in other parts of the world, the head was small; that of a Dinornis, thrice the bulk of the largest living ostrich, does not exceed eight inches in length.

"The notice of the remains found in the province of Nelson assures me that they are those of a saurian reptile, and indicate the jurassic age of the 'beds of limestone' in which they have been petrified. Parts of a Plesiosaurus were discovered in that province by Mr. J. H. Hood, of Cluny-house, Dunkeld, in 1861; but the present are of another kind.

"Should this letter appear and meet the eyes of any colonist able to grant the request, I would ask only for a single vertebra (joint of back or tail) and one of the supposed feathers of the 'gigantic bird,' and promise to return the name of the animal.

"As my table this morning gives unmistakable evidence of a coming avalanche of inquiries as to the meaning of the paragraph from the 'colonial newspaper' to which you have added your circulation, 'friends will please to accept' the above as an answer. "I am, Sir, your obedient servant,

"February 21. "RICHARD OWEN."

THE following are the last week's Cattle Plague Returns.

| Census Divisions. | 1. Attacked. | | | 2. Result of reported Cases from the Commencement of the disease. | | | | |
|---|---|---|---|---|---|---|---|---|
| | Week ending February 10. | Week ending February 3. | Week ending January 27. | Attacked. | Killed. | Died. | Recovered. | Unaccounted for. |
| 1. Metropolitan Police District | 23 | 36 | 26 | 7537 | 3177 | 3443 | 323 | 504 |
| 2. South Eastern Co. | 24 | 38 | 35 | 4924 | 1512 | 2747 | 436 | 229 |
| 3. South Midland Co. | 683 | 689 | 569 | 12174 | 2094 | 8255 | 980 | 845 |
| 4. Eastern Counties | 284 | 201 | 157 | 8370 | 3014 | 4212 | 628 | 516 |
| 5. South Western Co. | 69 | 48 | 58 | 1321 | 349 | 684 | 168 | 120 |
| 6. West Midland Co. | 690 | 195 | 1723 | 6112 | 687 | 3080 | 650 | 795 |
| 7. North Midland Co. | 679 | 725 | 715 | 6569 | 836 | 4449 | 514 | 770 |
| 8. North Western Co. | 4942 | 3221 | 3510 | 30513 | 682 | 21619 | 2060 | 6152 |
| 9. Yorkshire | 1455 | 1426 | 2034 | 23017 | 972 | 14423 | 3888 | 3724 |
| 10. Northern Counties. | 379 | 330 | 116 | 3386 | 688 | 1814 | 465 | 419 |
| 11. Monmouthshire & Wales | 448 | 369 | 626 | 6353 | 102 | 4995 | 778 | 478 |
| 12. Scotland | 1914 | 1875 | 2156 | 37747 | 4134 | 22232 | 7412 | 3969 |
| | 11590 | 9153 | 11745 | 148023 | 18247 | 92853 | 18302 | 18621 |

NOTE.—251 Inspectors have not sent in their reports in time for this return. The very large amount of work involved in inspection appears in some cases to be the reason of this delay. One Inspector has written to say that he inspects "upwards of 330 stocks," and that it is impossible for him to make up the return in time.

## NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

### Special Report on Fractures.

**In this week's number we publish the first of a series of Lectures on Fractures and Dislocations, which we hope to continue on alternate weeks, with the remainder of Dr. Bence Jones's Lectures. At the same time we begin to publish a set of Special Reports on the Treatment of Fractures as at present carried on in the Hospitals of London. Probably the treatment in Provincial Hospitals will follow. We are sure that every Practitioner who has passed some years in secluded Professional labour, away from Hospitals and great towns, will be glad to know the simplest, latest, and most useful methods of treating accidents such as these, which cause so much anxiety lest anything less than a comely and useful limb may be the result.**

"*An Invalid.*"—The Restorative advertised with the great Surgical Baronet's name is only a quack nostrum.

*W. R. S.* is thanked, but it is too ticklish a subject.

Dr. Macloughlin's doctrine, that cholera is always preceded by a premonitory diarrhœa, is now sufficiently well known to the Profession.

*Pulvis Jacobi.*—It was in great repute in 1750.

*Mr. Addington.*—A distemper among horned cattle prevailed in 1745. The offer is declined, with thanks for your courtesy.

*Erinensis, Deptford.*—Teige, a son of Joseph O'Cassidy, of Coole, Physician to the Princes of Fermanah in 1450.

*Dr. W.*—Hawkins invented the cutting gorget in 1740.

*E. R., Kennington.*—Mrs. Mapp, the bone-setter, visited the Grecian Coffee-house once a week in her coach and four from Epsom in 1736. Mrs. Stephens received £5000 from Parliament in 1739 for communicating the secret of her solvent for stone in the bladder.

*A Country Surgeon.*—The drawings of Sir Charles Bell will remain on view in the Museum of the College of Surgeons during the ensuing week, after which, in pursuance of the wishes of Lady Bell, they will be forwarded to the Royal Victoria Hospital, Netley.

*Archæologist, Sheffield.*—There were two Surgeons appointed by the Council to attend Henry VI. during his illness—viz., Robert Warren and John Marshall. At this time Surgery was distinct from Medicine, though united to the occupation of the barber.

*The Army Medical Service.*—There is a rumour that the whole batch of Medical candidates at Netley have petitioned to be allowed to exchange from the British into the Indian Medical Service. If this be true, it gives the useful hint to all who intend to compete at the next examination that they may as well go in for the Indian Service chance, and save themselves the trouble of asking afterwards for an exchange, which may not be got very easily.

*Erratum.*—In our report of the meeting of the Royal Medical and Chirurgical Society for February 10, *for* "Mr. Gascoyen," *read* "Mr. Gaskoin."

### The late Alleged Breach of Medical Etiquette at Upton Noble (Vide "Medical Times and Gazette," January 6 and 20, 1866).

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—At a meeting of the Somerset Central Medical Society, held on the 8th inst., the above question was discussed by the members present, and it was unanimously resolved that the Secretary be requested to write to the *Medical Times and Gazette*, stating that in their opinion Dr. Higginbotham was entirely justified in the course he pursued on that occasion.

I am, &c. W. C. Walker, Sec. and Treas. S.C.M.S.

Shepton Mallet, February 16.

### Syphilisation.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I am glad to see that after the lapse of nearly ten years from its first introduction to the British public the subject of syphilisation is now receiving its due share of attention. Permit me to observe that the earliest notices of syphilisation in Norway appeared in the *British and Foreign Medical Review* for April, 1857, p. 410; and again in 1859, January number, p. 118, the full account of Dr. Danielssen's researches was given, with an analysis of the long discussion on this curious subject, in which Professor Faye, of Christiania, took so active a part. Both these notices were written by

Yours, &c. Edward Charlton, M.D.

7, Eldon-square, Newcastle-on-Tyne, Feb. 16.

### The Sphygmograph.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I hope you will allow me to correct an error which occurs in a paragraph published in your last impression. Dr. B. W. Foster, of Birmingham, is therein stated to have read the first systematic paper on the use of the sphygmograph which has been heard in this country. This is rather a strange mistake, as it is well known that I read a paper, two or three months ago, at the Medical Society of London, in which I embodied the result of observations which I have been carrying out during the past year, with the assistance and advice of my friend Dr. Burdon Sanderson, to whom is due the real credit of introducing the instrument to English Physicians.

I am, &c.,

Francis Ed. Anstie, M.D., F.R.C.P.

16, Wimpole-street, Feb. 22.

### Poor Law Medical Relief.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I have now in the hands of the printer the Draft of a Bill containing seventeen clauses, with a commentary on each clause pointing out the reasons for their proposition. There is also a letter addressed to the Members of Parliament bringing all the important points of the subject prominently before them. A copy will be sent to each Medical officer who has sent a subscription to the Association within the last twelve months, as well as to each Member of Parliament, as soon as the Bill is brought before the House. If any of your readers can assist me by naming a gentleman willing to undertake the charge of the Bill, I shall be glad to hear from him. The printer informs me he cannot keep the type standing, I therefore trust that those Medical officers who intend subscribing will do so without delay, so that I may order the number of copies of the pamphlet actually required for them.

I am, &c. Richard Griffin.

12, Royal-terrace, Weymouth, February 17, 1866.

List of subscriptions received by Mr. Griffin:—Norman, W., St. Columb Major, 5s.; Allen, R. R., Belper, 10s.; Eldridge, F., Andover, 20s.; Heginbotham, E., Wincanton, 10s.; Coombs, J. W., Ticehurst, 5s.; Wills, J., Sturminster. 10s.; Smart, J., Bethnal-green, 10s.; Jones, W., Wigton, 5s.; Mason, M., Sudbury, 10s.; Ledgard, J. A., Carlton, 5s.; Ransom, R., (not Union) Cambridge, 10s. 6d.; Dowse, J., Huddersfield, 5s.; Taylor, C., Melksham, 5s.; Parsons, C. H., Foleshill, 5s.; Hewett, T., Hendon, 21s.

List of subscriptions received by Mr. Prowse:—Dandy, C., Ormskirk, 20s.; Burtt, G. R., Chard, 10s.; Somerville, J. H., Walsall, 10s.; Robinson, G. S., Saffron Walden, 10s.; Williams, W., Festiniog, 10s. 6d.; Roberts, R., Festiniog, 10s. 6d.; Douglas, T. S., Cockermouth, 10s.; Sutherland, W., Billingham, 5s.; Barrett, J. S., Abingdon, 10s.; Moorhouse, J. W., Ellesmere, 10s. 6d.; Franklyn, L. H., Lexden and Winstree, 5s.; Jones, E., Merthyr Tidfil, 10s. 6d.; Cooke, G. R., Dartford, 5s.; Terry, J. J., Tenterden, 5s.; Terry, J. G., Tenterden, 5s.; Hitchins, W., Bath, 10s.; Molyneux, S., Wigan, 10s. 6d.; Renton, J., Hexham, 10s.; Dixon, W., Doncaster, 10s. 6d.; Grace, H., Bristol, 10s.; Grace, H. M., Clifton, 20s.; Thompson, M., Godstone, 10s. 6d.; Egarr, M. J., Wisbeach, 5s.; Harland, H., M.D., Uckfield, 21s.; Whitaker, E. F., Witney, 5s.; Hesslegrave, J., Huddersfield, 5s.; Drew, S., Wortley, 7s. 6d.; Kenningway, E. P., Eton, etc., 21s.; Slater, R. Ashton-under-Lyne, 5s.; Workman, F., Reading, 10s.; Bishop, H., Tonbridge, 21s.; Macnamara, G. H., Eton, 20s.: Lattey, W., Southam, 5s.; Lamb, R., Islington, St. Mary, 5s.; Marshall, E., Croydon, 21s.; Reed, J. C., Morpeth, 5s.; Arras, W., Carlisle, 10s.; Smith, R., Epsom, 5s.; J. S., 5s.; Holyoake, T., Seisdon, 10s.; Yelf, L. K., Shipston-on-Stowe, 10s.; T——s, 5s.; Tiley, J., Hitchin, 5s.

### Ode to Dr. Marion Sims.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—After reading your vigorous criticism on the recently-published work of Dr. Marion Sims, my "teeming brain" conceived the following verses, which I hasten to deliver to you, to be, as you may think best, either strangled at once, or, happier fate! received among your adopted children.

I am, &c.

H. L.

Say, what is man? An atom at the first,
  Waiting its nuptial atom in the womb;
Too oft, alas, by fate untimely curst,
  In place of fostering home, to find a tomb.
Grieved at the thought, a tear thine eye bedims,
Great son of Æsculapius, Marion Sims.

Swift to thine aid *inventive genius* brings
  Persuasive tent or glistering hystrotome;
With these the obstructed portal open flings,
  And guides the struggling sperm'tozoon home.
Thus may the wished-for union perfect be,
The mystery no human eye can see.

Sims, should these fail, thou still wilt cherish hope
  To find some other cause that breeds the ill,
With learned digit, searching microscope,
  Or peering speculum, exploring still;—
Nay, wizard-like, ethereal sleep wilt shed,
To win thy point, e'en o'er the nuptial bed.

### Indirect Inoculation for Rinderpest.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Since the appearance of my letter in your last number, in which I spoke of a modified process of inoculation for the prevention of Rinderpest, I learnt by some remarks made by Dr. Crisp on the cattle plague at the meeting of the Pathological Society, January 16, that men employed in flaying diseased animals had often an eczematous eruption upon the arms and thighs, which sometimes continues for three and four weeks, and evidently arises, as he thinks, from the acidity of the virus affecting the skin, these men being in the habit of placing the knife between the thighs whilst so employed.

Now, if besides inoculating other species of animals with the Rinderpest virus, with the object of returning the infection in a modified form, we were also to inoculate cattle with the lymph obtained from these pustules in man, we might obtain an exanthem in cattle which would act as a safeguard against any future attack of the Rinderpest. Or better still, where an eruption happens to be contracted in man by direct or indirect communication with the diseased animal, we might avail ourselves of the opportunity, and employ the infection thus accidentally derived for the purpose of inoculation instead.

Requesting you to give the above a place in your columns,

I am, &c.

20, Clarinda-terrace, Kingstown, Feb. 20. F. E. Jencken, M.D.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The "hypothesis" of your correspondent Dr. Jencken in last week's *Medical Times and Gazette* is, I think, worthy of serious consideration. As it is an established fact that lymph from human small-pox inoculated into the cow does not produce small-pox, but cow-pox, and that this (cow-pox) lymph inoculated into the healthy human subject proves a complete prophylactic against small-pox, so the lymph from Rinderpest inoculated into the human subject does not produce Rinderpest, but herpes (*vide* Dr. Harbord's letter in *Medical Times and Gazette*, page 184); therefore, why should not this (herpetic) lymph inoculated into the healthy cow prove a complete prophylactic against Rinderpest? Reasoning from analogy, it must be so, unless there is something wrong in the premises; and, further, as there is no known cure for small-pox, so there is none for Rinderpest, and therefore the only effectual way of stopping the ravages of the disease is to discover a prophylactic for it, such as has been discovered for small-pox.

The cow has been made subservient to the life and well being of thousands of the human race, and why should not the human race be made subservient to the life and preservation of our herds of cattle? I have no doubt there are many persons who would willingly submit to be inoculated with the lymph of Rinderpest, seeing there is no known instance (so far as I am aware of) where the matter of Rinderpest has proved fatal to the human subject. Let the thing be put to the test of experiment, and we shall soon see whether there be any value in it or not. We have, no doubt, been on the right tack in all this vaccination, but, unfortunately, we have been experimenting with the wrong sort of lymph, and therefore no good has resulted from it. I am, &c.

2, Shaw-street, Liverpool, Feb. 20. P. LEIGH, M.R.C.S.

### "GREASE" AND VARIOLA.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Mr. Whately's letter is valuable, but may I ask some of your readers whether this is a new fact? Does not Jenner in his original work state that the men who tended horses suffering from "grease" if they afterwards milked the cows on the farm caused the appearance of vaccine vesicle on the cows' bags. I am, &c.

West Haddon, February 19. G. H.

### LIST OF PAPERS (NOT) READ AT THE MEETING OF THE BRITISH MUTUAL ADMIRATION SOCIETY.

1. On the vegetable formation of the Baldwin Islands, as suggesting a new theory of capillary attraction, by Dr. Wigsby and Mr. Beardmore.
2. On the theory and practice of ovisuction, based on the minute anatomy of the *chalaza* under high powers of the microscope; being a lecture specially dedicated to the grandmothers of England, by Dr. Bleareye, F.R.S.
3. On shirt-collars as an archetypal relic of the exoskeleton and on the gills of the tunicata, by Dr. Shelly.
4. On the composition of the milk among the Asiatic nomads as explaining the formation of cream of tartar by their revolutions on the Steppes, by Professor Dariman, of Pumpernickel.
5. Professor Wrigley on the vermiform process.
6. On the strata of native hippuric acid recently discovered at Bayswater, under the auspices of the Geological Society.
7. On the successful treatment of homicidal mania by the external application of the *Cannabis sativa*, by Dr. John Bull.
8. On nidification in the Equus caballus, by G. P. R. M. D.
9. On the paralysis producible in birds by the application of chloride of sodium to the feathers covering the posterior termination of the vertebral column, by Dr. Handy Fowler.
10. On the arrest of *tabes* in the horse by a general grumous discharge, by Professor Angreus Hercules, of the N. V. C.
11. On the psychical development of the higher quadrumana, as illustrated by the wood carvings of Gibbons, and the military organisation of mandrills, by Bulbous Roots, M.D.
12. On a new species of mouse, the *Mus remotus* (or farm-'ouse), discovered in the country round London by Tittlebat Titmouse, Esq.

COMMUNICATIONS have been received from—

HARVEIAN SOCIETY; G. H.; MR. T. SMITHSON; MR. P. LEIGH; DR. F. E. JENCKEN; MR. CALEB BARRETT; WESTERN MEDICAL AND SURGICAL SOCIETY OF LONDON; ETHNOLOGICAL SOCIETY; MR. BUXTON SHILLITOE; MR. LAWSON TAIT; MR. G. S. BRADY; DR. G. H. PORTER; ROYAL COLLEGE OF PHYSICIANS; DR. W. JONES; DR. GEORGE DOWN; MR. BATEMAN; MR. R. FREEMAN; MR. ARMSTRONG TODD; PHARMACEUTICAL SOCIETY; T. W.; ROYAL MEDICAL AND CHIRURGICAL SOCIETY; DR. MACLOUGHLIN; DR. E. CHARLTON; M. R. S.; MR. R. GRIFFIN; ROYAL INSTITUTION; DR. T. C. ALLBUTT; MR. W. C. WALKER; APOTHECARIES' HALL; MR. G. GASKOIN; H. L.; DR. J. T. BARRIE, DR. C. KIDD; DR. EDWARDS CRISP; DR. W. J. RUNDLE; DR. D. DYCE BROWN; MR. F. H. MARSH; MR. J. Z. LAURENCE; MR. E. BELLAMY; Professor LIONEL BEALE; DR. HUGHLINGS JACKSON; MR. J. HUTCHINSON; DR. C. R. BREE; DR. BALLARD; Professor BUCHANAN; MR. J. CHATTO.

## VITAL STATISTICS OF LONDON.

*Week ending Saturday, February* 17, 1866.

### BIRTHS.

Births of Boys, 1069; Girls, 1024; Total, 2093.
Average of 10 corresponding weeks, 1856-65, 1938·7.

### DEATHS.

| | Males. | Females. | Total. |
|---|---|---|---|
| Deaths during the week .. .. .. | 698 | 667 | 1365 |
| Average of the ten years 1856-65 .. .. | 669·2 | 664·4 | 1333·6 |
| Average corrected to increased population.. | .. | .. | 1467 |
| Deaths of people above 90 .. .. .. | .. | .. | .. |

### DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

| | Population, 1861. | Small pox. | Measles. | Scarlatina. | Diphtheria. | Whooping-cough. | Typhus. | Diarrhœa. |
|---|---|---|---|---|---|---|---|---|
| West .. | 463,388 | — | 11 | 3 | 3 | 3 | 4 | 1 |
| North .. | 618,210 | 8 | 7 | 10 | 5 | 8 | 17 | 5 |
| Central .. | 378,058 | 6 | 5 | 4 | 1 | 7 | 6 | 3 |
| East .. | 571,158 | 8 | 5 | 12 | 1 | 25 | 17 | 3 |
| South .. | 773,175 | 3 | 2 | 7 | 2 | 13 | 21 | 12 |
| Total .. | 2,803,989 | 25 | 30 | 36 | 12 | 56 | 65 | 24 |

### METEOROLOGY.

*From Observations at the Greenwich Observatory.*

| | |
|---|---|
| Mean height of barometer .. .. .. .. .. .. | 29·342 in. |
| Mean temperature .. .. .. .. .. .. .. | 38·9 |
| Highest point of thermometer .. .. .. .. .. | 48·1 |
| Lowest point of thermometer .. .. .. .. .. | 28·9 |
| Mean dew-point temperature .. .. .. .. .. | 34·6 |
| General direction of wind .. .. .. .. .. .. | S.W. & N.W. |
| Whole amount of rain in the week .. .. .. .. | 1·79 |

### BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, February 17, 1866, in the following large Towns:—

| Boroughs, etc. | Estimated Population in middle of the Year 1866. | Persons to an Acre. (1866.) | Births Registered during the week ending Feb. 17. | Deaths. | | Temperature of Air (Fahr.) | | | Rain Fall. | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Corrected Average Weekly Number.* | Registered during the week ending Feb. 17. | Highest during the Week. | Lowest during the Week. | Weekly Mean of the Mean Daily Values. | In Inches. | In Tons per Acre. |
| London (Metropolis) | 3067536 | 39·3 | 2093 | 1400 | 1365 | 48·1 | 28·9 | 38·9 | 1·79 | 181 |
| Bristol (City) . . | 163680 | 34·9 | 120 | 73 | ‡85 | 49·7 | 29·5 | 39·7 | 0·60 | 61 |
| Birmingham (Boro') | 335798 | 42·9 | 244 | 163 | 204 | 46·4 | 29·6 | 38·2 | 1·09 | 110 |
| Liverpool (Borough) | 484337 | 94·8 | 353 | 281 | 408 | .. | .. | .. | .. | .. |
| Manchester (City) . | 358855 | 80·0 | 260 | 203 | ‡231 | 48·5 | 25·0 | 36·9 | 0·45 | 45 |
| Salford (Borough) . | 112904 | 21·8 | 88 | 57 | 66 | 46·4 | 24·0 | 36·9 | 0·51 | 52 |
| Sheffield (Borough) . | 218257 | 9·6 | 198 | 115 | 131 | 47·7 | 24·9 | 36·4 | 0·96 | 97 |
| Leeds (Borough) . | 228187 | 10·6 | 274 | 116 | 164 | 49·0 | 19·5 | 35·7 | 0·82 | 83 |
| Hull (Borough) . | 105233 | 29·5 | 101 | 49 | 53 | .. | .. | .. | .. | .. |
| Nwcastl-on-Tyne, do. | 122277 | 22·9 | 118 | 65 | 72 | 44·0 | 28·0 | 34·6 | 0·44 | 44 |
| Edinburgh (City) . | 175128 | 39·6 | 106 | 84 | 93 | 41·7 | 27·0 | 34·7 | 0·70 | 71 |
| Glasgow (City) . . | 432265 | 85·4 | 334 | 252 | 252 | 42·1 | 24·4 | 33·7 | 1·36 | 137 |
| Dublin (City and some suburbs) . | 318437 | 32·7 | 170 | †156 | 177 | .. | .. | .. | .. | .. |
| Total of 13 large Towns . . . | 6122894 | 34·4 | 4459 | 3014 | 3301 | 49·7 | 19·5 | 36·6 | 0·87 | 88 |
| | | | | | Week ending Feb. 10. | Week ending Feb. 10. | | | | |
| Vienna (City) . . | (1863)<br>560000 | .. | .. | .. | 469 | .. | .. | §<br>44·8 | .. | .. |

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·342 in. The barometric pressure fell to 28·48 in. on Sunday, and rose to 29·89 in. on Saturday.

The general direction of the wind was S.W. and N.W.

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* The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.

† Registration did not commence in Ireland till January 1, 1864; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in that city were the same as the averages of the rates in the other towns.

‡ The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

§ The mean temperature at Greenwich during the same week was 45·8°.

## APPOINTMENTS FOR THE WEEK.

### *February* 24. *Saturday* (*this day*).

*Operations* at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free Hospital, 1½ p.m.

ROYAL INSTITUTION, 3 p.m. Prof. Westmacott, "On Art Education and How Works of Art should be Viewed."

### 26. *Monday*.

*Operations* at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.

### 27. *Tuesday*.

*Operations* at Guy's, 1 p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; St. Peter's Hospital for Stone, 3 p.m.

ETHNOLOGICAL SOCIETY OF LONDON, 8 p.m. Sir John Lubbock, Bart., and Frederick Lubbock, Esq., "On the True Assignation of the Bronze Weapons, etc." John Crawfurd, Esq., President, "On the Origin and History of Written Languages."

ROYAL INSTITUTION, 3 p.m. Professor Frankland, F.R.S., "On the Non-metallic Elements."

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8½ p.m. Mr. Callender, "On Stricture of the Urethra." Mr. T. Holmes, "On Lumbar Colotomy."

### 28. *Wednesday*.

*Operations* at University College Hospital, 2 p.m.; St. Mary's, 1¼ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.

### *March* 1. *Thursday*.

*Operations* at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.

HARVEIAN SOCIETY OF LONDON, 8 p.m. Dr. Broadbent, "On Prognosis in Heart Disease."

ROYAL INSTITUTION, 3 p.m. Professor Frankland, F.R.S., "On the Non-metallic Elements."

### 2. *Friday*.

*Operations*, Westminster Ophthalmic, 1½ p.m.

MEDICAL SOCIETY OF LONDON, 8 p.m. Meeting of Council.

ROYAL INSTITUTION, 8 p.m. G. Scharf, Esq., F.S.A., "On Portraiture: its Fallacies and Curiosities as Connected with English History."

WESTERN MEDICAL AND SURGICAL SOCIETY, 8 p.m. Practical Evening, for Cases and Specimens.

## EXPECTED OPERATIONS.

St. Peter's Hospital for Stone and Urinary Diseases—The following Operation will be performed on Tuesday at three o'clock:—

By Mr. Armstrong Todd—Lithotomy (a child).

# LIEBIG'S FOOD FOR INFANTS & INVALIDS.

Prepared strictly from the Formula of
Baron Liebig, by

**HOOPER,**

OPERATIVE CHEMIST,

TRADE MARK

Sold in Tins, 1 lb., 1*s.*; 3 lb., 2*s.* 6*d.*; 6 lb., 5*s.*,
by all Chemists and Druggists,
and direct from Mr. Hooper's Establishments,

**7, PALL MALL EAST,**
**And 55, GROSVENOR STREET.**

Wholesale of Barclay, Edwards, Newbery, all Patent Medicine Warehouses, and Wholesale Druggists.

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Natural Mineral Waters of Vichy, Carlsbad, Seltzer, Kissengen, Homburg, PULLNA, FRIEDRICHSHALL, &c., direct from the Springs; also the Artificial Mineral Waters prepared by Dr. Struve and Co. at the Royal German Spa, Brighton.—Agents, W. BEST and SONS, 22, Henrietta-street, Cavendish-square, London, W.

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## NATURAL MINERAL WATERS OF VICHY,

Efficacious in Stomach, Liver, and Renal Diseases; Gout, Rheumatism, Diabetes, &c.

Also, the celebrated OREZZA MINERAL WATER, containing Iron, and which is extensively prescribed as an invaluable Tonic.
VICHY PASTILLES, the best Digestive Lozenges; and VICHY SALTS for Baths. Also, other French and German Natural Mineral Waters.
VICHY WATERS COMPANY (only Depôt in Great Britain), 27, MARGARET-STREET, REGENT-STREET, LONDON, W.

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The Mineral Water of Geilnau (Nassau), an Acidulous and slightly Alkaline and Chalybeate Water, of very agreeable and refreshing taste, owing to its large proportion of carbonic acid; a valuable Dietetic Beverage in many morbid tendencies through its antacid, diuretic, and tonic qualities.

Specimen and analysis of the Water may be obtained from Messrs. BECKER and JUNG (Ems), the appointed Agents, 9, Rood-lane, Fenchurch-street, E.C., London, who supply also the other German Mineral Waters.

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BARTH'S OXYGEN WATER holds free Oxygen in solution. It gently stimulates the functional action of the stomach and secretory organs, and is a very useful beverage. Wentworth Scott's Analysis gives as contents of a bottle—"Nearly half an imperial pint of pure distilled water, and about 13·5 cubic inches, or 4·6 grains of gaseous oxygen; equivalent to that contained in 21·4 grains of chlorate of potash." 4s. per dozen.

OXYGENATED WATER COMPANY (LIMITED), 36, LONG-ACRE.

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## THE PANCREATIC EMULSION: a New Remedial Agent.

Originated by Dr. DOBELL, Physician to the Royal Infirmary for Diseases of the Chest.

*Vide* The Lancet, *Nov.* 11*th* and 18*th*, 1865.

**This Preparation is now made on an extensive scale, and the Price is therefore considerably Reduced.**

Prepared only by SAVORY & MOORE (Chemists to the Queen, H.R.H. the Prince of Wales, the King of the Belgians, &c.), 143, NEW BOND-STREET.

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## DR. DE JONGH'S

*(Knight of the Order of Leopold of Belgium)*

# LIGHT-BROWN COD-LIVER OIL.

MEDAL OF MERIT PRESENTED BY THE KING OF THE BELGIANS.
LEOPOLD I ROI DES BELGES

SELECT MEDICAL OPINIONS.

**Sir HENRY MARSH, Bart., M.D.,** Physician in Ordinary to the Queen in Ireland:—"I consider Dr. de Jongh's Cod-liver Oil to be a very pure Oil, not likely to create disgust, and a therapeutic agent of great value."

**Dr. BARLOW,** Senior Physician to Guy's Hospital:—"I have been well satisfied with the effects of Dr. de Jongh's Cod-liver Oil, and believe it to be a very pure Oil, well fitted for those cases in which the use of that substance is indicated."

**Dr. LANKESTER, F.R.S.,** late Lecturer on the Practice of Medicine, St. George's School of Medicine:—"I consider that the purity and genuineness of this Oil are secured in its preparation by the personal attention of so good a Chemist and intelligent a Physician as Dr. de Jongh, who has also written the best Medical Treatise on the Oil with which I am acquainted. Hence I deem the Cod-liver Oil sold under his guarantee to be preferable to any other kind as regards genuineness and medicinal efficacy."

SOLE CONSIGNEES AND AGENTS,

**ANSAR, HARFORD, & CO., 77, Strand, London, W.C.**

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**EARL RUSSELL sent to the College of Physicians a communication received by him from Manilla (where Cholera has been raging fearfully), to the effect that, of all remedies tried, Chlorodyne was the most effective.**—See "Lancet" and "Brit. Med. Jour.," Dec. 31, 1864.

# TOWLE'S CHLORODYNE.

**OF KNOWN COMPOSITION.**
*For Formula, &c., see back Numbers.*

## NOTICE TO THE PROFESSION.

☞ In consequence of the decision of the Board of Inland Revenue, that Chlorodyne is liable to Stamp duty, whether for Retail, Dispensing, or Export, I beg to inform the Profession of the following alterations in my Dispensing sizes, the price of which will now be,—2 oz., 2s. 9d.; 4 oz., 4s. 6d.; and 10 oz., 11s. (stamped.) The Liq. Chloroformi Co., in 2 oz., 4 oz., and 8 oz. bottles, will remain as before. All future orders are requested to be written for the above sizes.

The ½ oz., 1 oz., and 8 oz. sizes are discontinued in order to give the largest possible amount of Chlorodyne for the smallest Stamp Duty. Chlorodyne being frequently sold by weight, I beg to say that such is not the case with my preparation, which, being sent out by the fluid ounce, gives a considerable advantage over purchasing by weight, there being only 12¾ fluid ounces to the pound.

**Sole Manufacturer—A. P. TOWLE, STOCKPORT-ROAD, MANCHESTER.**

# ORIGINAL LECTURES.

## ON GENERAL AND LOCAL CHEMICAL DISORDERS ARISING FROM MODIFIED PEROXIDATION,

AND ON THE MECHANICAL DERANGEMENTS THEY PRODUCE.

By H. BENCE JONES, M.D., F.R.S.

### PART III.—LECTURE X.

### ON FERMENTATIONS AND FEVERS.

THERE is for the chemist and for the physician no subject more anxiously waiting for perfect solution than the nature of fermentation. For animal poisonings are fermentations, including as I intend to do under this term catalytic as well as transferred actions.

Many mineral, vegetable, and animal substances have the power to exalt or change the chemical actions going on in contact with them. Thus heated spongy platinum will cause hydrogen and oxygen to combine. Phosphorus will convert oxygen into the more active ozone. Finely-divided platinum will oxidise alcohol in the air. Peculiar vegetable mycoderms will produce the same oxidising action as the spongy platinum.

Sugar, when fully oxidised, without the presence of any modifying substance, gives rise to carbonic acid and water only; when modifying substances are present the oxidation is far more complex. With yeast or wine ferment sugar gives alcohol, glycerine, succinic acid, and carbonic acid; with a different ferment lactic acid is formed; with yet another viscous fermentation occurs, and gum, mannite, water, and carbonic acid are produced. According to M. Pasteur, when animal matters are present with the sugar, oxidation at first occurs; infusoria, as monas crepusculum and bacterium termo, live until the oxygen is gone; then butyric vibrios appear, and these set up putrefaction, and the compound sugar, $C_{12}H_{12}O_{12}$, gives rise to butyric acid, $C_8H_8O_4$, carbonic acid, $C_4O_8$, and free hydrogen, $H_4$.

In the human body many different kinds of ferments occur in health. Of these zymases, four are well known: first, those that change starch into sugar, as in saliva, in pancreatic fluid, in intestinal fluid, and in the liver; secondly, those that change sugar into lactic acid, as in stomach, and in milk; thirdly, those that help to make the albuminous part of the food soluble, as in the pepsine of the stomach; fourthly, substances that cause the fine division or emulsion of fat in the body, as in bile, in pancreatic and intestinal fluid.

Moreover, many other chemical actions in the human body depend in health on some kind of contact action, or action by presence. The whole process of assimilation in each part of the body: the food becoming blood, the blood becoming part of each organ and texture, identical in composition with the substance already there, gives evidence of the highest amount of contact action, on which clear ideas are as yet wanting.

At present our knowledge of the chemistry of fermentation is insufficient for the full solution of the comparatively simple problems of the making of bread or the putrefying of urine; how far short, then, must it be from giving us the explanation of the chemistry of assimilation?—far less can it help us now to comprehend the great problem of reproduction.

I am unable here to enter into the multitude of questions connected with fermentation in general. I am obliged to limit myself to a few points connected with fermentation, and I shall take that of the urine, on which I have some facts which I wish to bring before you.

First, on acid fermentation in the urine.

For the last twenty years it has been a received opinion that there is an acid fermentation in the urine.(a) Scherer thinks that after it has been passed an increase of acidity may be observed, and the deposit of uric acid and of acid urates he holds to be well explained by this after formation of acid. When making my experiments on the variations of the acidity of the urine by carefully determining the amount of acid in the urine at different periods after the water was passed, I was led to doubt the existence of this acid fermentation, and to satisfy myself I made the following experiments on the so-called acid fermentation.

I endeavoured to measure the increase of acidity in the urine, first by a standard solution of soda, and secondly, by watching the time when the uric acid crystallised out. A very dilute standard solution of soda was prepared, and eighteen different experiments on healthy urine were made. The acidity was determined when the urine was first made in a fixed quantity of water, 50 or 100 c.c., and the acidity was again and again noted from time to time on different days in the same urine. The results are given in the following table:—

| | Expt. 1st. | Expt. 2nd. | Expt. 3rd. | Expt. 4th. | Expt. 5th. | Expt. 6th. | Expt. 7th. | Expt. 8th. | Expt. 9th. | Expt. 10th. | Expt. 11th. | Expt. 12th. | Expt. 13th. | Expt. 14th. | Expt. 15th. | Expt. 16th. | Expt. 17th. | Expt. 18th. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1st day .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | no incr. | .. |
| 2nd day .. | .. | no incr. | no incr. | no incr. | slight incr. | .. | .. | .. | .. | no incr. | slight incr. | .. | .. | .. | no incr. | slight incr. | .. | slight incr. |
| 3rd day .. | no incr. | .. | .. | .. | .. | slight incr. | slight incr. | decr. | incr. | .. | .. | .. | .. | .. | .. | .. | no incr. | .. |
| 4th day .. | .. | .. | .. | no incr. | no incr. | .. | .. | .. | .. | no incr. | slight incr. | .. | .. | .. | .. | .. | .. | .. |
| 5th day .. | no incr. | no incr. | .. | .. | .. | slight incr. | slight incr. | slight incr. | .. | .. | .. | slight decr. | strong decr. | .. | .. | .. | .. | .. |
| 6th day .. | .. | .. | .. | no incr. | .. | .. | .. | .. | decr. | decr. | slight incr. | .. | .. | no incr. | .. | .. | no incr. | .. |
| 7th day .. | no incr. | no incr. | .. | .. | no incr. | slight decr. | .. | decr. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 8th day .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | decr. | .. | .. | .. | .. | .. | .. | decr. | .. |
| 9th day .. | .. | .. | .. | .. | .. | slight incr. | .. | same | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 10th day .. | decr. | .. | .. | .. | decr. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |

Thus, in all these experiments there is not one that showed any decided increase of acidity. There was either no increase of acidity at all, or it was so slight that the increase was not beyond the possible error of observation consequent on the process. Failing by direct measurement, I tried whether any conclusion could be arrived at by noting the time when free uric acid crystallised out, because the crystallising out of free uric acid is the most delicate test of the free acidity of the urine. Forty-nine different urines were observed daily without any filtration to determine the day when the uric acid crystallised out. In 32 no crystals were found; in 17 they were found.

In these 17 urines crystals were seen 5 times on the 2nd day.
" " " " 5 " 3rd "
" " " " 2 " 5th "
" " " " 1 " 6th "
" " " " 2 " 7th "
" " " " 1 " 11th "
" " " " 1 " 12th "

Twenty different urines were filtered immediately after they were passed, and in these only ten times were crystals of uric acid found.

In these 10 urines crystals were seen 3 times on the 3rd day.
" " " " 3 " 4th "
" " " " 3 " 5th "
" " " " 1 " 7th "

It follows, then, that there is no evidence of any increase of acidity at any fixed short period after the urine is made. No proof of fermentation can be drawn from these observations of the days of appearance of uric acid crystals in the urine.

When Professor Brucke observed that in health small quantities of sugar were found in the urine, it seemed to me very desirable to try whether this sugar disappeared when the urine was kept. Three litres of urine were divided into two perfectly equal portions. One part had the sugar determined immediately; it gave 2·4 grains of sugar. The other part was kept until it became feebly alkaline in twenty-five days. Then the sugar present in it was determined by the same process, and found to be 1·9 grains.

Hence I can find no distinct evidence of an acid fermentation in the urine. The more or less rapid crystallisation of free uric acid depends on the amount of liberating acid that is secreted by the kidney and on the more or less acid urates that exist in the urine, and on the influence of other salts present at the same time. Highly acid urates are decomposed, setting free uric acid, when washed with water or salt and water alone; while they are not decomposed if washed with the urine from which they were precipitated. Less acid urates liberate uric acid when washed with dilute solutions of acid or of pure acid phosphate of soda more or less quickly, according to the amount of dilute acid or acid phosphate of soda present, and according to the temperature and the time the action is continued. Even in the ordinary method of determining with strong hydrochloric acid the amount of uric acid in the urine, twenty-four hours are, as Dr. Hassall has shown, insufficient to allow all the uric acid to crystallise out.

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(a) *Scherer Beiträge zur Pathologischen Chemie; Annalen der Chemie und Pharmacie*, vol. xlii., p. 176.

Secondly, on the alkaline fermentation in the urine.

It has been said, and repeated over and over again, that the mucus in the urine is the ferment that effects this change from acid to alkali; but this is not the fact, as the following experiments, not made for this object, will show you.

In November the fresh urine was filtered carefully through a fine filter, and twenty observations were made from day to day. Seven times the urine became neutral or alkaline on the following days:—Ninth day, 1; tenth day, 2; eleventh day, 3; sixteenth day, 1.

In February the unfiltered urine was observed twenty-two times. Nine times it became neutral or alkaline on the following days:—Fifth day, 1; sixth day, 1; eighth day, 1; ninth day, 2; tenth day, 1; eleventh day, 1; thirteenth day, 1; fourteenth day, 1.

In June the unfiltered urine was observed twenty-seven times. Eighteen times it became neutral or alkaline on the following days: Fourth day, 1; fifth day, 1; sixth day, 2; seventh day, 3; eighth day, 4; tenth day, 2; eleventh day, 5.

Hence, filtered 7 in 20 become neutral or alkaline during observation, most on the eleventh day; unfiltered, 9 in 22, most on the ninth day; in summer, unfiltered, 18 in 27, most on the eleventh day. So that there is no decided difference between filtered and unfiltered urine as regards alkaline fermentation. The mucus that is separable by the filter is not the ferment that changes the urea into carbonate of ammonia, $C_2H_4N_2O_2 + 4HO = 2(NH_4O.CO_2)$.

Moreover, vibrios are not the cause of the alkalescence; for I have several times met with urine that was exceedingly foul in smell at the moment of passing, and so ropy that the drops adhered as they were poured from the vessel, quite distinctly tailing. Yet test paper showed that this water was highly acid, and it remained so in one case in July for seven days. With the microscope, multitudes of active vibrios were found within a few minutes of the water leaving the bladder.

That these vibrios are formed within the bladder the following case proves:—

A boy, eight years of age, was brought to me with the following history:—A native of India, just arrived, sickly, thin, sallow, languid. When four and a-half some unusual smell was first perceived in the urine; but little was thought of it until he embarked for England, when the water was observed to be passed in large quantities, and frequently to be so abominably offensive as to render his cabin intolerable to those with him. The mother remarked that she had observed the offensive smell to be always most perceptible when the bowels were most constipated. When the bowels were well evacuated the urine was not fœtid. Generally fifty to sixty-five ounces were passed in twenty-four hours. At one evacuation of the bladder he did pass thirty-three ounces; specific gravity 1008; slightly acid; with albumen and pus, and no casts of tubes. Specific gravity sometimes as low as 1004. Dr. Prout, who examined the patient, considered the smell was distinctly that of sulphuretted hydrogen. Two months after I saw him he caught a bad cold in Ireland and died. The kidneys and bladder were sent to London for examination. The right kidney was one and a-quarter inch long, one inch broad, and the ureter impervious. The left kidney was large, with abscesses in it. The pelvis was dilated and the ureter dilated. The bladder was very much dilated. The right ureter opened by wide mouth into the bladder. At its entrance it admitted a large catheter, and it swelled, when blown up, to four times the size it had when collapsed, presenting very much the appearance of an inflated small intestine. It was twice the size of the other ureter, and was four inches long. During life the urine was caught on a glass at the microscope, and the focus being right the infusoria were seen instantly in activity in four seconds. As many as fourteen divisions were counted in one moving string; monads were also present, and some pus globules and blood globules.

M. Pasteur considers that he has proved that the germs of these vibrios come from the atmosphere, and that they will not form unless all the oxygen present is first taken away by other kinds of infusoria; then the vibrios set up intense putrefaction, and without the access of germs and absence of oxygen no putrefaction occurs. When air is present, he says, in twenty-four hours monads and bacteria abstract oxygen, and grow on the surface in contact with the air, forming a pellicle, which gets thicker and thicker until it falls to the bottom, and thus prevents oxygen getting to the lowest part of the liquid. There the vibrios can live and do set up putrefaction, transforming nitrogenised into simpler, but still complex compounds. Bacteria burn these products, and reduce them to the simplest forms—water, ammonia, and carbonic acid.

The alkaline fermentation of the urine and putrefaction in the bladder are not explained by these facts of M. Pasteur. If it be possible that monads or vibrios may make the urea change to carbonate of ammonia, then the germs of the monas and of the vibrio, at least sometimes, must be formed in the bladder. The putrid abscesses found in the liver; in contact with bone; in the cellular tissue and in other parts where no germs can be carried by the access of air must either prove that vibrios are not necessary to putrefaction or that the germs of infusoria must during life pass into all our textures and start into activity when circumstances permit. At present, notwithstanding M. Pasteur's high authority, the possibility of the production of infusoria without germs entering the body must be considered an open question.

If we are not able yet to comprehend the alkaline fermentation of the urine and the putrefactions that occur in the bladder (b), how can we yet expect to obtain an explanation of other more complex fermentations that may arise within the body? For example—

M. Davine has shown that the Charbon contageux or sang du rate or malignant pustule depends on the development of bacteria in the blood; if the disease is local, it gives rise to carbuncle, or diffuse erysipelas; or if general, it affects the whole blood. The infusoria are analagous to those which produce butyric fermentation. Fourteen inoculations on rabbits proved that the blood was affected. In four hours the rabbits died. The blood was decomposed and full of infusoria. The organs, as, for example, the liver, &c., were decomposing, and ecchymosis and effusions were found in the serous cavities. In man the disease has been attributed to inoculation by bites from flies fed on putrid matter.

### *Consequences of Ammoniacal Urine.*

The effect of this change of urea into carbonate of ammonia in the urine has been the cause of great confusion. It was exalted into a disease, and the chemical inability of carbonate of ammonia to dissolve earthy phosphates in the urine was called the phosphatic diathesis; and to make the confusion still worse, as the amount of earthy phosphate precipitable depends on the amount of earths present, when much magnesia and lime were in the ammoniacal urine the phosphatic diathesis was considered very marked and very slight when a small amount of earthy matter was present. Carbonate of ammonia and earthy salts in the urine give rise to all the appearances that have been attributed to disease, and the cause of the phosphatic diathesis disappears in the cause of ammoniacal urine—in other words, it depends only on the alkaline fermentation which we have just been considering.

### *The Symptoms Resulting from Ammoniacal Urine.*

The bladder in health contains a feebly acid saline fluid. If the acid or salts vary greatly on either side of the usual amount the bladder is irritated by the unaccustomed stimulus of pure water or excess of salt. Thus a very strong solution of salts in the urine, or very dilute almost watery urine, cause irritation. Highly acid urine and, above all, ammoniacal urine have the same effect. Increased irritation causes increased secretion, and the mucus cells when thrown out in quantity acted on by the carbonate of ammonia become ropy and adhesive; like the ordinary alkaline mucus from other mucous membranes, as from the nostrils. If the irritation is continued pus is formed, and these cells also when acted on by carbonate of ammonia become ropy, and this has also been included under the term of ropy mucus. According as more or less earthy phosphates are present—that is, according as more or less magnesia or lime is taken into the system, more or less phosphatic precipitate is mixed with the ropy mucus or ropy pus, and this chemical error mounts up to the formation of mechanical masses of mortar-like or stoney substances, which cause excessive pain either in passing through the irritated urethra or in scraping the inflamed surface of the bladder, or even by precipitation within the mucous membrane of the bladder itself.

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(b) Since this was written M. Béchamp, in the *Comptes Rendus* for 27th February and 7th August, 1865, states that he has insulated by alcohol the ferment from the urine. He names it Néfrozymase, and he traces its variations in healthy and diseased states. It is a soluble organic albuminous substance, void of all organisation, capable, though to a much less degree, like sialozymase or diastase, to change starch into dextrin and sugar. It is altered by boiling, and then loses the property of acting on starch or on urea. This may be shown to be the case even in healthy urine, without any separation of the néfrozymase. Thus M. Béchamp brings us back again to chemical changes taking place in a peculiar albumen, as the cause of the decomposition of urea in the urine, whilst M. Pasteur holds that living vibrios effect this change. Between a highly complex organic substance undergoing chemical change, and the chemical actions going on in living plants and animals lies our future knowledge of fermentation and putrefaction. Most probably it will ultimately be proved that when in living or in dead animal or vegetable albuminous matter certain kinds of increased chemical action are set up, the various kinds of fermentation or putrefaction are produced, according to the kind of chemical action that exists in the so-called living or dead albumen.

The constant muscular contraction to expel the irritant is more disturbing to sleep than the cough of bronchitis; and hence loss of rest becomes sometimes the most serious consequence of the complaint. Next to this is the extension of the inflammation upwards to the pelvis of the kidney. The ureters may show or not show that they have been inflamed; sometimes no trace can be found of the passage of the inflammation upwards, but pyelitis and tubular nephritis producing pus throughout the kidneys and uræmia throughout the body may put an end to the progress of the disease by destroying life. The inflammation may spread downwards, and then the urethra suffers, and often violent orchitis is set up.

If the neck of the bladder and the prostate get thickened by interstitial deposit of fibrin, the bladder is unable to empty itself, and the fluid that remains is in a variable state of more or less complete putrefaction. If the fundus is chiefly thickened by deposit and increase of the muscular coat it will contain less and less fluid as the thickening increases; from either cause the frequency of the calls increase, and when ulceration takes place the amount of pain with each contraction becomes excessive.

(To be continued.)

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## ORIGINAL COMMUNICATIONS.

# ON SOME FORMS OF DYSPHAGIA (a),

### WITH SPECIAL REFERENCE TO NEW METHODS OF TREATMENT.

By MORELL MACKENZIE, M.D. Lond., M.R.C.P.,
Physician to the Hospital for Diseases of the Throat.

Dysphagia, though strictly speaking only a symptom of disease —an impairment or arrest of function—is attended with such serious consequences to health and life, that it appears to me to deserve especial and independent consideration. So many diseases, both local and general, give rise to dysphagia, that in a paper like this it would be impossible to pass them in review, except in so far as they are concerned in the production of a common phenomenon. On these grounds, it seems to me desirable to bring a symptom of disease under your notice, rather than such an aggregate of symptoms as would constitute a single disease. This method of investigation not only brings a great variety of causes under consideration, but it favours the application of differential diagnosis, and enables us to give prominence to the various methods of treatment suitable under different circumstances. Before bringing under your consideration the causes which make the act of swallowing difficult, it is well briefly to describe the normal mode in which the function is effected.

The food, after being sufficiently softened by the saliva, is thrown into the pharynx by the pressure of the tongue against the roof of the mouth; the communication between the pharynx and the posterior-nares being cut off by the approximation of the posterior pillars and the action of the uvula. When the food has passed from the mouth, this cavity is closed posteriorly by the approximation of the anterior pillars. The base of the tongue being now elevated and directed backwards, whilst the larynx is raised and slightly advanced, the epiglottis is pressed down over the laryngeal aperture. This movement of the valve is likewise assisted by the passage of the morsel of food over its lingual surface, and by the contraction of the glosso-epiglottidean fibres. The closure of the larynx is further effected by successive approximations of the ventricular bands and the vocal cords. Propelled from the pharynx into the œsophagus by the contraction of the middle and inferior constrictors, the pellet of food mechanically dilates the tube and stimulates its lining membrane; successive contractions of the muscular coat in successive portions of the canal carry the food into the stomach. The action of swallowing becomes purely involuntary, when the isthmus of the fauces has been passed. This brief analysis will make it evident that dysphagia may be caused by morbid conditions of any of the parts concerned in the act of deglutition, whether the disease of these parts be of a purely local character or depend on central or reflex causes. Dysphagia may be due either to the pain occasioned by the act of swallowing, or to an actual obstruction in the food-tract; and some authors have endeavoured to classify all forms of dysphagia under these two heads. As, however, this arrangement ignores the influence of paralysis and spasm, I do not see the utility of its application. The various causes of dysphagia are therefore :—

1st. Diseases of the tongue.
2nd. Diseases of the pharynx.
3rd. Diseases of the larynx and trachea.
4th. Diseases of the œsophagus.
5th. Diseases of the parts contiguous to the food-tract, by which the calibre of the canal is narrowed.

It is especially with reference to new methods of treatment that I bring the subject of this paper under your notice, and I shall only refer to the nature and symptoms of the various diseases giving rise to dysphagia, in so far as they may affect the question of therapeutics.

1. *Diseases of the Tongue.*—Inflammation, ulceration, ranula, paralysis, simple hypertrophy or cancer of the tongue may cause dysphagia. It is only in the last named disease, however, that this symptom is really serious, and here it sometimes causes death; excision is the last resource. The experience of Mr. Syme in his last operation is most important. No Surgeon would think of performing the operation without making himself thoroughly acquainted with all that the Scotch Professor has written on the subject; at the same time, I may be allowed briefly to remind you that the success of Mr. Syme's last operation was due to the performance of the operation in such a manner, that deglutition could afterwards be effected physiologically. In previous cases, after the operation, the elevation and advance of the larynx in swallowing could not be properly performed, in consequence of the division of all those muscles by which this movement is effected. In his last operation, Mr. Syme left the mylo-hyoidei and genio-hyoidei muscles entire. The result was that after the operation, the action of the larynx in deglutition remained normal. In previous cases, pulmonary inflammation had proved the sequel to laryngeal disease, the latter having been caused by the passage of food into the larynx. The non-closure of the epiglottis was due to the larynx not being raised in the normal way. In the last operation none of the untoward symptoms occurred, and before the end of three weeks, the patient declared that "he had never felt better in his life."

2. *Diseases of the Pharynx.*—Amongst the causes here situated are enlarged tonsils, whether of an acute or chronic character, general inflammation of the mucous membrane of the pharynx, diphtheria, ulcers of the mucous membrane, more especially when situated on the posterior wall of the pharynx just behind the uvula, polypi of the fauces, spasm or paralysis of the pharynx, and the action of corrosive poisons. When acute inflammation of the tonsils (commonly called quinsey) has reached a certain grade, it generally runs a definite course, whatever treatment be adopted. When seen at an early stage, however—that is, before the substance of the glands is affected, and whilst the disease is confined to the superjacent mucous membrane—I have found the local action of guaiacum most beneficial. "Instar specifici in hoc morbo operatur," says Home in his "Principia Medicinæ," (pars iii., sec. iv.) I tried this remedy internally and as a local application—that is to say, I powdered the affected part with it—but it did not prove serviceable in my hands until Dr. Crompton, of Manchester, explained to me his way of employing it. This consists in allowing the patient to place on his tongue and slowly suck away four or five grains every three, four, five, or six hours, according to the urgency of the symptoms. In cases of incipient quinsey—that is to say,

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(a) This paper was originally read before the Medical Society of London.

where the patient has not felt any uneasiness for more than forty-eight hours—and in cases of general congestion of the mucous membrane of the fauces and soft palate, even of a very high degree, I have found that it almost invariably cuts short the crescent inflammation. Very often within twenty-four hours the patient is entirely relieved. I have employed it now in several hundred cases, so that I do not speak without some experience. In 4 per cent. of the cases it caused griping and diarrhœa, but the favourable results were not due to the latter symptom; indeed, where there was any intestinal irritation the drug was at once discontinued,—in most cases before any good effects had resulted. Whilst I am on the subject I may take occasion to observe that the local application of guaiacum has proved very useful in cases of chronic congestion of the mucous membrane dependent on constitutional syphilis. The dislike which some patients expressed to sucking the guaiacum induced me to have the powdered resin made into lozenges. After a good many trials Messrs. Bullock and Reynolds succeeded in manufacturing an excellent lozenge, in which the guaiacum is very nicely combined with the juice of the black currant. There are four grains of guaiacum in each lozenge, and though they exert a peculiar pungent effect on the back of the throat, they are not disagreeable. I have found them not less effectual than the powder. In bringing this remedy under your notice I ought perhaps to recommend it as a means of warding off one form of dysphagia rather than of overcoming it when present. It need scarcely be observed that the guaiacum is of no use when the gland-substance of the tonsil has become affected. When pus has been formed the dysphagia, if present, should be relieved by making an incision in the tonsil with a guarded bistoury; a very minute and superficial opening is generally sufficient to allow the complete and rapid escape of the matter.

Chronic enlargement of the tonsils sometimes gives rise to dysphagia. It is only in the case of children, however, that this symptom becomes serious. Here the small calibre of the throat, and the large size to which the glands attain, sometimes gives rise to a chronic form of dysphagia, in which the food is constantly swallowed with some difficulty. Under these circumstances, the glands may be excised. Many parents, however, object to having cutting operations performed on their children; in these cases, London paste, an escharotic consisting of unslaked lime and caustic soda moistened with a little alcohol, will be found a useful agent for destroying the glands. The largest tonsils can generally be reduced to a convenient size in three weeks or a month. The caustic can be applied either with a glass rod or with a little instrument I have had made for the purpose. The latter is made of vulcanite, and it has a kind of shallow, circular spoon, which is provided with a cover. The closed instrument is introduced into the mouth, and when opposite the tonsil the cover of the spoon is drawn back, and the caustic comes in contact with the enlarged tonsil. The application of the caustic causes the formation of a slough, which separates in three or four days. The caustic can then be applied again, and so on until the gland is reduced to a convenient size. Vienna paste has been used for this purpose by Dr. Fournié, of Paris, but I am not aware that the caustic which I have introduced, and which is in every way more manageable than the potash caustic, has ever before been employed in Surgery. It is prepared for me by Messrs. Bullock and Reynolds.(b)

Ulcers in the pharynx are especially likely to give rise to dysphagia when situated on the posterior wall of the pharynx behind the uvula. Their presence here causes the pressure backwards of the uvula, which occurs at the commencement of deglutition, to be accompanied with uneasiness; the uvula, therefore, gives way, the act of deglutition is baulked, and the food or drink sometimes passes up into the nares. Some months ago I saw a case in consultation where the cause of the dysphagia had not been detected. I found that the symptom was occasioned by a small circular ulcer about three lines in diameter, situated on the posterior wall of the pharynx, on a level with the base of the uvula. These ulcers, whether of simple or specific character, are generally easily healed by the application of caustics. In dysphagia dependent on general hyperæmia of the mucous membrane, the sucking of ice is often attended with very satisfactory results.

Polypi of the pharynx and posterior nares sometimes give rise to dysphagia, but it is not necessary to enter into the various modes of treating these affections.

The forms of dysphagia dependent on spasm or paralysis are very distressing. Spasm of the pharynx is due,—First, to nervous irritability; secondly, to the poison of hydrophobia; thirdly, to the disease of the cervical portion of the spinal cord.

The nervous irritability may be simply a form of hysteria, or it may occur without any symptom of that disease being present. It is frequently the sequel of some local injury to the mucous membrane of the pharynx, thus:—A bone sticks in the throat, but is afterwards dislodged and passes into the stomach. The sensation of the foreign body remains, however, and the patient cannot be convinced that the bone is no longer there. This persistent incredulity on the part of patients may have given rise to the story of a Practitioner who in such cases, it is said, always provided himself with a fish-bone before he used the probang. The production of the bone can alone persuade the patient that it is no longer in the throat. When the sensation remains in the œsophagus it is called œsophagism. Wherever the situation of the disease, I have found the best effects follow from the internal application of galvanism.

Ordinary cases of spasm of the pharynx may be best treated locally by one of two methods,—by one plan, ice may be brought into continuous contact with the mucous membrane, whilst counter irritation is persistently applied to the neck externally; in the other, a sedative and relaxing mode of treatment may be carried out. Should the latter method be adopted, steam inhalations with a small quantity of chloroform and conium will be found useful. Whatever local treatment be adopted, suitable constitutional remedies must be used. It is not necessary to enter into details concerning the best hygienic means for strengthening a weakened nervous system, nor to explain the suitable mental or moral treatment of such cases.

2. In hydrophobia, dysphagia forms the pathognomenic symptom of the disease. The ætiology and pathology of the disease are obscure enough, but the main features are, alas, far too marked. The spasm of the pharynx is too evident to escape attention. Few of us have the misfortune to meet with cases of this disease, and it may perhaps seem unnecessary to some to make any remarks on the treatment of its most fatal symptom. A careful examination of all the reported cases, will not, I think, fail to convince most people that death is almost invariably due to exhaustion. The prostration is no doubt in a great measure due to the extraordinary influence of the poison on the nervous system, but still it must be in part caused by the entire arrest of the supply of nutriment. Should a case of this sort come under my care, I should look to the introduction of food and stimulants with the stomach-tube as the most important feature in the treatment of the case. I need not say that the latter instrument would have to be used under the influence of chloroform.

3. Injuries of the cervical portion of the spinal cord sometimes give rise to spasm of the pharynx; it is, however, generally quickly followed by paralysis.

(To be continued.)

# DESCRIPTION OF SOME UNDESCRIBED APPEARANCES IN THE WALLS OF OVARIAN CYSTS.

By FRANCIS BOWEN, M.D.,
Formerly Resident Surgeon to the Royal Maternity Hospital, Edinburgh, and late Surgeon to the Royal Hibernian Military School, Phœnix Park, Dublin.

Patches of a lustreless yellow or dull brownish colour, generally supposed to be indicative of fatty tissue, are of frequent occurrence in the walls of ovarian cysts. With a view to their examination, Mr. T. Spencer Wells, with his usual courtesy and kindness, supplied me with numerous cysts of this class, which he removed by operation; and Dr. James Bell Pettigrew, of the Royal College of Surgeons, aided my investigations by every means in his power.

The multilocular ovarian cyst from which a portion of the principal cyst wall (ten by twelve inches) was taken, was one of very rapid growth in a young and unmarried Jewess. The fluid evacuated at the time of the operation measured twenty-one pints, and the emptied cyst weighed one pound four ounces. A report of the case appears in the *Medical Times and Gazette* of February 10, 1866, page 145.

This cyst wall displayed several irregular patches of a dull yellow or brownish colour. On examination by the microscope, the patches in question were found to consist principally of white fibrous tissue, but no traces of fat could be detected. The colour was probably due to non-vascularity, the patches being deprived of a vascular supply owing to the vessels being filled with clot, and being more or less obliterated. The non-vascularity of the patches is worthy of attention, and was no doubt due to congestion of the vessels in the immediate neighbourhood, resulting in rupture and extravasation. This seems likely, from the circumstance that the cyst wall, as a whole, was beautifully injected with blood, the portions only surrounding the patches showing extravasation. The extravasated points formed two circumvallated lines, as shown in the accompanying woodcut. The vessels leading to the outer circumvallation were large and numerous, those leading to the inner circumvallation being smaller and fewer in number. The patches with the circumvallated lines may be said to form three distinct areas.

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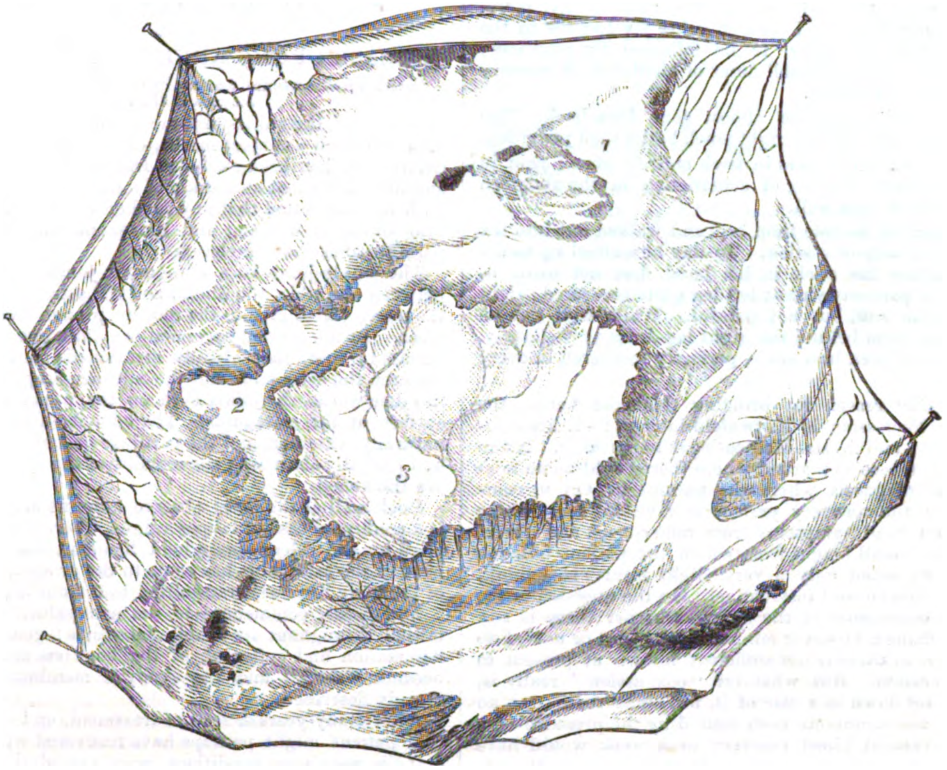
(b) For further details see my pamphlet on "Enlarged Tonsils." (London: Lewis.)



Accurate view of the appearances from within observed in portion of the wall of a large cyst removed by Mr. T. Spencer Well by ovariotomy at the Samaritan Hospital on January 10, 1866. Reduced one-half.

1. An area where the vessels were numerous and large, and where great quantities of blood of a bright florid colour was effused.
2. An area where the vessels were smaller and partially emptied of their contents, and where the effusion was less highly coloured and less distinctly marked.
3. An area in which the remnants only of vessels could be traced, and where no effusion was perceptible.

This third or central area was of a dull yellow, running into a dull brownish tint, and contrasted strongly with the delicate hue of the second area.

These appearances are described as seen from within the cyst wall.

That portion of the cyst wall corresponding to the non-vascular area varied in thickness, and not unfrequently became extremely thin, and it is probable that when the cyst ruptures it occurs at the points indicated. That the thinner portions referred to may give way is extremely likely on account of distinct or well-defined perforations of various sizes occurring in the walls between the smaller enclosed cysts. The non-vascular area, in all probability, degenerates, and results in thinning and subsequent perforation. If this view be correct, rupture is due to degeneration in the bloodvessels in the first instance.

62, Upper Berkeley-street, W.

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We learn that on Tuesday next Messrs. Puttick and Simpson will sell by auction the Professional and private library of the late Dr. Robert Ferguson, Physician to the Queen.

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## CASE OF CONCUSSION OF THE SPINE, WITH REMARKS.

By D. DYCE BROWN, M.A., M.D.,

Fellow of the Obstetrical Society of London.

W. C., aged 18, a gentleman's servant, of a slim figure, was vaulting behind his master's house on August 24, 1865, when he fell, inclining to the right side, upon the sacrum. He found immediately that he had lost the use of his lower limbs, and had to be carried into the house. I was asked to see him next day, when I found he could move neither lower limb in the least, and on attempting to do so suffered considerable pain in both, especially the right limb. This pain was most severe in the muscles of the anterior part of the thigh. The legs were subject to involuntary startings, and felt numb and cold at times, though not constantly. He was unable to turn in bed without assistance; complained of pain and tenderness in the upper part of the sacrum; no fracture. Feeling of constriction across abdomen, increased much on attempting any movement of the legs. Pulse natural; tongue clean; passed his urine; no priapism; no head symptoms of any kind. He was ordered to have perfect rest in bed, a purgative, and six leeches to be applied to the upper part of the sacrum. This to be followed by poultices.

26th.—Pain and tenderness in back and limbs relieved, especially in left limb; can move the left leg a little. Soon after yesterday's visit both legs felt perfectly cold (though the weather at the time was extremely hot), the feeling of heat being gradually restored by warm blankets. Had passed no urine for the last twenty hours, and though he felt no uneasiness I passed the catheter. The passage of the instrument seemed to give the nesessary stimulus, for as soon as it was fairly in the bladder, and the urine began to flow, the remainder did not run in a dead stream, but was forced out at the sides of the tube, as well as through it, by the contractive force of the bladder.

27th.—To-day complains of much pain over lumbar and lower dorsal regions of spine, which are tender to the touch. Says his limbs are "stiffer" and more pained than yesterday, but he can move the right leg a little and the left more. Passes urine now freely. I ordered other six leeches to the tender portion of the spine, to be followed by poultices; also a mixture containing small doses of bichloride of mercury and tincture of belladonna.

28th.—Pain and tenderness almost gone from back. Can move the left leg well, and the right much better than yesterday.

29th.—Pain and tenderness in back entirely gone; pain in limbs much better. Feeling of constriction in the abdomen gone; moves both legs well.

31st.—Yesterday he rose from bed, and walked out into the garden with the help of a stick. To-day he walked up to my my house, having his stick in his hand, but not using it. Feels well; no pain anywhere; left leg quite recovered; right leg feels a little stiff, but not painful. Walks well, but on looking at him from behind the right leg drags very slightly. I have frequently seen him since, perfectly recovered in every respect.

*Remarks.*—My reason for bringing this case before the notice of the Profession is its twofold interest:—1. Its comparative rarity; and 2. Its Medico-legal importance. As to the first point, a case so marked where there could be no mistake about the diagnosis, where the paraplegia was so complete, and yet the recovery perfect in a week's time, where there were no head symptoms from *contre-coup*, and where, considering the small height from which the patient fell, one would have expected only a very slight injury, is, I think, extremely interesting and instructive. On the question of the pathology of concussion of the spine—whether there is any real organic change, however minute, in the cord or not—I do not now enter, as there is not sufficient known at present to decide the question. But whatever "concussion" really is, this must be set down as a case of it, for, since there was no fracture, had the symptoms been caused by the presence of a clot of extravasated blood recovery in a week would have been impossible. It will be observed that there was a disposition to reaction and irritation, most of the symptoms, such as the spinal tenderness, pain and startings in the legs, etc., indicating this. The treatment which seemed to do most good was the rest, leeching, and poulticing. As to the assistance given in the cure by the medicine I am doubtful, as the relief to all the symptoms followed too rapidly on the second leeching to justify my attributing a large share, if any, to the medicine. It is interesting to observe that though both legs were involved, the right one was much more so than the left, and was longer in recovering, and it will be remembered that the lad distinctly stated that he fell inclining to the right side; also the fact that most severe pain was situated in the anterior portion of the muscles of the thigh is worthy of observation, the abnormity of sensation not consisting in numbness or want of sensation, but in hyperæsthesia. This condition is occasionally seen in such cases. Secondly, the case is interesting in its Medico-legal aspect. The attention of the Profession has been much drawn lately to the subject of injuries to the nervous system from railway accidents, and as, on the one hand, most severe and lasting injuries to the nervous system can be caused by accidents which leave little or no external marks, and on the other, most of the symptoms and sensations can be feigned by impostors, the motive for imposition—namely, recovery of damages—being always a ground of suspicion, it behoves Medical men to be careful lest in their evidence they err on the side of credulity or of incredulity. Had the injury in the above case occurred from a railway accident—say from being thrown out of a carriage—and had it been proved that the patient had fallen only from the height of probably a yard and a-half, was not otherwise ill, but simply said he could not move his legs, and complained of the other feelings which my patient had, but nevertheless had completely recovered in a week, the suspicion with which such a case would be looked at would not improbably result in its being considered a case of imposition for the purpose of obtaining damages, or if the unfortunate sufferer happened to be a woman, perhaps a combination of imposition, fright, and hysteria would have been the verdict.

Aberdeen.

# REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

## ST. BARTHOLOMEW'S HOSPITAL.

### DISEASE OF THE ANKLE-JOINT—AMPUTATION.

(Extract from a Clinical Lecture delivered by Mr. HOLMES COOTE, Surgeon to the Hospital.)

DISEASES of the ankle-joint are not mentioned with the fulness that such a subject merits, chiefly because the study of deformities has been excluded from general consideration. I amputated the foot and ankle of a man aged 36 last Saturday, with the conviction that any further attempt to preserve the limb would be useless; and the examination of the morbid parts justifies that conviction.

The ankle-joint is a compound joint. The articulation between the tibia, the fibula, and the astragalus is but one of the many which give to the foot its proper amount of movement. In the present specimen we find two of these joints diseased; first, that already mentioned; and secondly, that between the astragalus and the calcaneo-scaphoid ligament,—in other words, the joints both on the upper and the under surface of the astragalus. The bone itself is soft and preternaturally vascular, and the cartilage on both surfaces is loose and partially absorbed; the remains of the synovial membrane are thickened.

Look well at the foot; observe how the arch has sunk. It is a confirmed case of talipes valgus, wherein the support supplied by the calcaneo-scaphoid ligament has been lost; the head of the astragalus has come to the ground, and the weight of the body has been transmitted to it from the tibia.

The disease commenced in the astragalus, and was transmitted throughout its whole substance; general chronic inflammation and softening of the bone ensued, the cartilage became "shed," and the synovial membrane thickened as already described.

After many years of rest, of treatment, and of constant care, this patient might perhaps have recovered with a stiff ankle. But the necessary conditions were not attainable. You all know how rarely cases of confirmed disease of the ankle-joint recover with osseous anchylosis.

Now, what is the course which should have been adopted in the present case? When the arch of the foot first sank, it should have been at once raised by a thin elastic pad, and the ankle kept at its right bearing by an outside iron, attached to the boot, and a leather strap. The head of the astragalus would not then have pressed upon the ground, the bone would not have become diseased, and most of the ulterior symptoms would, in all probability, have been avoided.

As it is, the foot has been removed, an operation attended with no great amount of danger to life; but the patient is mutilated. I operate at the lower third or fourth of the limb,—in short, I divide the bone where it is smallest. You then have a conical stump, which is the form best suited for an artificial foot.

I closed this wound with strapping. That mode of dressing is preferable to suture when the flaps are thin and long. A great amount of support is given to the detached structures, and the warmth is of use in maintaining circulation.

The patient is convalescent.

## KING'S COLLEGE HOSPITAL.

### CASES OF EXCISION OF THE KNEE.

(Under the care of Mr. HENRY SMITH.)

THE following cases represent very fairly (Mr. Smith remarked) the particular instances in which the operation of excision of the knee-joint should be substituted for amputation. In the first case detailed acute disease was going on to such an extent as to threaten the life of this patient, who had, in fact, left another institution because she would not submit to the loss of her limb, which had been suggested as the only resource. The only thing that induced hesitation to adopt excision was the suspicion that tuberculous disease of the lung existed, but stethoscopic examination revealed so little mischief, that Mr. Smith considered he was not justified in amputating the thigh. The fatal result was solely due to pyæmia, which, as is well known, is too liable to destroy patients after any Surgical operation. It is a matter for regret that it was found necessary to remove the limb from the splint a few days after the operation; it is not improbable that the disturbance of the parts may have been productive of pyæmia.

In the second case the operation was performed for the sole purpose of rectifying deformity and making an entirely useless limb of some service to the boy. Mr. Smith was induced to perform excision here in consequence of the wasted and semi-paralysed condition of the limb; for it is well known now that when a firm anchylosis is brought about not only does the power of motion become restored, but the limb gets a considerable increase in bulk and power.

In the third case we are presented with an instance where perhaps the circumstances are as favourable for an operation as they could possibly be, and where even perhaps the most obstinate opponent to excision of the knee would consider it justifiable; for not only was there a perfectly useless limb, but disease which had been going on for six years with more or less severity was adding suffering, and there was really no other remedy short of amputation, for any attempt to break up the very tough anchylosis would have been out of the question, as the force required would have probably been productive of further serious mischief. In this case, as in that of the boy, the perfect absence of the slightest unfavourable symptom after so severe a proceeding was remarkable, and the fact of the patient being able to be put upon his crutches a month after the operation with a straight limb and the parts at the site of operation firmly knit together, is perhaps unparalleled in the history of this operation.

*Case* 1.—M. B., aged 30, admitted September 6, 1865, a tolerably healthy-looking woman; pain and slight swelling commenced in right knee-joint about a year before; shortly after this she was confined, and this appeared to aggravate the symptoms. She applied to one of the London Hospitals, where they recommended amputation at the thigh.

On admission, the knee-joint was much swollen, very painful on pressure and slightly flexed; a back splint ordered to keep the joint still, and tonics.

On October 21 excision by a lunated transverse incision was performed; the greater part of the condyles of the femur and a slice of about one half an inch in thickness of the tibia being removed; the patella also was taken away. There was extensive pulpy degeneration of the synovial membrane of the joint; cartilages here and there slightly ulcerated; the bony tissue of the femur was perfectly healthy, and that of the tibia somewhat softened.

25th.—The patient became very restless and low, and required large quantities of stimuli. Forty-eight hours after the operation she had rallied well, and although the pulse was very rapid (130), she had no bad symptoms, but took her nourishment, beef-tea, etc., well, besides 8 oz. of brandy. Yesterday there was a good deal of puffiness about the front of the knee, and on dressing the part carefully a large quantity of purulent matter escaped, and it was discovered that the end of the femur was riding considerably over the tibia. Mr. Smith, therefore, gave her chloroform, and took the limb off the splint, and making extension got the parts into good position.

26th.—Slightly delirious; great discharge; ordered brandy 10 oz. The pulse increased up to 140 up till the 31st, and she had severe rigors. Pyæmic symptoms set in about this date, and became more and more severe until she died November 8. A most prominent symptom for forty-eight hours before death was excruciating pain at the back of the head, causing her to scream loudly.

At a post-mortem examination it was found, forty-one hours after death, the body pale and emaciated, and on opening the brain pus was found deposited under the membranes in front of the cerebellum, also in the right ventricle and corpus striatum; there was also pus in the left and fourth ventricles; on opening the joint the bones were in very good position, they were infiltrated with purulent matter, and the tissues surrounding them disorganised; no abscesses found in other joints; there were two or three circumscribed abscesses on the surfaces of both lungs; tubercles in both lungs; abdominal viscera healthy.

*Case* 2.—F. B., aged 8, admitted September 28, with strumous disease of left knee-joint. Disease had been existing about seven years. The joint much thickened, semiflexed, and partially anchylosed. The leg was much wasted and entirely useless. All active disease in the joint had ceased. The lad was very healthy, and in a good state for operation.

On October 7, excision performed by a single lunated incision horizontally across the joint, the lower end of the femur and part of the head of the tibia being removed, leaving as much as possible of the epiphysis as possible; the patella also was removed. The joint was entirely disorganised, and the lower end of the femur was impacted in the head of the tibia, which was immensely thickened.

The boy had not a single bad symptom, and by the 24th the wound had nearly healed.

On November 4, on being taken out of bed and placed on his feet, it was found that the leg was nearly straight; the union, however, was not at all firm, and, considering the amount of diseased bone taken away, there was very little shortening, and when standing perfectly upright he was able to touch the ground with ease with the toes of the limb operated on.

29th.—Discharged.

*Case* 3.—W. H., aged 30, a marine, admitted December 24, 1865. First noticed pain in left knee-joint whilst on duty in the summer of 1860. Shortly after this abscesses formed, and burst about the joint. On admission the joint was anchylosed, semiflexed, and the tibia slightly dislocated backwards, and there were several scars of old abscesses about the joint. Complained of considerable pain when an attempt was made to use the limb.

On January 6, the joint was excised by a single transverse lunated incision. The lower end of the femur, patella, and heads of the fibia and fibula were found to be firmly pressed together; a large wedge-shaped piece of bone was removed, including the whole of the anchylosed parts; a thin slice from the head of the tibia was subsequently removed, as a small cavity containing tuberculous matter was found in it. The ends of the bones came well into apposition. The limb was put up in an ordinary excision splint and swung. The patient did wonderfully well, and did not have a single bad symptom. Splint removed on the 30th. Wound almost entirely healed.

On February 9, the patient got up and was allowed to go about the ward on crutches. There was very little shortening and very firm union, and the patient in perfect health.

A case of excision of the knee-joint has been recently under Mr. Wood's care, and has turned out successfully, the patient being a lad of about 5 years of age. The disease had commenced in the synovial membrane, the joint itself only being secondarily affected. The epiphysis of the tibia was removed and also a thin slice of the femur. The case healed well and there was but little shortening. [We are compelled to postpone the full account of this case until next week.]

## UNIVERSITY COLLEGE HOSPITAL.

### INCLUDED CARIES AND NECROSIS OF THE HUMERUS—CHRONIC OSTRITIS OF THE ULNA —CLINICAL REMARKS.

(Under the care of Mr. ERICHSEN.)

We are indebted to Mr. F. B. Nunneley for these cases.

*Case* 1.—T. E., aged 22, sailor. Patient has had good health generally. Two years ago he had a slight blow on the elbow; a month after there was pain just above the joint, and swelling, which gradually increased. Eight months ago the pain became very severe and gnawing, especially at night. On admission, the lower end of the humerus was found considerably enlarged, and the shaft of the bone was thickened for some distance above; just above the level of the condyles were two spots, which were extremely tender; the elbow-joint was not involved in the disease. In accordance with his diagnosis —that there was either an abscess or included caries—Mr. Erichsen made a T incision down to the bone and applied the trephine. A carious cavity was found, and gouged out, and the arm placed on a splint. Since the operation the patient has been entirely free from his old pain, and is now gradually recovering.

*Case* 2.—H. B., aged 27. Patient has had symptoms of both secondary and tertiary syphilis. A year ago he had pain in the right elbow, which was worse at night; since then the pain has become most severe, so much so at night as to deprive him of sleep. When admitted (November 13) there was considerable enlargement of the upper end of the ulna, the swelling was exquisitely tender at one spot; the elbow-joint was free. 15th.—Mr. Erichsen made a longitudinal incision three inches long down to the bone, the structures over which were greatly thickened with plastic matter, as also was the periosteum. He then made a cut with Hey's saw about one and a-half inches long into the substance of the bone, not quite deeply enough to open up its cancellous structure. The patient passed the night after the operation free from the wearying pain, which has not returned since.

Mr. Erichsen remarked that it was a definite rule in Surgery to use the trephine when there was considerable enlargement of the head of one of the bones entering into the knee or elbow-joint, with nocturnal exacerbations of pain, and especially if there were one or two tender spots ; the cases met with having these symptoms, being either (1) chronic osteritis, or (2) included central caries and necrosis, or (3) included abscess. He further mentioned a fourth case, in which he had found it necessary to use the trephine :—A patient had an enlargement of the humerus occupying the external condyle ; there was tensive pain, but no crackling on manipulating the swelling. On trephining, a large cavity lined with a smooth membrane and containing an ounce of clear serous fluid was found. In connexion with these cases of disease about the elbow-joint, Mr. Erichsen further alluded to a case which had been in the Hospital some time ago, and which presented several points of interest. The case was that of a sailor, who had struck his elbow several times accidentally before coming into the Hospital ; but for two years there had been pain and impaired movement of the joint. On admission, the patient, who seemed to be in good health, complained of pain in the left elbow. On examination, the lower end of the humerus was found to be three times its natural size. There was tenderness over the swelling, the joint was free, the glands in the axilla were not enlarged. At one part of the expanded bone was more or less egg-shell crackling and a semi-elastic feeling. Mr. Erichsen made a diagnosis of myeloid tumour of the humerus, and disarticulated at the shoulder-joint, thus amputating above the diseased bone. The patient made a very good recovery.

Another case of chronic ostritis of the ulna has been recently admitted. The case is that of a woman, aged 31. She states that a year ago she strained her right arm whilst lifting a heavy weight. Since then she has had pain, latterly very severe, over the upper third of the back of the ulna. There was here on admission a swelling two inches long, resembling a node, with one very tender spot. Mr. Erichsen made a saw-cut an inch and a-half long longitudinally into the enlarged bone. After the operation the patient expressed herself quite relieved from the pain, and slept well during the night.

## SOUTHWARK OPHTHALMIC HOSPITAL.

### ON THE CORRECTION BY CYLINDRICAL LENSES OF ASTIGMATISM AFTER THE EXTRACTION OF CATARACT.

(By **ROBERT A. C. MOON**, House-Surgeon to the Ophthalmic Hospital, Southwark.)

William V., aged 53, was admitted at the Ophthalmic Hospital, Southwark, under the care of Mr. Laurence, October 16, 1865. The lens of the right eye was densely opaque and that of the left was faintly striated. With the right eye he possessed merely quantitative perception of light ; with the left he could read No. 2 (Jäger) when his presbyopia was corrected with a 12-inch convex glass.

On October 20 Mr. Laurence removed the right lens by the "traction" operation, during which everything went perfectly smoothly. Five days afterwards there was slight iritis, but by November 17 all reaction had disappeared. The pupillary area was occupied by a thin layer of opaque capsule, which was removed by a needle operation.

Upon leaving the Hospital he was supplied with 2½ and 4½ inch convex lenses, they being the spherical glasses which afforded him the greatest benefit. On February 8, 1866, he returned to the Hospital, stating that his sight was still very defective. With + 4½ he read C (Snellen) at 20 feet ; with + 2½ he read No. 6 (Jäger).

Finding that there was no material obstruction to the rays of light, the pupil being perfectly clear and the fundus being distinctly visible with the ophthalmoscope, we tested the eye for astigmatism with the following results :—

1. With + 4½ on horizontal are a little clearer than vertical lines. Lines disposed obliquely / / / are invisible, but a similar set at right angles to these are distinctly seen.

2. With a 20-inch convex cylindrical lens, the axis directed upwards and slightly outwards, at an angle of about 10° from the perpendicular, in addition to his spherical + 4½, he reads L well, and XL imperfectly at 20 feet ; *so that his visual power was more than doubled.* With the cylindrical lens, in addition to his spherical + 2½, he reads No. 1 with perfect ease.

From these observations we conclude that this patient is the subject of hypermetropic astigmatism in an oblique meridian of the cornea. Whether this irregularity of curvature existed prior to the extraction or whether it was the result of the operation it would be difficult to determine.

The object in publishing the present report is to show the necessity of a careful investigation of the optical condition of all patients who have undergone operations for cataract. The loose way in which the optical investigation is sometimes conducted in such cases is greatly to be deprecated. As remarked by Dr. Mackenzie (*Ophthalmic Review*, vol. ii.), patients who have been operated on for cataract are in many instances sent back to their homes with convex lenses of 4½ inches focus for distant objects and 2½ for near objects, very little care being taken to see that these are the glasses which will afford them the greatest assistance.

Although the vision of many eyes after extraction of the lens cannot by any optical contrivance be raised above a certain point, yet a very large quota, of which the above case is a representative, will be found to be astigmatic. Therefore if spherical glasses do not completely restore the visual power to the normal standard, the suspicion should at once arise that the eye is astigmatic, and any abnormal refraction of the meridians of the cornea should be ascertained and corrected by cylindrical glasses.

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# Medical Times and Gazette.

SATURDAY, MARCH 3.

## THE REPORT OF THE COMMISSION AT THE ADMIRALTY.

We print in another column a full abstract of this important document, so far as it relates to the Army. That part relating to the Navy shall appear next week. It evidently seems as if the Committee had been actuated by the sincerest desire to remove every grievance which the Medical officers of either Service could reasonably complain of. Although not long, the Report is exhaustive, and deals with every question that could fairly come under consideration ; such as military status, rank, pay, and promotion.

It will be evident that the Committee have tacitly condemned many points in the existing system ; and that they have equally endorsed the complaints which we in this journal have from time to time given expression to, on the part of the Medical Services. On this point we believe that the combatant and executive members of the Committee were unanimous,—that they showed the best feeling, and only required to have the sentiments of the Profession and the facts of the case temperately laid before them. We have good reason to know, further, that the civilian Medical members, Dr. Markham and Mr. Busk, did their duty towards their naval and military brethren in a way to earn their warmest acknowledgments.

We gather, however, from our military brethren that they wish the Committee could have gone a little further in one respect; and we conceive that their sentiments are much as follows:—

A military acquaintance gave us a sketch of what would take place among every group of Army Doctors at the reading of this Report,—the group to be composed of men ranging in rank—say—from a Deputy-Inspector to the most junior Assistant-Surgeon. The *Army* Inspector thinks it unfair that his *Naval* brother should garner more fruit from his labours than himself. A stout old Surgeon-Major, who has a family to provide for and is willing to keep in harness on that account, albeit "his strength is but labour and sorrow," is in high dudgeon at finding that he can add only a shilling or two to his retiring pension by continuing until his age is 55. A Regimental Surgeon, whose remedy for all grievances lies in an earlier and better retirement, cannot conceal his disgust at the offer of five-tenths of his pay as a retiring allowance at twenty years. A Senior Assistant-Surgeon, grown depressed and irritable by the prospect of longer service in his subordinate capacity, longing for promotion, finds 2s. a-day a very poor substitute for the disappointment; and the Junior Assistant, viewing with dismay his position on the list at the foot of some 800 men, and listening to the expressions of determination on the part of the elders not to go before twenty-five years, ejaculates—"Why, I may live and die an Assistant at this rate; and the maximum pay I can get is 17s. 6d.!"

Such is our friend's sketch. He proceeds to analyse the Report and calls attention to the reigning purpose. The recommendations of the Committee are designed—"In view of the proper requirements of the Service, and in order to encourage the coming forward of *a larger number of the most eligible class of candidates, so as to render the competitive examinations really worthy of the name, and such as was contemplated upon its establishment.*"

The first difficulty to be surmounted arises from a slowness, almost amounting to an absence, of promotion altogether for the very junior officers. By what plan was the Committee to induce a really good and superior class of candidates to place their names at the foot of a list of some 800 Assistant-Surgeons?

This has not been attempted by making the promotion more rapid, or by fixing a definite time at which a man should cease to be an Assistant-Surgeon, but by a pecuniary equivalent for the rank of Surgeon. They have recommended the pay for Assistant-Surgeons above 5 years' service of 12s. 6d., in lieu of 11s. 6d. per diem; above 10 years' service, of 15s., in lieu of 13s., or on promotion of 17s. 6d.; above 15 years', 17s. 6d., in lieu of 13s.

These sums are just and reasonable enough, but all increase of pay for that rank ceases after fifteen years. The Committee were confronted by the long list of Assistant-Surgeons of 1854, and they could not get over the difficulty of twelve years and promotion; and so long as the present regimental system remains intact and unmodified this difficulty will remain likewise. The Committee did not grapple with the question of the enormous disproportion between the number of Assistant-Surgeons and Surgeons, and this disproportion must, therefore, still continue.

It seems, too, to have been lost sight of that India absorbs nearly half the Department; the new scale of pay will, therefore, not affect that half at all.

A service can never be popular with well-educated and ambitious students where a man has the certainty almost of spending a large part of his life in the most subordinate position; and, unfortunately, it does not appear to be at all clear at what date a man may expect to be promoted. He will certainly attain the daily pay of 17s. 6d. after 15 years' service, but it is highly improbable he will gain a step in rank at that time, or soon afterwards. At 20 years' he may still remain an Assistant-Surgeon, and he will then be at liberty to retire upon 8s. 9d. per diem. Now, will the *right* men enter such a service while the Indian Medical Department is open to them? In the Navy, the promotion to the rank of Surgeon has been, and is, much quicker; and the Indian Medical Warrant fixes twelve years as the time for promotion. We do not wonder, then, at the rumoured petition of the last batch of candidates to be allowed to exchange to the Indian Service.

It may be said that had a fixed time been adopted for promotion in the Army, the authorities would have had to contend with the difficulty arising from a sudden and great increase in the number of Surgeons. But is there any reason why the presence of two Surgeons in a corps should necessarily entail evils arising from conflicting authority any more than the presence of two majors in a regiment does so; the senior assumes the lead and takes the responsible position in the one case, then why not in the other?

But the Committee, we presume, thought the difficulties insurmountable; and we next turn to another and slower method for accelerating the circulation of promotion—viz., an earlier permissive retirement.

Here the claims of the service and the public purse come into play. A retirement on the completion of twenty years' full-pay service is advised; but, in the language of the *Pall Mall Gazette*, "provisoes are attached to the recommendation which may not be so satisfactory as could be wished." The retiring allowance will be exactly half the pay of which the Medical Officer may be in receipt at the time his twenty years is up. In the case of a fresh candidate, as far as we can see, he will be an Assistant-Surgeon in receipt of 17s. 6d., and entitled, therefore, to 8s. 9d. on going. In the case of Surgeons it will be more, of course; but still only five-tenths of the daily pay. Very few men will leave on such a retiring allowance unless compelled by sickness, and, in that case, a rather better provision is made.

The Committee probably thought that a man of twenty years' service was, by his age and experience, the most useful and best class of officer to retain. If so, it might be expected that some additional inducements would be held out to him to remain. Surgeons-Major, retiring compulsorily at fifty-five years of age, are recommended to be given a retiring allowance of 1*l.* per diem—that is to say, they will receive about 1s. 6d. per diem more than at present, if they are compelled by their age to retire, instead of going voluntarily after twenty-five years' service.

Very few men, indeed, will be fifty-five years of age at the time they will have completed twenty-five years' service. Nearly all of them entered the departments before they were twenty-five, and we suppose this clause must have been introduced to meet the case of those candidates who entered under the late regulations extending the age of the candidates to thirty.

There are recommendations in the way of increased remuneration, which are, good remuneration for the rank of Assistant-Surgeons up to fifteen years; poor for the Surgeons; and none at all for the Army Inspectorial ranks.

The recommendations of the Committee as to relative rank, position at mess and on mixed boards go to confirm the present custom; but to fix that position more plainly and definitely by the alterations suggested to be made in the *Army List*. All the reasonable men will be satisfied, we think, with this part of the report; those possessed of very military notions will not.

## THE VENEREAL COMMISSION.

The report issued by the Committee appointed to inquire into the treatment and prevention of venereal diseases in the Army and Navy, and to suggest any practical rules to the authorities whereby the frequency of contagion could be diminished, is a very valuable one. It discloses the astounding fact, in the first place, that as regards the Army "the loss of service arising from them (admissions of men suffering from venereal diseases) was equal to that of the whole force serving in the United Kingdom for an entire week;" and the statistics of the Navy show that in 1862 "the daily loss from venereal diseases was about 9·9 per 1000," which may be looked upon as equal to the loss of the services of the whole complement of such a vessel as H.M.S *Royal Oak* (iron-clad). The estimated cost of venereal diseases in the Navy in the same year (1862) is reckoned at 32,296*l.* This sum refers to disease in "all ships in commission, and all Naval Hospitals at home and abroad; it does not include the expenses for Marine Infirmaries for the care of seamen and coastguardmen in sick quarters. . . . Nor are the expenses for the conveyance of invalided seamen sent home from abroad included." If these omissions be taken into account, and the term venereal be made to include diseases of vital organs, of special senses, rheumatic and bone affections, "the sum of 32,296*l.* would be better represented by that of 50,000*l.*, as the cost of venereal diseases in the Royal Navy for 1862."

The operations of the *Contagious Diseases Prevention Act* would seem to have been successful in a certain degree, but the Committee recommend its more complete development. It would appear that its application fails especially to detect disease in the earliest stages; that it acts with difficulty, and is of slow operation, thus permitting the spreading of the disease for many days before discovery takes place; and that it is not calculated to secure the evidence of existing disease, which is obtained by a kind of chance, either through the spite of companions, or from the occasional knowledge of the police or other possible information; "those prostitutes only against whom information is laid are liable to compulsory examination under the present Act." The Committee recommend the absolute necessity for instituting a periodical compulsory examination of all prostitutes, of separating them from the possible contact with others, and detaining and treating them in Hospitals until cured; and they base this upon the complete success which has attended the operation of such regulations, especially in the Ionian Islands and Malta. At the present time there is nothing to prevent, on the arrival of a ship, all diseased women from infecting the whole crew, and such women could only be reached by a periodical examination, such as suggested. In addition, it is proposed that the system of Lock Hospitals should be very considerably extended, and placed under Government control; that a Surgeon should be appointed in each town with power to send women to these institutions; that penal enactments be instituted for infringement of regulations; that the system of control should be extended to garrison and seaport towns; that loose women should not be allowed residence in public houses, nor to carry on "the open solicitation" in the public streets, and "the scandalous and barefaced immorality" which is spoken of by some of the witnesses as disgracing Portsmouth and other towns of the same class. The expenses attendant upon these changes would be repaid by the greater efficiency of the Service generally. The objections to the regular examination of men are noted.

> "However efficiently the regulations as regards women may be carried out, their success in arresting the spread of disease must be very imperfect, unless similar precautions be adopted for preventing the men from carrying infection to the women. The Committee have been led to give much consideration to the periodical examination of the persons of men of both services. The Committee are of opinion that the practice, so far as the soldier is concerned, should be universal throughout the Army, and that it is no less necessary to the health of the sailor whenever he has the opportunity of access to women. Without such a regulation the proposed periodical examination of women must lose half its value."

Suggestions are also made for improving the general condition and tone of men. Dr. Balfour makes a separate report, thinking that the weekly examination would not diminish prostitution, but rather offer increased facilities, and makes some special recommendations of his own. The Appendix contains the experience of Sir H. Storks and Mr. Inglott, at Malta, and the report on prostitution in Paris, and the laws in operation there for its repression, which we cannot enter into here.

The Committee appear to have met the matter fairly; they allow the existence of a great evil, and suggest what appear to them suitable legislation, avoiding as much as possible all encouragement and facility of access to prostitutes.

## THERMOMETER IN PHTHISIS.

The statements that have already been laid before our readers have by no means exhausted the information that the thermometer gives us. By means of it we gain the most important information concerning doubtful cases of consumption. All of our readers must have met with cases which have perplexed their skill and resisted diagnosis by the scantiness of the symptoms and physical signs. In such cases the thermometer assists us greatly. It is by both physical signs and symptoms that we learn that a patient is the subject of tubercular deposit in the lungs. Of these, physical signs are the most to be relied upon; but physical signs sometimes altogether fail us, and this is especially the case at the commencement of the disease, at which time most is to be expected from treatment. The following physical signs, situated at the apex of the lungs, are those chiefly to be relied upon in an early case of phthisis—namely, dulness on percussion; weakness of the respiratory murmur; jerking respiration and rhonchus. But jerking respiration is generally absent, and when present, it may be due to hysteria or nervousness, and thus is most important when limited to one apex. It is, indeed, a sign whose presence gives us important information, but whose absence by no means frees the patient from the suspicion of consumption.

Rhonchus, moreover, during the early stages of the disease is mostly absent. Nor can the absence of dulness on percussion be accepted as a proof of the freedom of the lungs from tubercular deposit, for no dulness may be detected, although tubercule even in considerable quantities may be present. If small in quantity, it may fail to impair the percussion note; and even if the deposit be considerable, if it be scattered through the lungs, no dulness may be detected. This is especially the case with children; indeed, with young people the diagnosis of consumption must be often made when dulness on percussion is absent throughout the course of the disease. Again, when there is a considerable amount of deposit in the lungs, and when this is localised in their apices, if some emphysema be present we may entirely fail to obtain any loss of tone on percussion, or the slight loss of tone may be due to former disease which has left the lung impaired, but from which no further bad consequences are to be apprehended.

Weakness of the respiratory murmur is a valuable sign, but it is often difficult to be sure that it is present, as the intensity of the respiratory murmur varies greatly in different people. It is true that the vesicular murmur is heard equally loud under both clavicles, but if both sides be equally affected, we lose this means of comparison.(a)

Thus often the most important of the physical signs are absent, and even if present in a slight degree much doubt must remain as regards the nature of their cause. Indeed, we need not dwell on the insufficiency of physical signs to enable us to make a diagnosis in many early cases of phthisis. We appeal to the experience of those of our readers who are in the habit of making post-mortem examinations in support of our statement.

But if physical signs sometimes fail us, how much more is it the case with symptoms, for the symptom of early phthisis are by no means characteristic? They are frequently met with as the result of other causes.

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(a) We can, however, mostly learn if the respiration be weak under the clavicles by comparing the vesicular murmur heard at this part with that heard lower down the chest, for the respiratory sound is as loud under the clavicle as at any other part of the chest.

The symptoms most relied on are cough, emaciation, night sweats, and frequent pulse; but none of these singly, nor their combination, will enable us to declare the patient to be tubercular.

For emaciation is frequently produced in other ways. It may be due to the influence of bad hygienic conditions of life, to excesses of various kinds, or to mental oppression, the result of grief or disappointment. Nay, more, it must be recollected that phthisis may progress without causing loss of flesh of the patient; that, indeed, under favourable circumstances, the patient may even gain in weight. Profuse sweating is mostly due to two causes, 1st, fever, 2nd, debility; for on the decline of the temperature of febrile patients, sweating almost always ensues. This is well seen on the critical days of various febrile affections, and in the third stage of ague, at which time the temperature is returning from an abnormal elevation to the temperature of health. But weakness is a most frequent cause of sweating, those persons whose health is broken down from any cause often sweat profusely on exertion, from excitement, or during sleep. Persons also present great individual differences in respect of the amount of excretion from the skin; thus profuse sweating is by no means a proof of phthisis.

We may add in passing, that the state of the skin often affords us much information respecting the condition of our patients, and thus becomes an indication in treatment.

When the result of weakness, profuse sweating in non-febrile patients calls for tonics, out-door exercise, and a bracing climate. If it occurs in febrile patients in whom the temperature remains high, it shows want of vigour of the system; and if it occurs at the commencement of the disease it is often of serious significance, and calls for the free administration of stimulants.

How are we to determine whether the sweating be due to a fall of the temperature, or if it be due to weakness? If it be caused by the former of these conditions, it occurs only once in the day, and usually in the evening, as there is only one rise and fall of the temperature in fever in the twenty-four hours, and the fall most frequently occurs in the night; while, on the other hand, if the sweating be due to general weakness, then it may occur at any time, and may be frequently repeated. Thus, on exertion, or from excitement, or from sleep, patients in such a condition perspire freely.(b)

The thermometer gives us a still more certain means of learning to which of these conditions the sweating is due. The sweating resulting from debility is not only profuse, but often of a very offensive smell.

Of the remaining symptoms that we have mentioned, cough is not of itself sufficient to prove the existence of consumption, and we have already seen that weakness may cause the pulse to beat too quickly. Thus, three of the most important symptoms—loss of flesh, a quick pulse, and profuse sweating—may be due to mere weakness, and this condition may be produced by many other causes than phthisis. Hæmoptysis is, of course, a valuable and serious symptom, but it is absent in many cases of phthisis, and when it occurs it may be difficult to learn from the account given by the patient whether it comes from the mouth, throat, or lungs. But we need hardly dwell longer on this part of our subject. All our readers must have but too often met with doubtful cases in which some of the above symptoms and signs were present, and yet were not sufficiently marked to warrant a positive diagnosis, which cases caused them great perplexity and much anxiety. What information does the thermometer afford us in such doubtful cases? *While tubercle is being deposited in any of the organs of the body, the temperature of the patient is preternaturally raised.*

The degree of elevation varies. It, however, mostly reaches 102° or 103° Fahr., and not unfrequently 104° or 105° Fahr. It must be borne in mind that the temperature of tubercular patients is often normal in the morning, but rises in the evening; and thus it is important that the observations of the heat of the body should be made in the evening. Such daily elevation of the temperature may continue for many months.

Thus a patient with some of the symptoms and signs of phthisis, but whose temperature after a careful examination is found to be normal, is not the victim of this serious disease. If, on the contrary, the temperature be elevated, and no other cause can be detected—and in the great majority of cases such cause, if present, can be detected—then it becomes very highly probable that the patient is suffering from tubercular disease.

We now give cases in illustration of these remarks.

A young woman, 24 years of age, had lost flesh for some weeks. She was very pale, and suffered from great weakness. Her pulse was quickened and her breathing hurried, especially on exertion. She had a slight cough with very scanty muco-purulent expectoration. Her appetite was bad and her sleep much broken. She sweated greatly at night. For some months she had been greatly overworked. By a physical examination of her chest nothing was discovered with the exception of some sonorous rhonchus. This was heard over the whole of her chest. It, however, soon disappeared, and her cough improved. She was considered to be the subject of active tuberculisation. Her temperature, however, was always normal. By means of perfect relaxation from work and generous diet she quickly improved, and ultimately recovered. At no time were any abnormal physical signs other than those mentioned detected, though a careful examination of her chest was frequently made.

A young lady suffered from a severe domestic bereavement, which considerably altered her prospects in life. Shortly after this she began to lose flesh. Her appetite was very greatly impaired. She slept badly at night. Her cough was slight and without expectoration. She had never spat blood. She still continued to discharge the ordinary duties of life, and though visibly failing, declared that she felt pretty well. No physical signs indicative of disease could be detected. The temperature was found to rise to 102 and 103. In a few weeks well-marked physical signs indicative of phthisis were developed. She grew rapidly worse, and her life is now drawing to a close.

We need hardly dwell on the importance of an early detection of this disease, for it is at such a time that most good is to be expected from treatment. On the other hand, serious inconvenience may follow a mistake in the diagnosis. Thus, if phthisis be diagnosed when no such disease is present, it may cause the patients to observe useless precautions that may seriously interfere with their future prospects in life.

It has been already stated that the temperature of the body affords us an exact indication of the severity of the cause producing fever. Such is the case with tuberculosis. *The temperature is a measure of the rapidity with which tubercle is being deposited in any of the organs of the body.* The more rapid the deposit the higher the temperature. Hence we possess an easy means by which we can learn the condition of the patient.

In this respect, again, the temperature is superior to the other symptoms, for we have seen that a patient may not lose flesh, but, on the contrary, may gain in weight, while phthisis is progressing; for the weight is dependent on the appetite and this holds no constant relationship to the severity of the disease. If the appetite remains good, the weight is maintained or even increased, and the patient may linger on for an almost indefinite period. If the appetite fail, they rapidly waste and speedily die. It is a question of demand and supply; of increased consumption of the tissues and sufficient supply of nutritive material, with power to assimilate it. This increased consumption of tissue (in part, at least) causes the fever. If food can be digested, this increased waste is compensated. Hence the prognosis of phthisis must be chiefly founded on the amount of elevation of the temperature—a measure of the amount of tubercle being deposited—and on the digestive powers of the patient. This, indeed, is the case with all febrile diseases.

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(b) It is generally considered that sweating causes much exhaustion of the patient. When due to fever (elevation of the temperature) much weakness is often the result; not, however, from the sweating, but from the increased consumption of tissue that causes the elevation of the temperature. When, however, the sweating does not depend on a previous elevation of the temperature, it must be considered the result, and not the cause, of the exhaustion. Dr. Druitt has observed that sponging of the body of patients who sweat greatly with water as hot as can be borne often checks the sweating for several hours. This treatment would probably be found more useful in checking the perspiration from exhaustion than that due to fever.

It must be remembered that the same degree of elevation in different diseases by no means indicates the same amount of danger. The fever (elevation of the temperature) rarely destroys life. Each fever has, in respect of its dangers, its own peculiarities. These dangers are chiefly due to the poison in the blood. This, in addition to an elevation of the temperature, gives rise to various, and often characteristic symptoms. In phthisis (tuberculosis) the influence of this blood-poisoning, apart from the fever it produces, is but slight. Thus, while with typhus fever, unless the fever quickly subside, the patient dies, a phthisical patient may continue to live for months with a temperature equal to that which occurs in a severe attack of the former disease. Thus, in forming our prognosis, we must take into consideration the nature of the disease, the elevation of the temperature, and the amount of food that can be digested.

But to return to our subject. The pulse cannot compare with the temperature as an estimate of the rapidity of the deposition of the tubercle; for this, as we have seen, is accelerated by weakness, and the amount of weakness of the patients is in a great measure regulated by the amount of food they can take.

Nor can we obtain exact information from the physical signs, for much tubercle may escape detection by percussion. It may be situated in the centre of the lung, or the evidence of its presence that it would give may be completely annulled by some emphysema. Moreover, in respect of the increase of the deposition, we can only get information from the physical signs when the examination is made after a long interval has elapsed, as a slight increase in the amount of the tubercle is utterly beyond detection by these means. Hence the temperature of the body affords us the most exact estimate of the rapidity with which tubercle is being deposited in its organs.

## THE WEEK.

### KEROSOLENE AS A LOCAL ANÆSTHETIC.

A few days ago Sir James Y. Simpson operated in the Edinburgh Infirmary on a case of vesico-vaginal fistula; and for the purpose of producing local anæsthesia he applied, before making the incisions and stitches, the vapour of kerosolene by a spray douche. Afterwards, he applied the spray of kerosolene to the hands, arms, etc., of several students, and showed, that, by its influence, the douched part could be frozen in a very few seconds. To obtain the full effect of the kerosolene —which is one of the cheapest of medicinal agents—it requires to be pure. In various minor operative procedures Sir J. Y. Simpson has used local anæsthesia of late with varying amounts of success, employing vapour of sulphuric ether, according to Dr. Richardson's ingenious method. He believes that a larger apparatus, provided with several jets, like a watering-pan, would be sufficient as an anæsthetic in many smaller operations. As local anæsthetics he has employed the vapour of oxide of amyl (eupion), nitrous ether, the lighter hydrocarburets from the distillation of paraffine oil, chlorocarbon, hydrochloric ether, etc. Some years ago (see *Medical Times and Gazette* for January 22, 1859, page 79) he suggested, in our columns, solid carbonic acid for producing the same effect, observing that it had always seemed to him that solid carbonic acid, applied in a caoutchouc bag or otherwise, alone or mixed with ether, would probably be found the most convenient and best freezing agent for producing local anæsthesia in the practice alike of the Surgeon, Dentist, and Accoucheur.

### SEA SCURVY.

An inquiry was held by Mr. Carttar, at Greenwich, on Monday last, on the body of a seaman, who was said to have died of scurvy about ten hours after admission into the *Dreadnought.* The Medical officer of that Hospital, in conjunction with Dr. Duprè (of the Westminster School of Medicine), having analysed the so-called lime-juice provided aboard the ship in which this man was serving, came to the conclusion that it was either a solution of citric acid or very weak lemon-juice and water. Evidence was given to this effect, a verdict was returned in accordance with that evidence, and it is understood that a prosecution will result therefrom, at the instance of the Board of Trade. On Tuesday last the master of the brig *Western Star* was charged at the Thames Police Court with a breach of the Merchants' Shipping Act. In this case the evidence went to prove that the supply of limejuice was not sufficient for the voyage; that two men had died from scurvy; and that nearly all the crew were more or less disabled from the same cause. Mr. Partridge, the presiding magistrate, convicted the defendant in the full penalty of £20, remarking that this was a gross breach of the Act, and one to be viewed in a very serious light. The latter of these inquiries proves but too plainly how very inadequate is the law, as at present constituted, to deal with this question. If official supervision had been exercised before the vessel hauled out of dock on the outward passage, it is not too much to say that this list of deaths and sickness would never have appeared at all. A penalty of £20 is but a wretched mockery, given as a peace-offering for the deaths of two, and the wretched (perhaps permanent) debility of eight men. It is the duty of the Seamen's Hospital Society to keep this matter before the public, and so eventually to obtain measures that will remove this disgraceful malady from the merchant navy.

### FEVER AT BUGLAWTON, CHESHIRE.

Last week we quoted an extract from a letter which appeared in the *Guardian* newspaper, giving an account of an outbreak of fever in the village of Buglawton. The writer of the letter, to whom we wish to give all credit for benevolence and good intention, is, we believe, a clergyman of the parish. That good intentions and benevolence are not a guarantee either for good sense or good taste, is too often proved by the proceedings of clerical as well as lay unauthorised dabblers in Physic. This gentleman, in a portion of the letter which we did not quote, hints that the Doctors have been over-physicking and stimulating their patients, and throws out a bait to some stray homœopathist to come and settle amongst them, by stating that there is no homœopathic Physician in the neighbourhood. We have received several Congleton papers containing letters from the same clergyman filled with homœopathic twaddle, from which it appears that the reverend gentleman has been uniting to his spiritual functions those of the quack. The facts of the case are the following:—The sanitary condition of the village is thoroughly bad. The drainage is in a most deplorable state. The water is impure; indeed, many of the inhabitants are drinking river or well water impregnated with the sewage. Under these circumstances, as was to be expected, there has been a well-marked outbreak of typhoid fever; not, however, it would seem, of a very virulent type, for, according to the reverend gentleman's statement in the *Congleton Advertiser* of February 24, the deaths have only reached the average of eight per cent. This he thinks a large percentage; we should think it a small one for such an outbreak as he describes. We would suggest to the incumbent of Buglawton that his time would be better employed in introducing sanitary reforms amongst his flock, in obtaining a better system of drainage in their dwellings, and a better water supply, than in interfering with and annoying the Medical Practitioners of his neighbourhood by administering homœopathic nostrums to the sick, by asserting openly that some of the doctors have over-stimulated their patients, and advising that their directions should be disregarded. We have heard that one of the Medical Practitioners of the neighbourhood has, in consequence of this unwarrantable interference, felt it his duty to visit his patients, at a distance of a mile and a half from his house, three times a day, to insure the proper amount of stimulants being given. How would a clergyman like his sacred functions to be interfered with by any lay adventurer who might possess sufficient ignorance, temerity, and conceit to undertake to supersede the parson?

### CATANIA AS A HEALTH RESORT.

THANKS to increased facilities for travel, a trip in search of health is no longer the terrible undertaking it used to be—frequently postponed until worse than useless. We rarely now see on board the Southampton steamers young men and women whose hectic cheeks already glow with the sunset hues of existence. Modern investigations into the influence of climate on the bodily economy enable Physicians to prescribe residence in certain localities with as much accuracy as any medicine from the shops. Consequently several places have become the regular resort of invalids; several almost forgotten have resumed their old importance, and nearly every year some are added to the guide books.

Of these is the old university town, Catania, long celebrated for historical associations and the salubrity of its climate, but scarcely affording to English men and women those comforts which, both in sickness and health, are so indispensable to them.

Catania is situated on the shores of an inlet of the Mediterranean, on the eastern slope of Mount Etna or Mongibello, which the Greeks who colonised Sicily selected as best adapted for the cultivation of their cereals, olives and vines. A natural mole of lava enclosed a small harbour, and there they established a port, about forty-one miles from Syracuse. The scenery is of extraordinary beauty and variety; the isolated cone of Mount Etna rises to the height of 10,874 feet above the sea level, and its sides present three separate and different zones—an upper, which is the principal crater, covered with perpetual snow, scoriæ, and ashes; a middle, covered with dense pine and oak forests which used to supply timber for the fleets of Syracuse; and a third, the lava region, covered with luxuriant vegetation. From every part of the town can be seen the enormous volcano, its summit sometimes obscured by clouds, at others emitting volumes of smoke, while on its sides are the quiet country villages of the labouring people.

The town of Catania has been repeatedly destroyed by earthquakes and eruptions of lava, but often the inhabitants have built themselves a new city out of the materials which destroyed the preceding one. The present town is almost entirely paved and built of lava, traversed by fine long and broad streets, and surrounded by orchards of vines, olives, almond trees, and mulberries, which cover every rising ground. The population is about 80,000. There are many public buildings and an university, founded in 1434 by King Alfonso of Arragon; a lyceum, and an institute with a naval and technological school; there are besides several good schools for both sexes.

There are also public libraries, museums, a botanical garden, scientific resorts of all kinds, public promenades, and theatres. The archeologist may revel in Grecian and Roman antiquities, remains of temples, the forum, theatres, circus, and amphitheatre.

The Hospital of St. Mark can accommodate 100, Santa Martha 80, the Syphilitic 50 patients. There are lying-in, sick children's, and foundling Hospitals; the Medical Professors of the University give clinical instruction at these institutions.

The Hospital accommodation at first sight seems small compared with the population, but we have it on the highest authority that the average number sick at one time is only 500 in civil practice. This satisfactory condition of the public health is no doubt owing in a great measure to the sober and simple habits of the people, who are industrious, frugal, and religious, together with the abundant supplies of good and cheap food; the markets are always supplied with plenty of beef and mutton, poultry, game, and both salt and fresh water fish. Fruits and vegetables are in great abundance. But much of this unusual degree of health depends upon the situation of the town on a dry slope, moderately elevated above the sea level, and exposed to the bracing north-east wind, an equable temperature, averaging 68·683° Fahr., the wide, well-paved, and carefully-cleaned streets allowing currents of air to sweep through the town, and the plentiful supply of water which is brought into the town for the numerous fountains, public lavatories, and gardens, in addition to more than a thousand wells which contain good drinking water.

The water of Catania is limpid, crystalline, without smell or distinct taste, and leaves no deposit in closed vessels. Chemical analysis shows that it contains, besides atmospheric air and carbonic acid gas common to all waters, traces of the following:—Bicarbonate of lime, bicarbonate of magnesia, bicarbonate of soda, carbonate of manganese, carbonate of iron, chlorate of iron, chlorate of iodine, sulphate of soda, silicic acid, phosphate of lime.

According to a meteorological return from the University Observatory of observations for fifteen years, we find the following:—

*Annual Medium.*

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| Barometer (English inches) | 29·829 |
| Thermometer (Fahr.) | 68·683 |
| Hygrometer (Saussure) | 52·203 |
| Cyanometer. | 18·041 |
| Evaporation (English inches) | 2·692 |
| Anemometer (prevailing wind) | E.N.E. |
| Evaporation (English inches) | 4 397 |

The most common maladies are derangements of the gastric mucous membrane from warm weather or biliousness. An experience of thirty years shows that these form about six-eighths of all cases treated, the remainder being made up of coughs, pleurisy, pneumonia, and other incidental ailments. Phthisis is so rare that the average number of cases in St. Mark's confined to Medical cases is not above two or three. Asthma, gout, and vesical calculus are still more rare. It would seem that the climate of Catania is peculiarly adapted for cases requiring a dry, bracing, mild air, not subject to sudden changes of temperature. Lines of railroad branching from Catania can take the visitor to any of the principal points of interest, and there is a very fair amount of game for sportsmen.

We have said that Catania had not accommodation suitable for invalids, but, fortunately, that objection has been removed by the Grand Hotel de Catania, about 900 feet from the sea margin, in a situation which commands an uninterrupted panoramic view of Etna and the sea. The director of this large establishment, which contains upwards of 100 bedrooms, M. Adolphus Werdenberg, has made it his business to study the great English hotels, and, impressed with the importance to Englishmen of their home comforts, he has fitted the rooms with carpets and fire-places; where even winter is as mild as our spring, of course, the latter are rarely to be found in ordinary houses. There are also hot and cold baths, a music, billiard, and smoking rooms, not to mention other resorts often wanting abroad. This is an excellent head-quarters, not only for invalids, but for sportsmen and general tourists. M. Werdenberg is an experienced Eastern traveller, and is ready to give advice and introductions to any going on to Egypt, Syria, or Palestine.

One great advantage of Catania is that it is easy of access, and by different routes. Those who do not mind the sea can get in the Peninsular and Oriental steamer to Malta, meet there an Italian steamer which, allowing for a short delay at Syracuse, will bring them to Catania in a few hours. Those who prefer it can go by France or Italy; from all the Italian ports comfortable steamers ply regularly for Messina or Catania. The railroad takes about two hours, and the steamer about six between these towns. There is another advantage: the scale of charges is graduated according to the requirements of the visitor; he can have a room from two shillings upwards, and, as we have seen, food is varied and cheap. M. Werdenberg has so arranged that if visitors choose to let him know when, he can have one of his own servants to look after them and their luggage at Malta.

We have no doubt that to those who by this time know the old sanitaria, Catania would prove a pleasant and beneficial change.

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### FROM ABROAD.—A BUTCHERS' MICROSCOPICAL SOCIETY—PARIS REGISTRATION RETURNS.

The trichina question is taking on a practical aspect in Germany in the shape of the formation of microscopical societies by pork-butchers. That at Nordhausen, in Prussian Saxony, has just published its rules, stating in the preamble, that, as the microscopical examination of the flesh destined for sale is the only security for the public and the trade, and that as where this has to be paid for it will be apt to be neglected, it has been resolved to form a society which Professor Kützing has agreed to instruct in the art of using the microscope and detecting the trichinæ in their various forms. Those persons who are desirous of being members of the Society must be in possession of a sufficiently good microscope, and have learned the use of it for the detection of the trichinæ. The microscope must be always kept in good condition, and at least three portions of the muscles of each pig must be submitted to examination immediately after slaughtering. The preparations must be kept carefully between glasses for mutual examination and control, under the superintendence of Dr. Kützing. When the microscopes and preparations are not found to be kept in proper order reproof will be administered, which, if not efficacious, will be followed by expulsion from the Society. The Society, moreover, offers to pay, for every pig containing trichinæ delivered up to it, not only more than the market price of the animal, but a premium of fifty thalers. This is, at all events, a good practical attempt at meeting what has become in Germany a great public calamity.

In a recent number of the *Moniteur* it is stated that although *trichiniasis* has never been yet observed in France, the French Government has taken steps to obtain full information upon the subject, having sent Professors Delpech and Raynal into Germany to investigate and report upon the matter, and also requested the Academy of Medicine to report to it upon the facts which have already been published. As it is so much the fashion to say that we are always behind the French Government in this kind of inquiries, we may remind our readers that our Government is already in possession of an elaborate Report upon the subject of trichiniasis from the able pen of Dr. Thudichum, and printed in the last Report of the Medical Officer of the Privy Council.

Dr. Farr, in his preface to the "Summary of the Metropolitan Weekly Returns for 1865," just published, makes the following observations:—

"It is a common notion on the Continent that the publication of weekly tables, such as those of London, may shake the nerves of the people and lead to explosions of terror in times of epidemic; but experience proves that the publication of the facts quiets instead of disturbing the popular mind, and while it reveals the exact extent of danger, robs it of the halo of alarm with which the imagination surrounds indefinite pestilences walking abroad by noonday. The panic in Paris, Marseilles, and Naples from cholera last year had no parallel in London in 1854, and if weekly tables had been published in Paris that city would probably have enjoyed the same comparative immunity as London in 1865; for the London tables, demonstrating the diffusion of cholera by the wells and water companies, led the latter, under legislative pressure, to seek purer sources of supply; while Paris was left behind in this work of improvement, and unnumbered thousands of the people perished."

Although the French authorities have not mustered up enough courage to publish weekly tables of the mortality of Paris, Baron Haussmann has caused to be issued monthly tables for 1865 of a very complete character; and although they are rather late in making their appearance, that for September having only been just published, yet they constitute a very important step in the right direction, and will embrace a complete account of the late epidemic of cholera. They are published in the form of a handsome quarto number of some twenty to thirty pages, and are divided into two sections—the one relating to topography, and the other to the population. In the first are detailed meteorological observations made at the Paris Observatory, tables of rainfall, as observed at eight stations, thermometrical observations made on the waters destined to the supply of Paris, the quantity of these derived from the various sources, and tables of the height and condition of the waters of the Seine. Under the section on Population are tables of births, marriages, and deaths; and detailed tables of causes of death, arranged, however, as it seems to us, upon a very faulty system, under twenty different heads. As an example, we may state that deaths from cholera are entered under the heading "Diseases of the Organs of Digestion." As an appendix to these tables, others are given of the amount of direct taxes and the price of bread in Paris during 1865, During the month of September the total births in Paris amounted to 4402 (2224 male and 2178 female) and that of the deaths to 3512 (1844 male and 1668 female), being an excess in favour of the former of 890. Of the 4402 births, 3139 were legitimate and 1263 natural. Of these infants 313 were either born dead or died within twenty-four hours—viz., 214 legitimate and 99 natural infants. The marriages solemnised during the third quarter of 1865 amounted to 4537. The population of the 20 arrondissements, exclusive of the garrison, is estimated at 1,667,841.

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### PARLIAMENTARY.—THE CATTLE PLAGUE—ENCLOSURE OF EPPING FOREST—WEIGHTS AND MEASURES—TRICHINOUS DISEASE IN SWINE—POOR LAW RATING OF HOSPITALS AND CHARITABLE INSTITUTIONS—VARIOLA OVINA IN NORTHAMPTONSHIRE.

In the House of Lords on Thursday, February 22, a conversation took place, in which several points in connexion with the Cattle Diseases Bill were referred to, and the continuance in force for a few days of the Orders in Council was recommended, with the view of enabling Parliament maturely to consider the two bills upon the subject.

In the House of Commons,

Mr. Doulton asked a question as to the alleged enclosure of Epping Forest.

Mr. Childers, on the part of the Government, said that there had been a correspondence between a department of the Government and the Metropolitan Board of Works as representing the metropolis on the subject, but nothing had been decided. The Government have under consideration the question of what measure should be adopted; but since the report of the last Committee no fresh instructions have been issued by the Treasury.

Mr. Locke asked whether it was the intention of Her Majesty's Government to introduce any bill into Parliament during the present Session to amend the law relating to weights and measures.

Mr. Childers said it was the intention of the Government to introduce a bill this Session on the subject. The special object of the bill would be to transfer to the Department of the Board of Trade all the duties at present imposed by various Acts of Parliament on the Controller-General of the Exchequer, and to place on a more satisfactory footing the custody of our standards.

In reply to Sir A. Agnew,

Mr. Childers said it would have nothing to do with the coinage.

Mr. Hunt's Cattle Plague Bill passed through Committee, with numerous amendments and with the addition of many new clauses

In the House of Lords on Friday,

Lord Granville stated, in reply to Lord Derby, that the Government did not propose to take charge of Mr. Hunt's Cattle Diseases Bill when it reached the House, but if no peer should undertake the charge the Government would consider whether they should not adopt it.

A conversation followed upon the subject of the Cattle Plague, in the course of which Lord Granville stated that experiments with a view of finding a cure for the disease were still in progress.

In the House of Commons,

Sir J. Walsh asked whether the attention of Her Majesty's Government had been drawn to the appearance of a new disease affecting swine in parts of the Continent of Europe, and not only destroying the animal, but rendering the flesh poisonous and dangerous to human life; and whether they had instituted any inquiries by competent Medical and scientific authorities, with a view to ascertain the nature, extent, and progress of the disease. The hon. baronet explained, in putting the question, that the disease had appeared in France and Germany, and that eggs were deposited by insects in the hide of the animal, which died soon afterwards, or, if promptly slaughtered, could not be eaten with safety.

Mr. Bruce said that in 1862 Professor Gamgee was directed to report upon the subject of diseases in meat, and among the diseases embraced in the inquiry was the one referred to. A German Physician of eminence who had paid special attention to the subject was directed to make a report, and it was published in the last volume of the reports of the Medical Officer of the Privy Council. The report was most exhaustive, supplied a number of illustrations, and gave every possible information upon this and other parasitic diseases affecting animals that were killed for human food.

Mr. G. Hardy called attention to a recent decision of the House of Lords on the Mersey Docks Act, and entered into an elaborate argument to show that if the principles there laid down were carried to their full extent, they would lead to the rating of charitable institutions, such as Hospitals, schools, etc. He discussed the grounds on which such institutions had been originally exempted, contending that they were public buildings in the strictest sense of the word, and showed that in many cases their utility would be hampered by the burden of these rates. He put a string of questions to the President of the Poor-law Board as to the instructions which he had issued on this subject, and as to his intentions with regard to future legislation.

Mr. Villiers asserted that great convenience and public advantage had been gained by this decision of the House of Lords, which had set at rest a question on which, for a long series of years, the Courts had given conflicting opinions, and he argued that the exemptions alluded to had arisen from a wrong construction of a clause in the Act of Elizabeth. In reply to Mr. Hardy's questions, he replied that the Poor-law Board had not issued any instructions to rate this class of buildings, though their law advisers had given an opinion that, after the judgment of the House of Lords, these exemptions were invalid; and with regard to legislation he announced that he had no intention to bring in any Bill on the subject.

In the House of Lords, on Tuesday,

Lord Granville, in answer to questions addressed to him, stated that an inspector had been sent into Northamptonshire to inquire into the outbreak of small-pox among sheep in that county, and that the Custom House authorities adopted the same precautions with regard to sheep arriving from abroad as in the case of cattle imported into this country.

Lord Granville then, in moving the second reading of the Cattle Plague Bill, declared himself unable to defend either its principle or its details. The principle was uniformity of restrictions, but that principle was largely modified by numerous exceptions which, in his opinion, would render the provisions of the Bill less stringent than the regulations now enforced by the local authorities. At the same time he admitted that some of the clauses would usefully supplement the Cattle Diseases Bill, and therefore he proposed the second reading with a view to the details being carefully considered by a Committee. The Government intended to suggest certain amendments which they believed would facilitate the operation of the measure.

After remarks from Lord Berners, the Marquis of Bath, Lord Winchilsea, the Duke of Marlborough, the Duke of Buckingham, and Lord Romney, the Bill was read a second time, and was subsequently referred to a Select Committee.

## REVIEWS.

*On Some of the Causes and Effects of Valvular Disease of the Heart, being the Croonian Lectures of the Royal College of Physicians for* 1865. By THOMAS B. PEACOCK, M.D., F.R.C.P., Physician to St. Thomas's Hospital, etc. London: Churchill and Sons. 1865. Pp. 114.

THESE lectures are devoted to the consideration of cases of valvular disease of the heart arising from causes other than inflammatory affections, to which last conditions it has been very much the habit of late to attribute it. The causes specially referred to are congenital malformation of the valves, injuries of the valves, and alterations in capacity of the orifices and cavities. The lectures exhibit much research, and are well deserving of most careful study. In a table which we quote, the relative frequency with which the several causes of valvular disease operated is given in regard to 63 cases which have come under the care of the author during life, and in which the hearts were examined after death. Thus, of 26 cases of aortic valvular disease—

| | | |
|---|---|---|
| 9 or 34·6 | per cent. are referred to | malformation |
| 2 or 7·4 | „ „ | injury |
| 6 or 23·07 | „ „ | rheumatism; and |
| 9 or 34·6 | „ „ | various other causes combined. |

Of 17 cases of mitral valvular disease—

| | | |
|---|---|---|
| 11 or 64·7 | per cent. are referred to | rheumatism |
| 6 or 25·2 | „ „ | other causes. |

Of 16 cases of mitral and aortic valvular disease—

| | | |
|---|---|---|
| 2 or 12·5 | per cent. are referred to | malformation |
| 10 or 62·5 | „ „ | rheumatism |
| 4 or 25·0 | „ „ | other causes. |

Cases are quoted both from the author's practice and from other sources to illustrate the several points on which he dwells. Some of them are very interesting, and perhaps more especially four cases which illustrate injury to the valves of a heart, previously sound, during some violent muscular effort. Such cases are very different from those in which valves previously diseased give way under some slight exertion or shock. The following extract supplies something like a summary of the leading features of the classes of cases discussed by Dr. Peacock:—"1. There are cases in which the patients have been delicate throughout their lives, and have specially displayed evidences of defect in the circulating organs; while they have never had rheumatism or any other serious illness, and have never sustained any accident, and in which, after death, the valves display one or other of the forms of defect which have been described. 2. There are other cases in which, after the patients have sustained a severe injury or strain, when previously in good health, symptoms of heart disease manifest themselves and never afterwards wholly subside, and in which on examination the valves are found obviously to have been in some way torn. 3. There are yet other cases in which the patients, without having previously been in impaired health or subject to any symptoms indicating cardiac delicacy, have decided attacks of rheumatism or some other form of acute or chronic disease, in which there is proof that the heart was probably or certainly implicated; and after death the valves are found to present some of those conditions well known to ensue upon endocarditis. In cases like this we can have no hesitation in assigning the valvular disease respectively to malformation, injury, or rheumatism, etc.; but 4. There are other cases of which the causation is very obscure. The valves may have been the seat of some congenital defect, which, though trivial, may have predisposed to subsequent disease; the patient may have sustained an injury, scarcely noticed at the time and nearly or entirely forgotten, yet some portion of the valvular apparatus may have been strained or torn, so as to interfere with their efficient action, and lead subsequently to more serious defect; or during a trifling rheumatic attack, such as few persons pass through life without suffering, or in the course of some acute inflammatory or febrile affection, the heart may have been slightly affected, and the disease thus first set up may ultimately occasion important changes of structure; or 5, and lastly, the patient may have had an attack of rheumatism or some other acute or chronic disease in which the heart may have been involved; and yet such attack may not have been the original cause of the valvular disease, but may only have called into active operation some defect which had previously existed in a latent state. Questions like these frequently arise in considering the probable causation of valvular affections, and make it extremely difficult to decide to what the original development of the disease is to be assigned."—P. 69.

The subject of Dr. Peacock's third Lecture, on the changes which are produced in the state of the heart itself by the various diseases of which it may be the subject, is introduced by an acconnt of some very important original researches into the weight and dimensions of the healthy heart, in considering which the lecturer takes into account the character of the diseases producing death and the duration of the illness, since "it is evident that the weight of the heart must vary considerably, according to the mode in which death takes place; the organ being heavier when the patient dies after only a short attack of illness and lighter when death has occurred from lingering and emaciating diseases." A great part of this information is given in the form of tables, which will doubtless be extensively consulted in future by pathologists.

The following are some of Dr. Peacock's remarks upon the prognosis in heart disease: "It has generally been considered that the prospects of longevity are greater in persons who labour under affections of the aortic than of the mitral valves. Yet though the various secondary affections more readily occur in the latter than in the former class of cases, I believe that the received opinions as to the relative duration of life in the two forms of disease is erroneous. I have met with cases in which patients with marked signs of mitral insufficiency have survived for many years; and we all know how frequently such cases come under treatment, both in public and private practice, again and again, the local complication being readily relieved, and the patients soon regaining a comparative state of health. On the contrary, in cases of aortic incompetency, we rarely find that the patients derive any very material benefit from treatment, and such cases as we have the opportunity of watching generally prove fatal in no long time. Indeed, notwithstanding the greater frequency of such cases, I am unable to refer to any instance in which life has been sustained for a considerable period. Probably injuries to the aortic valves present the condition under the most favourable circumstances for the prolongation of life, and yet I have shown how very limited is generally the period during which such patients survive. It will be remembered that of the nine cases of injury of the aortic valves to which I have referred, life was maintained for the longest period in two of those which I have myself reported. In one of these the patient died three years after the occurrence of the accident; but as no post-mortem examination took place, the precise nature of the injury is uncertain. In the other, the patient was still living when the last information was received five years after the accident had occurred. In reference to the prognosis in cases of valvular disease, the mode in which death is liable to occur must also be considered. In aortic valvular disease, death usually results from failure of the power of the left ventricle, and hence may take place suddenly and when least expected; and this, not only in cases of very serious defect, but when there is only slight insufficiency or when the valves are quite competent. On the other hand, in cases of mitral valvular disease, death is generally due to the pulmonary engorgement and other secondary affections, or to the progress of the dropsical effusion, and is usually more gradually brought about. It is worthy of observation, that in cases in which the heart is most remarkably enlarged sudden death is yet of common occurrence. Such was the termination of the case which fell under my notice, where the organ, though not the seat of valvular disease, weighed 40 oz. 12 drms.; and in that of Dr. Bristowe, in which there was incompetency of the aortic valves, and the weight was 46 oz. 8 drms. The remarks which I have made as to the duration of life are intended to apply to cases of incompetency of the aortic and mitral valves, not to instances of obstruction at those orifices. In cases of mitral disease, it would often be difficult, if not impossible, to distinguish between simple obstruction and regurgitation; and hence no comparison can be instituted between the duration of life in such instances and those of aortic obstruction. In the latter form of disease, however, we know that, provided the obstruction be not great, life may, under favourable circumstances, be prolonged for many years, and a large amount of health and vigour be enjoyed; and it has been shown that even the most aggravated disease of the valves is compatible with freedom from cardiac symptoms for many years. The case which I have referred to, as reported by Dr. Stokes and Dr. Graves, and still more strikingly one of those which I have myself mentioned—in which the patient died at 76 years of age, and then not of symptoms referable to the heart—may be referred to in support of this assertion." —P. 106.

We must also quote the following opinion respecting the value of digitalis, which has recently been maintained to be a cardiac tonic. Dr. Peacock says:—

"I have not seen any decided proof of the correctness of this opinion; it has several times occurred to me to observe the symptoms of cardiac incompetency greatly aggravated by the use of the remedy, and equally remarkably lessened by its discontinuance. . . . In cases of mitral valvular disease, I believe, however, that digitalis is eminently useful; not by any influence which it exerts over the heart itself, but from its powerful diuretic action, by which it tends to lessen the amount of the blood, to relieve congestion, and promote the absorption of any fluid which may have been effused, and so indirectly to assist the action of the heart."—P. 112.

These lectures embody in a small space the results of a vast amount of laborious research.

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*A Manual of Minor Surgery and Bandaging, for the use of House-Surgeons, Dressers, and Junior Practitioners.* By Christopher Heath, F.R.C.S., Assistant-Surgeon to, and Lecturer on Anatomy at, the Westminster Hospital. Third Edition. London: Churchill and Sons. 1866. Pp. 249.

We are glad to take this opportunity of drawing attention to a new edition of Mr. Heath's "Manual of Minor Surgery and Bandaging." This admirable little book explains the *minutiæ* of Surgical practice—all those niceties of dressing and bandaging upon which the comfort of the patient and the credit of the Practitioner so much depend. In the best interests of our Profession we wish this Manual success. The more it is taken as a guide, the more will the details of Surgical practice be finished and perfected; and are we not learning every day that the safety of patients depends more upon simple means carefully used than upon heroic remedies and great operations?

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*Man, considered Socially and Morally.* By George Sparkes, late Madras Civil Service. London: Longmans. 1865. Pp. 162.

Mr. Sparkes is evidently a man who has a taste and capacity for metaphysical inquiry. He has read largely on the subject, and now he has undertaken to write upon it. The result is, that he has produced a very readable little book, which deals in a short and clear way with many of the most interesting questions relating to the nature of man in its social and moral aspects. When we mention that our author discusses the origin of evil, virtue, and vice; moral responsibility; the races of man; the fixity of species, besides a host of kindred topics, and all in the space of a hundred and sixty-two small pages, it will easily be understood that his book is of a popular rather than of a scientific kind. Still we have derived both pleasure and instruction from the perusal of it. But, in writing a popular book upon such abstract questions as these, we would recommend Mr. Sparkes to be a little more diffuse. A few more examples and illustrative anecdotes would serve to make the subject both plainer and more interesting. Moreover, a work like this ought always to be divided into chapters and sections. Metaphysical subjects, above all others, require to be treated with method and arrangement.

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*The Third Annual Report of the Peking Hospital, under the care of J. Dudgeon, M.D., for the year 1864.* Peking: Printed by James Ly and Co., 1865.

This thin yellow pamphlet is so interesting that we should like to transfer it bodily to our pages if we could. It is the account of one year's work of a missionary Physician at Peking, and as it appears that one of the Emperor's ten Surgeons has been a pupil at the Hospital, there is some chance of the spread of surgical skill. In fact, there is no *à priori* reason why the Chinese should not make good Surgeons.

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*A Manual for the Classification, Training, and Education of the Feeble-minded, Imbecile, and Idiotic.* By P. Martin Duncan, M.B., Hon. Consulting-Surgeon to the Eastern Counties Asylum for Idiots and Imbeciles, and Wm. Millard, Superintendent of the Eastern Counties Asylum for Idiots and Imbeciles. London: Longmans. 1866. Pp. 191.

This will be found a most useful handbook by those who have the training and education of idiots; and, indeed, it contains many hints which would be of value to those who have the care of perfect children. The authors give some excellent advice as to the qualities which are essential to a good attendant upon the imbecile; and then they proceed to lay down a scheme of education, wherein they recommend that the powers of the body should be strengthened and developed by suitable diet, regimen, and exercise before the training of the mind is attempted. The results which are brought about by this system appear to be most satisfactory; and we would advise all who are interested in the subject of lunacy to study this little book.

# GENERAL CORRESPONDENCE.

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## SUCCESSFUL CANDIDATES FOR THE ARMY MEDICAL SERVICE.

### Letter from the Director-General of the Army Medical Department.

[To the Editor of the Medical Times and Gazette.]

Sir,—The Director-General of the Army Medical Department presents his compliments to the Editor of the *Medical Times and Gazette*, and begs to enclose a list of the candidates of Her Majesty's British Service who were successful at the competitive examination in August last, and who have passed through a course at the Army Medical School, showing the combined results of the examination.

Army Medical Department, February 21, 1866.

| Names. | Studied at. | No. of Marks. |
|---|---|---|
| O'Reilly, J. J. | Dublin | 4485 |
| McWalters, W. | Dublin | 4310 |
| Mally, R. N. | Dublin | 4308 |
| Catherwood, W. A. | Belfast | 4260 |
| Clarke, E. J. | Dublin | 4183 |
| Johnston, W. | Aberdeen & Edinburgh | 3963 |
| D'Arcy, E. F. | Dublin | 3903 |
| Moust, G. B. | Edinburgh | 3776 |
| O'Brien, H. J. | Dublin | 3680 |
| Kilroy, P. Le F. | London and Dublin | 3480 |
| Alexander, W. | Belfast | 3468 |
| Lowe, R. W. | Edinburgh | 3435 |
| Purden, J. E. | Dublin | 3423 |
| Connellan, E. | Cork | 3176 |
| Mackinnon, H. W. A. | London | 3045 |
| Brodie, J. F. | Galway and Dublin | 2860 |

## NYCTALOPIA.

### Letter from Mr. Caleb Barrett.

[To the Editor of the Medical Times and Gazette.]

Sir,—The case of "Night-blindness" by Mr. Haynes Walton in your last number reminds me of one which I noticed some years since, and now send for your publication, if you think it will interest your readers:—

A farm labourer, aged 30, applied to me on July 7, 1860. For a week he had suffered from considerable loss of sight every evening about twilight, recovered gradually by candle-light, and entirely in the morning. He had some dull, aching pain about the eyes, but no external sign of congestion; his general health was good. The ophthalmoscope showed some dulness of the vitreous humour, a deeper colour of the retina, and larger size of its vessels. I prescribed for him blisters behind the ears, and purgatives, with a shade for the eyes.

On the 27th I again examined his eyes with the ophthalmoscope, and found the vitreous humour clear, the vessels of the retina still large here and there, but the retina itself, especially near the optic nerve, paler than in health. His sight was much improved. He was advised to use blue spectacles, and take the tinct. ferr. sesquichlor. His sight was quite restored in about four weeks.

In June, 1862, he had a similar but slighter affection.

I am, &c.,
Caleb Barrett, F.R.C.S. (exam.), Surgeon
to the Gloucester Infirmary.

5, Barton-street, Gloucester, February 20.

## POISONING BY HALF AN OUNCE OF PRUSSIC ACID—POWER OF MOTION AND VOLITION.

### Letter from Dr. G. Corfe.

[To the Editor of the Medical Times and Gazette.]

Sir,—I beg leave to forward to you the accompanying brief report of a fatal case of poisoning by hydrocyanic acid, which has recently occurred at our Dispensary, and for which I am indebted to the Resident House-Surgeon.

I am, &c. Geo. Corfe, M.D.

9, Nottingham-terrace, Regent's-park, Feb. 28.

"Western General Dispensary, Feb. 24.

"Dear Sir,—The circumstances attending the death of Wm. Hesketh on Sunday last were as nearly as possible as follows:—About 11½ a.m. he suddenly opened the door of our sitting-room on the first floor, advanced about two yards or so within the doorway, and said, "Come down directly, I have taken half-an-ounce of prussic acid." He then immediately turned round, and ran very quickly downstairs, leaning on the banister. I and the assistant, Mr. Killingworth, immediately followed him down, and found him standing in the centre of the Dispensary room. He said, "Give me something," and we immediately gave him some ammonia and iron, of which he drank some, and then tried to excite vomiting, by pressing his finger on the back of his tongue. An abortive attempt at vomiting took place, and he then fell on his back, insensible; his face, previously pale, became much congested, and the veins swollen; the pupils were dilated and fixed, the lids half closed. There was very slight stertor with the first respiration or so after he fell, but the respiration became soon fainter, and ceased with frothy exudation from the mouth. Cold affusion, artificial respiration, and the galvanic battery were tried without any effect.

"The post-mortem next day showed engorgement of the venous system with dark fluid blood; left side of heart contracted and empty; right, uncontracted and containing dark blood. All the organs, including the brain, were congested. The stomach contained some grumous material, and smelt of ammonia. Mr. Hillman, who was present at the post-mortem, made subsequently an analysis of the contents of the stomach, and found large quantities of prussic acid. He is now preparing a detailed report of the whole case for publication. As far as I can judge, the period that elapsed from the time at which he came to our room to his death could not have exceeded ten minutes; but, supposing he ran up immediately on taking the poison, the time that elapsed from taking the poison until he became insensible could not have exceeded two minutes.

"I am, &c.,
"R. L. Thom."

## RINDERPEST AND ITS AFFINITIES.

### Letter from Mr. George Gaskoin.

[To the Editor of the Medical Times and Gazette.]

Sir,—A great authority in veterinary science has informed us that Rinderpest is Rinderpest; I presume an *idiopathia* which took its origin among the bovine race; but it is a little too much to affirm of any one species of animals when they happen to be victims of a communicable virus that this infection originated in their blood, and that it is peculiar to their nature. We must place such a conclusion on a par with that which derives syphilis *è fædo muliere.* The mutual participation of several tribes of animals in the effects of a single morbid poison, and the modification of that poison in its passage through their bodies, as well as the various modes of their subjection to its influence; these form fit subjects for modern thought, appertain to modern Medicine and to our present stage of civilisation. When a man is accustomed to hold a transplantable virus on the point of his lancet he easily persuades himself that there is something in its origin, independent of the animal that may chance to feel its sting. The transmission of the contagion from England to the Zoological Gardens at Paris, where it committed such great ravages, is a central fact on which to fix our intelligence, and we should never forget that man also is a large animal. I am of opinion, therefore, that we should continue in this same path of thought, notwithstanding the ill success which has attended Dr. Murchison's experiment, whether this reside in defect of method or of principle, noting with scrupulous care all the pathological differences in the various tribes of animals affected, and following in the track of the contagion as the thread which should guide us; for assuredly we stand on the threshold of great discoveries. Whether the idea of vaccination as preventive was original or not, it behoved us to try it in England. It is extraordinary how in the pages of Dionysius of Halicarnassus, and of Livy, we find that plagues of cattle preceded some of the most malignant pestilences recorded as happening to ancient Italy. In the fine poem of Fracastorius there is a beautiful passage, in which a pestilence is described as commencing among the goats in autumn under influence of the south wind; and not till the following year, in spring and summer, did there ensue a plague, which destroyed nearly every head of cattle:—

> "Infirmas pecudes, balantumque horrida vulgus
> Pestis febre mala miserum pene abstulit omne."

Whether this was the same infection as that he describes in his first book, "De Contagione," as occurring near Forojuolo and in the Venetian and Veronese plains, I cannot say. If the lungs of the goats were affected, the same appears to be the case with the sheep in our cattle plague. This passage of the poem I have seen nowhere referred to.

Writing in the interests of scientific inquiry, I abstain from any deprecation of the poleaxe; but let us not relax in inquiry, for even the poleaxe might fail. Erasmus jokingly proposed to burn the syphilitics; and Phillip the Long of France, in dealing with the lepers, did pursue that plan, but it fell short of success. I am, &c.

3, Westbourne-park, Feb. 14. GEO. GASKOIN.

## THE COMMITTEE ON THE ARMY AND NAVAL MEDICAL SERVICES.

[To the Editor of the Medical Times and Gazette.]

SIR,—I do not believe that we have been fairly represented at the late inquiry before the Committee at the Admiralty, or they would never consider the addition of two shillings a day could be an equivalent for promotion. Most men have been deluded in the course of their lives, but no one was ever more deluded than I was when I entered Her Majesty's Army Medical Department some ten or twelve years back. I am convinced that if I had employed that time in private practice anywhere my position would be infinitely better than it now is. I do not envy the man whose name occupies the 700th place on the list of Assistant-Surgeons. He clearly never can be promoted, and as for myself, I may remain—well, never mind; the subject is not pleasant to a man in the best of spirits, and I can hardly be that, seeing I am fresh from the perusal of the Report of the Committee.

I am, &c.,

February 28, 1866. AN ASSISTANT-SURGEON.

[To the Editor of the Medical Times and Gazette.]

SIR,—The Committee of Inquiry on Naval and Military Medical Affairs have given in their Report, and, like the fable of the mountain in labour, they have produced a very ridiculous offspring. As yet I have only seen a report of the conclusions at which they have arrived. I have not seen the evidence upon which they based their conclusions. But whether the conclusions be or be not in accordance with the evidence, I am perfectly satisfied that the Committee have failed to appreciate the requirements of the Naval Medical officers, and that the recommendations of the Committee, if adopted, will fail to induce candidates to offer themselves for Assistant-Surgeoncies in the Navy.

I particularly dislike comparative statements, because they are injurious; but I may observe here that the bait of 2s. 6d. a day for the first five years to a Naval Assistant-Surgeon in excess of what the Army Assistant-Surgeon gets is too transparent to be successful in promoting enlistment, and the paltry boon of counting staff time for pay only after eighteen years, and the promise of one pound a day when worn out and unfit for further service, must fail to induce men to serve with any *esprit*.

What is really wanted to make the naval service popular is the abolition in whole or in part of half-pay time, and an increased promotion to the higher grades of the Profession. The abolition of half-pay time would be preferable to any present increase of pay, and the appointment of inspectorial officers to all our Hospitals and flag-ships on foreign stations would be more in accordance with our requirements than the patchwork recommendations of the Committee to which I refer. I am, &c.,

A NAVAL MEDICAL OFFICER.

## REPORTS OF SOCIETIES.

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## THE PATHOLOGICAL SOCIETY.

TUESDAY, FEBRUARY 6.

DR. PEACOCK, President.

### REPORT ON THE NATURE OF THE ERUPTION IN CATTLE PLAGUE.

THE following is the report by Mr. Sibley and Dr. Dickinson:

We have examined portions of skin removed from cattle which had died at different periods of the disease; and also through the kindness of Dr. Sanderson, Professor Gamgee and Mr. Duguid we have been enabled to observe the appearances presented during life.

It appears that the cutaneous eruption is by no means a constant character of the disease; whereas the affection of the mucous membrane is always present. We may instance, as an illustration of the former statement, the case of a calf suffering severely from the disease, in which a careful examination of the skin at various periods failed to detect any departure from the natural state.

The eruption when present is generally observed on the third or fourth day, and increases until the seventh or eighth day.

The first change observed, and sometimes the only change, is an irregular injection of the skin observable about the parts least covered with hair, particularly the neighbourhood of the udders. The skin is traversed by a fine vascular appearance almost as if chafed by friction.

The next alteration, that which must be regarded as most characteristic of the disease, is the appearance of a number of small, indurated, and discoloured spots, which are slightly raised above the surface. The skin above them is greasy to the touch, and scurfy in appearance. If one of these hard elevations be examined with the microscope, it is found to consist of scabs of epithelium, more or less mixed with granular matter. The only change in the cutis is that the papillæ are somewhat prominent and injected. The more rare form of eruption, of which we have seen two instances, consists of cream-coloured elevations, varying in size from that of a mustard-seed to the diameter of a third of an inch. It is right to mention that each of these two specimens had been immersed in spirit before examination. The smaller spots are circular in outline; the larger are very irregular in outline and in amount of elevation. The raised part is nearly white and opaque, so that by the naked eye the spots are not to be distinguished from pustules. They are surrounded by a dusky red halo. Some come off as crusts, leaving a disc of cutis exposed and raw-looking beneath, having in its centre some raised and injected papillæ. Six or eight of these prominences existed in a portion of skin six inches square from the neighbourhood of the udders.

We have never observed vesicles.

A section through one of the large elevations described showed that the formation was upon the surface of the cutis, from which it could be easily displaced. The cuticle was separated from the cutis, the interval being occupied by a soft yellow material, solid, very easily broken up. Beneath this the papillæ show a great increase of vascularity. The soft material between the cutis and the outer layer of cuticle consisted of a great accumulation of epithelial scales, in various stages of development, some of which were irregular, granular, and broken up. These were mixed with granular and fatty matter, and with a good many bodies, possibly rather smaller than pus corpuscles, which, however, some of them much resembled. They were irregular in shape, round or ovoid, and others angular. Some of them were evidently epithelial nuclei, while others had two or three separate nuclei of their own. The latter were such that had they been found in undoubted pus, they would have been regarded as pus corpuscles.

With regard to scars left by the eruption, we have examined two animals recovering from the disease, as well as a portion of the skin of one killed in the seventh week, which was exhibited by Dr. Crisp. In none were any marks present. We were not able, however, to find out what amount of eruption, if any, had existed during the progress of the disease in these animals.

*Conclusions.*—From these observations we come to the following conclusions:—

1. The eruption in cattle plague is not constantly present.
2. The ordinary form consists of small hard elevations composed of altered epithelium.
3. In a few exceptional cases an eruption is observed, at first sight composed of pustules, but which minute examination shows to consist, like the other, chiefly of altered epithelial formation.

### REMOVAL OF A LARGE RECURRENT ENCEPHALOID TUMOUR FROM THE ORBIT, THE PATIENT WELL FOURTEEN MONTHS AFTER.

This remarkable case was brought forward by Mr. Campbell de Morgan, in whose practice it occurred, to illustrate the pathology of malignant disease. The following account was given by Mr. De Morgan:—J. V., 35, a gardener, healthy, and of a healthy family, received a blow on the left eye in August, 1863. Two months after the sight began to fail, and he had deep pain. In February, 1864, he had completely lost the sight of the left eye. On April 20 the eye was removed by Mr. Woolcott, at the Maidstone Eye Infirmary, for a cancerous growth within the globe. The parts healed rapidly, and he went out with his health improved. The lids were closed. In May he had severe darting pain at the back of the orbit, and in a short time after the lids began to open from a tumour protruding from behind. The increase was very rapid, and he lost health and strength. In August the tumour began to bleed, and he continued to lose a considerable quantity of blood. In October a piece as large as a large walnut dropped off. He came to the Middlesex Hospital on November 3, 1864. A large, irregular tumour protruded from the orbit, excavated and sloughy. The margins of the lids can be traced over it above and below; but at the lower part the disease has involved the cheek. Its surface is somewhat flattened and circular, and measures four inches across. It projects nearly four inches from the cheek on the outside, and about two and three-quarters of an inch from the nose. No alteration could be detected in the cranial bones; nor were any diseased glands to be felt. There have been no cerebral symptoms. He was in a wretched state from the continued bleeding and offensive discharge, as well as from severe pain. I removed the tumour on November 23, 1864, by first cutting out the mass from the orbit with curved scissors, then applying freely the actual cautery till the iron could be felt rubbing on the bone, and finally filling the orbit with a pad of cotton wool thoroughly coated with Fell's chloride of zinc paste, as was done in Mr. Moore's case of rodent cancer. There was very little hæmorrhage. He suffered but little after the operation. In a fortnight a larger mass of charred and destroyed tissue was thrown off, with some of the bones of the orbit. Portions of the bony framework of the orbit exfoliated from time to time, exposing the dura mater and the nasal cavity. Healthy granulation soon covered the whole surface. He rapidly regained flesh and strength, and was discharged; but he came every week to see me. One or two little millet seed looking excrescences remained at the inner part of the cavity, but did not seem to grow. From to time, however, I applied the chloride of zinc or the nitrate of silver to them. On my return to town in September, 1865, he came to me, looking and feeling ill, with rheumatic pains in the right hip; he has lost flesh; the pulse was 100. The excrescences on the inside of the orbit were larger—one as large as a small nut. I cut them away, and destroyed the whole tissue from which they sprang and the parts around it, with the chloride of zinc. Healthy granulation soon ensued. He has remained free from any appearance of disease to the present time—fourteen months after the second operation—and is now strong and well.

Mr. **De Morgan** then added the following remarks:—The interest of this case, which I believe to be almost unique, consists in the light which the rapid recurrence after the first removal of the disease, and the subsequent effectual removal, throw on the local nature of cancer. No class of case was regarded as more effectually proving the necessary return of this disease from original predisposition than that of encephaloid of the globe of the eye. I removed the tumour without a hope of getting rid of the disease beyond a short time. But I thought that the patient's life might be prolonged in some comfort, and that as the disease sprouted it might be kept down by means of caustics. When I found that so unexpected an improvement took place, I began to doubt whether I had made a mistake in the nature of the disease. The mass which I removed had been examined, and pronounced to be medullary with some melanotic deposit; but it had been thrown away. Mr. Woolcott had, however, preserved the eye, and he very kindly presented it to me. It looked as though the whole disease had been removed, save that at one point the sclerotic was a little rough and dull. The optic nerve appeared healthy. Microscopic examination, which Mr. Hulke made carefully, showed that extending between the inner and outer sheath of the nerve were little masses of cancer elements. The same was seen in the meshes of the sclerotic, extending to the dull-looking patch. The disease then had existed in the tissues beyond the seat of operation. Its germs were scattered—sown, we may say—over the surfaces exposed, and quickly sprouted in the soft vascular tissue. In the second operation all the parts were destroyed to a great depth, and probably to a depth beyond the range of the disease. I say probably, for it is by no means sure that the germs of the disease may not extend along the course of the nerve in the cranium. The view of the pathology of cancer which is here indicated should lead Surgeons to early and complete extirpation of the disease, and to the attempt at their thorough removal in apparently desperate cases. Mr. De Morgan added that, in a case by Mr. R. B. Carter, and in the report of cases by Dr. V. Häsuer, of Prague, attention is called to the probable local nature of cancer of the globe. Mr. Moore's paper has more forcibly and more generally drawn attention to the subject.

### REMOVAL OF THE LACHRYMAL GLAND FOR EPIPHORA.

Mr. J. Z. **Laurence** showed a healthy lachrymal gland which he removed under the following circumstances:—The patient from whom it was taken was a man aged 25. Three years ago he was chipping caustic soda, when a particle of it flew into his left eye; violent inflammation ensued, and from that time he suffered from overflowing of tears. When the patient was seen last December at the Ophthalmic Hospital, Southwark, there was no trace of either punctum lachrymale of the left eyelids, and the inner thirds of the lids were united to the ocular conjunctiva by white, fibrous fræna. An ineffectual attempt was made to discover the lower canaliculus by excising a portion of the skin and mucous membrane over its presumed situation; at the same time the fræna were divided. It having been found impossible to restore the excreting lachrymal passages, Mr. Laurence determined to remove the lachrymal gland. An incision about an inch and a quarter in length was made immediately below the outer two-thirds of the supra-orbital ridge, when, upon retracting the parts, and after a little careful dissection, the gland, together with its accessory lobe, came into view, and was, without difficulty, separated from its attachments by the handle of the scalpel and removed. The edges of the wound were united by two points of suture, and cold water applied to the wound. This healed by the first intention. The excessive flow of tears observed previous to the operation had ceased when he left the Hospital four days after the operation, the moisture of the two eyes being the same. The same result was observed a fortnight afterwards. Mr. Laurence suggested whether, in intractable cases of fistula lachrymalis generally, excision of the lachrymal gland might not be practised.

Mr. J. Z. **Laurence** also showed a

### FUNNEL-SHAPED DETACHMENT OF THE RETINA

in an eyeball which he had taken from a female aged 32 years. She attributed the affection of her eye to a bad confinement five years ago. Whilst pregnant with the child she had suffered from epileptiform fits, and for three days during that confinement she was convulsed, and lost a large quantity of blood by flooding. Three months afterwards she experienced for about twelve hours a complete loss of sight, preceded by severe pain in the left side of the head. Similar attacks recurred at intervals of three months up to three years ago, when she began to lose her sight every night, and regain it on the following morning, and a few days afterwards she lost all consciousness, and remained in that condition for a fortnight. Upon again becoming conscious, she discovered that she was stone-blind of the left eye. She had severe pain in and around it; the pupil was widely dilated, and the globe was very hard. She was then admitted into a metropolitan Ophthalmic Hospital, and iridectomy was performed, which was followed by relief to pain, but no restoration of vision. In this state she remained till November, 1865. She then had a severe headache, which lasted two days. She applied a month later at the Ophthalmic Hospital, Southwark. At that time there was a general vascularity of the tunics and congestion of the rectal vessels; the lens was opaque; the pupil widely dilated with coloboma upwards; the globe was quite soft and exquisitely tender. There was also profuse lachrymation of the left eye, and slight photophobia of the right. The patient suffered great pain at the vertex, and along the left supra-orbital ridge. She had no perception of light with the left eye, but with the right her vision was perfect, although it was subject to transient obscurations. Ineffectual attempts having been made to relieve permanently her sufferings by medical treatment, the eyeball was removed. Upon making a section of the globe, a reddish-brown fluid flowed out, which contained an abundance of cholestrine plates. The retina was completely detached from the choroid, and was funnel shaped, the apex of the cone being attached to the optic entrance, its base to the margin of the lens. The removal of the disorganised eye was followed by a cessation of all pain, and of the threatened sympathetic irritation of the right eye.

Mr. **Hinton** showed a specimen of

### EXFOLIATION OF THE TYMPANIC BONE.

It had been discharged from the right meatus of a girl aged five years. A discharge had existed since an attack of scarlet fever at three years old. The deafness in this case was not extreme, and the exfoliation was attended with very little irritation. The membrane of the left ear was also perforated.

### DISCONNEXION OF THE INCUS AND STAPES.

In illustration of the remarks made by Mr. Toynbee at a previous meeting, Mr. Hinton exhibited the petrous bone of a man, twenty-four years of age, in which the long process of the incus was reduced almost to a thread, and had no attachment to the stapes. The membrana tympani had fallen in and adhered to the promontary about its central part, lying in contact also with the atrophied portion of the incus and with the head of the stapes, which appeared to be thus maintained in its natural position. The ossicula were freely mobile. In this case, in spite of the disconnexion of the incus and stapes, the hearing, which had been tested shortly before death, was very slightly impaired. There was no history of discharge from the ear.

Mr. **Toynbee** showed a specimen of

### HAIRS IN THE MASTOID CELLS.

Mr. Toynbee said that, according to his own experience, this case was unique. The hairs were firmly embedded in the mastoid cells, and surrounded by masses of epidermis. Dr. Tilbury Fox, who examined them, agreed that the hairs could not have been introduced from without, but were nourished in the cells.

Mr. **Toynbee** next exhibited a specimen showing

### DISCONNEXION OF THE INCUS AND STAPES.

Bearing upon the specimens of disconnection of the incus from the stapes shown at a previous meeting, Mr. Toynbee exhibited a dissection in which he had disarticulated the incus from the stapes in a healthy ear; he showed that so long as the tensor tympani ligament remained healthy, the incus and stapes were retained in contact, and during life doubtless simple disconnexion of the incus and stapes would not be attended by deafness; indeed, so great a power has the tensor tympani ligament in drawing inwards the drum and the chain of bones, that a thin layer of india-rubber placed between the incus and stapes was tightly held there to any one who is tolerably acquainted with the pathology of the ear.

The **Secretary** then read a communication by Dr. Weber, of Berlin, and exhibited specimens for this gentleman demonstrating the possibility of

### INJECTING THE TYMPANIC CAVITIES BY THE EUSTACHIAN TUBE.

There were three petrous bones, into the tympanic cavity of which Dr. Weber had succeeded in introducing ink by the Eustachian tube, after death, the bodies having been placed in an erect posture. These experiments were undertaken in consequence of the statement of Dr. Kramer, that fluids could not be forced into the tympanum through the Eustachian tube while the membrana tympani was perfect—a statement which Dr. Weber thus proved to be entirely incorrect.

In reference to Dr. Weber's specimens showing that fluids can be injected through the Eustachian tube into the tympanum during life, Mr. Toynbee said no one who had any experience in ear diseases could no more doubt the practicability of injecting fluids into the tympanum than they could the practicability of injecting fluids into the bladder. But the question was, first, is such a proceeding safe? and, secondly, is it of any use? Seeing from his own experience that the injection of tepid water into the tympanum was liable to produce long-continued sensitiveness of the organ, seeing that fluids in the tympanum must be applied to the outer surface of the membrana fenestræ rotundæ, within which is the expansion of the auditory nerve; and seeing that death has occurred from merely blowing air into the tympanic cavity, the operation of injecting medicated solutions into the tympanum is surely not a safe proceeding. And, secondly, supposing it to be safe, *cui bono?* For the cure of what pathological conditions of the mucous membrane of the tympanum are these injections to be used? "Such conditions," Mr. Toynbee said, "are unknown to me. The conclusion arrived at is that the operation of injecting fluids into the tympanic cavity is dangerous and useless, and therefore the Profession ought resolutely to set its face against it."

Dr. **Duckworth** exhibited specimens of

### FIBROUS TUMOURS IN THE ILEUM, CAUSING PARTIAL OBSTRUCTION OF THE BOWEL BELOW AND DILATATION ABOVE.

This specimen was taken from the body of a woman aged 43, single, who died after an illness of fourteen days from acute pyæmia. On examining the abdomen the ileum was seen to be greatly distended in part of its course, also contracted below the dilatation. Under the serous coat of the dilated portion several white patches were seen. On opening the intestines these were found to correspond to four tumours, one the size of a large walnut, and three about the size of horse beans. They were firm and elastic to the touch; the mucous membrane passed over them, and on three of them presented the "shaven beard" appearance. The solitary and agminate glands were healthy throughout the intestines. The largest tumour was somewhat constricted about its middle. Seven inches below this mass the dilatation of the bowel was abruptly limited by a strong pyloric-like band of muscular fibres. It appears that this portion of the gut had grasped the largest tumour near its centre, and thus produced a partial obstruction leading to the dilatation of the bowel above this point. These growths were found to arise in the submucous tissue, and a portion of one of them was seen under the microscope to present the characters of typical fibrous tissue. There were no symptoms during life referable to this condition of the bowel. The tumours were not polypoid and not pedunculated.

Dr. **Duckworth** also exhibited a

### SPECIMEN OF GALL BLADDER, WITH OBSTRUCTION OF THE CYSTIC DUCT FROM A BILIARY CALCULUS.

This was removed from the same patient as the last specimen. The gall bladder was enlarged and full of transparent fluid. A large calculus could be felt within it. At the commencement of the cystic duct a calculus the size of a musket-ball was impacted. It had apparently passed some way along the duct, which was commencing to contract behind it. The common duct was free. The fluid was found to consist of thick yellowish mucus, with flaky masses suspended in it. Plates of cholesterine and of columnar epithelium were found it in on microscopical examination. Both the calculi consisted chiefly of cholesterine; that in the gall bladder had four facets upon it. There was a distinct history of occasional attacks of the passage of gall stones, accompanied with jaundice. This patient had been treated at the Royal General Dispensary.

Dr. **Hilton Fagge** exhibited a kidney showing an

### ABNORMAL POSITION OF THE URETER.

The ureter lay *in front* of the vein and artery, and not *behind* them. This is a point, Dr. Fagge remarked, of some importance, because it shows that we cannot, with absolute certainty, distinguish a right from a left kidney. The other differential character which is sometimes made use of—namely, the flattening of the posterior surface—was also absent in this case.

Dr. **Conway Evans** exhibited a specimen of

### ANEURISM OF THE INNOMINATE ARTERY, WITH FRACTURE OF THE STERNAL END OF THE CLAVICLE.

The patient was admitted, under Sir William Fergusson, into King's College Hospital about a year after the accident, with a pulsating tumour reaching from the parotid region to the third rib, and extending over to the opposite side. The symptoms were comparatively slight. The diagnosis which Dr. Anstie made by the sphygmograph was that the subclavian was unaffected. The man died from rupture of the aneurism through the skin, the tumour having greatly collapsed. It remained questionable whether the aneurism had been caused by the fracture, or had previously existed, and had been injured in the fracture.

Mr. **William Adams** showed a specimen of

### LOOSE CARTILAGE REMOVED FROM THE KNEE-JOINT.

The cartilage was removed by subcutaneous incision from a man nineteen years of age. Mr. Adams entered into the theory of the formation of loose cartilages, and detailed the microscopical appearance of his specimen.

Mr. **Bryant** brought forward

### TWO CASES OF RUPTURED FEMORAL ARTERY,

one from disease, the other from accident. In the former case the patient, aged seventy-five, was admitted dying from disease of the heart and arteries. One day he complained of pain in the thigh, and a pulsating tumour was found in the site of Hunter's canal. The artery was tied above the tumour; it was atheromatous, and yielded with a crackling sensation. All pain ceased in the limb. The ligature did not separate; but the man gradually sank and died three weeks afterwards. The ligature was found in position. The whole vessel was blocked up nearly as far as the aneurismal sac, which was composed of the muscles and soft parts of the thigh. In the other case, a patient of Mr. Poland's, the rupture of the popliteal artery was from accident. The limb became gangrenous, and amputation was performed about a fortnight afterwards. Secondary hæmorrhage occurred, for which at first the femoral and next the external iliac artery was tied. He still remains in a very critical state, four days after the last operation. On examination of the leg, the anterior crucial ligament was ruptured, and the posterior was injured. The popliteal artery was completely ruptured, and its ends retracted about an inch. The posterior aspect of the vein showed some traces of rupture, corresponding to the arterial lesion.

[In our report of the last meeting of this Society the name of the exhibitor of the specimen "Mulberry calculus removed from the female bladder by lithotrity" was wrongly printed. Mr. Christopher Heath was the exhibitor].

(To be continued.)

## BOOKS RECEIVED.

**Capital Punishment is Murder Legalised.** By James C. L. Carson, M.D. Pp. 68. London: Houlston and Wright, Paternoster-row. 1866. 1s.

*** Dr. Carson adds to this work half a page "to the reader" explanatory of the preceding sixty-eight pages. He wishes, he says, "to show the tendency and spirit of the age in which we live. A feeling in favour of trifling and inadequate punishments is becoming almost universal." The virtuous are "trampled upon," while the vicious are cajoled, flattered, and encouraged in their evil ways. A startling statement, no doubt, but not necessarily a correct one. Dr. Carson says a man fighting in self-defence kills justifiably, but he seems to forget that capital punishment is but society fighting in self-defence. He desires punishment to be slighter, but surer. What would he do with a convict who murdered his gaoler?

**The Modern Practice of Photography.** By R. W. Thomas, F.C.S. Pp. 67. London: Harrison, 59, Pall-mall. 1866.

*** Commences with an introductory sketch of the art, followed by five chapters explanatory of how to make the negative, clean the plate, varnish, print, and prevent fog stains and streaks in the negative.

**Annali de Medicina Pubblica Hygienica Professionale.** No. 20. Firenze. February, 1866.

*** Contains a long article in four chapters on public health generally; treats of Hospitals and public institutions, and of the great Hospital at Milan; a review of the propagation of cholera, with a notice of the Constantinople Conference, at which Professor Bosi, of Bologna, represents Italy. The number is completed with well-selected articles from the *Medical Times and Gazette* and other journals.

**Facoltà di Chimica Napoli**, addressed to Italians, but especially to Municipalities, Provincial Boards, and Youth. 1866.

*** Is an announcement of the purposes and plans of the thirteen professors who teach chemistry and physics generally, and specially in Naples.

**Photographs, Coloured from Life, of the Diseases of the Skin.** Second Series. By Balmanno Squire, M.B. London: Churchill and Sons.

*** Portfolios to hold six parts, 3s. 6d. No. 1, 3s. 6d. The number before us is a good representation, beautifully tinted, of Rupial and Lupoid Syphilides, with a handy sheet of letterpress giving the history and present state of the case. This promises to be an important, though very cheap series.

## ARMY AND NAVAL MEDICAL SERVICES.

### ABSTRACT OF THE REPORT OF THE COMMITTEE APPOINTED TO INQUIRE INTO THE WHOLE QUESTION OF THE RANK, PAY, AND POSITION OF THE MEDICAL OFFICERS OF THE ARMY AND NAVY.

1. The Committee having met on the 29th November, considered it desirable that the evidence taken before the Royal Commission in 1857-8, "on the regulations affecting the sanitary condition of the Army," under the presidency of the late Lord Herbert, with the report and recommendations of that Commission, and also the evidence and report of a Committee of the House of Commons in the session of 1856 on the Medical Department of the Army, should be laid before them. Those public documents contain much information respecting the position of Army Medical officers at the period of the issue of these reports, and their claims for consideration at the hands of Her Majesty's Government, and explain the grounds on which the Secretary of State for War promulgated the Royal Warrant of 1st October, 1858, which conferred on the Medical officers of the Army "relative rank, with all precedence and advantages attaching to the rank with which it corresponds, except as regards the presidency of courts-martial."

2. It appears that, not long after the issue of that Royal Warrant, some alterations in its provisions were made by a memorandum issued from the Horse Guards in December, 1858, depriving Medical officers of certain advantages which had been conferred upon them by the terms of the Royal Warrant, and in particular excluding them from the presidency of courts of inquiry, of committees, and boards of survey.(a)

The alterations introduced by the Memorandum were embodied in the new Army Regulations of 1st December, 1859, and were confirmed by a Royal Warrant of date 1st May, 1863.

Considerable disappointment appears to have arisen in the minds of the Medical officers of the Army when these alterations in the Royal Warrant of October 1, 1858, became known and their operation practically felt; and the existence of this feeling was brought prominently under the notice of the Secretary of State for War in a memorial addressed to him on July 12, 1865, by the President and Fellows of the Royal College of Physicians, in which they express their great regret "to know that a general and settled feeling of discontent with their condition prevails among the Medical officers of the Army, and they cannot doubt that this must operate prejudicially, not only on the interests of the Medical Profession, but also—and with still more injurious effect—upon the military Service of the country."

3. The evidence adduced before the Committee bears out the statement of the College of Physicians that a feeling at present exists on the part of the Medical officers of the Army that they have been deprived of some of the advantages accorded to them by the Royal Warrant of 1858; and witnesses have stated that they consider their position to be in some respects even more unpleasant now than before the issue of the Warrant which was intended to remedy all cause of discontent, on account of the terms of the Warrant not having been faithfully carried out.

The expression of complaint at being deprived of their position as presidents of courts of inquiry, of committees and boards of survey, is not, however, entirely unanimous. The Medical officers have no wish to be mixed up with questions of discipline,(b) but they consider themselves aggrieved at being disqualified from being presidents of those mixed boards at which, by their Professional education, they are specially fitted to lead an inquiry, and at being obliged to appear only as witnesses when these boards are presided over by combatant officers junior to themselves in rank.

4. Relates to right of Medical officers to preside at boards.

5. To their social position at mess on public occasions.

6. To the more public recognition of their relative rank with combatant officers, it recommends that a general list of their names and ranks should appear in the official list, and that they should be placed in a more important position in the regimental list.

7. That Medical officers ranking with field officers should appear mounted on parade.

In the Appendix No. 24 will be found a return of the number of candidates who have been examined at Chelsea Hospital as to their Professional qualifications between January, 1860, and February, 1865. During this period the candidates who passed were arranged in three divisions or classes, according to the number of marks gained. The result during the period in question was as under:—

| 1st Class. | 2nd Class. | 3rd Class.(c) | Rejected. |
|---|---|---|---|
| 6 | 144 | 199 | 110 |

These figures seem to establish the fact that a majority of candidates passed with the minimum qualification required for their admission at all into Her Majesty's Service. But it is further to be remarked that, during the last three years, there has been a gradual increase in the number of candidates who passed in the 3rd class, and simultaneously a considerable increase in the number of those rejected. Thus during 1860, 1861, and 1862, there were passed into the Service—

6 candidates in the 1st class
72 ,, ,, 2nd ,,
45 ,, ,, 3rd ,,

Whilst during 1863, 1864, and the first half of 1865, there were—

0 candidates in the 1st class
72 ,, ,, 2nd ,,
135 ,, ,, 3rd ,,

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(a) Also as Warrant of March 28, 1861, negatived clause 16 of the Warrant of 1858, which gave the Surgeons relative rank according to dates of commission, but this Warrant of 1861 was itself negatived by Warrant of May, 1863, and the original clause (16) restored.

(b) In the Army Medical Instructions there is inserted a letter addressed to the Secretary of State for War by the late Lord Herbert, explaining the principles and the changes introduced in the new code He says,—"In the Hospital Regulations generally we have, in accordance with the opinion of the Royal Commission, liberated the Medical officers, wherever it is possible, from all duties not strictly Professional—a change indispensably necessary for the efficiency of the Medical officers, in order to enable them to devote more time to the higher duties of their Profession, and the better to perform the sanitary duties with which we have now charged them."

(c) It should be stated that 19 of the 3rd division did not enter the Service, owing to there not being a sufficient number of vacancies at the time.

And of 167 candidates for examination in 1860, 1861, and 1862, 25 only were rejected; whilst in 1863, 1864, and 1865, of 319 candidates, 99 were rejected, that is to say, 15 per cent. failed in the examination in the former period and 30 per cent. in the latter. To which it may be added that at the last examination, in August, 1865, of 31 candidates, 17 were passed and 14 rejected, or at the rate of more than 45 per cent.

It is manifest, therefore, that there is at present a considerable deficiency of candidates of that higher class of Professional attainments which it was hoped would have presented themselves as competitors for Her Majesty's Service, and which it is on every account so desirable to procure.

In endeavouring to find the reasons for this deficiency, the Committee have been led to the conclusion that it may be referred to several causes, some intrinsic to the Service itself, and some extraneous to it.

The alleged causes of the unpopularity of the Army Medical Service, arising from the so-termed grievances of the officers, have already been sufficiently adverted to. The following reasons, extraneous to the Service, accounting for the dearth of well-qualified candidates, have been brought to the notice of the Committee:—

(1.) That, although the number of Surgical Diplomas from the Colleges of London, Edinburgh, and Dublin would appear to have increased during the last ten years, it appears by evidence to be the general impression that the actual number of Surgical students has decreased, or not kept up with the increase of the population;(d) whereas a far wider field for the Medical Profession has been opened out in the emigration ships, and in the service of the large steam navigation, mining, and other companies, and in the colonies.

The consequence is, that Her Majesty's Service is brought into a more severe competition than formerly with the other demands upon the Medical Profession.

(2.) In further explanation of the comparatively small number of English candidates, and as showing that at present the Army Medical Service is not sought by a very large number of Medical students, whom it would be desirable to induce to become competitive candidates, it has been stated by the Professors at Netley, and by other competent witnesses, that few of the numerous students frequenting the London Medical Schools can at present be induced to come forward at the examinations. The number of English students who now present themselves is so small as to be out of all proportion with the number of Medical men educated in England, as will appear from the circumstance that, out of the last 490 candidates for admission into the Army Medical Service, 264 were educated in Ireland, 89 in Scotland, only 89 in England, and 48 in mixed or foreign schools. Of those 490 candidates, 347 were received into the Service—viz., 168 Irish, 71 Scotch, 71 English, and 37 from mixed schools.

It appears also that a late Chelsea examination, of 77 successful candidates, 47 were from Irish, 18 from Scotch, and only 8 from the English Medical Schools; so that practically at the present time the list of candidates at the competitive examination receives but a very scanty addition from the numerous class of English students, and the Medical Service of the Army derives but little benefit from the immense field of instruction afforded by the great Schools and Hospitals of the metropolis.

In addition to what has been shown above with respect to the position taken by the majority of the candidates who have passed at the Chelsea examination, and the large proportion of those who have been rejected, it should be remarked that in the classification there given only the strictly Professional qualifications are regarded; but besides this several witnesses have stated, and the Committee are of opinion, that it would be highly desirable, if possible, to secure for the Medical Department of the Army the services of men not only Professionally qualified, but also of better general education and information than would appear to be possessed by many amongst those who have presented themselves for examination.

*Scale of Pay Proposed by the Committee for Army Medical Officers.*

| | Rank. | | |
|---|---|---|---|
| | Assistant-Surgeon. | Surgeon. | Surgeon-Major. |
| Under five years' service:— | s. d. | s. d. | s. d. |
| Present rate | 10 0 | — | — |
| Proposed rate | 10 0 | — | — |
| Above five years' service:— | | | |
| Present rate | 11 6 | — | — |
| Proposed rate | 12 6 | — | — |
| Above ten years' service:— | | | |
| Present rate | 13 0 | 15 0 | — |
| Proposed rate | 15 0 | 17 6 (e) | — |
| Above fifteen years' service:— | | | |
| Present rate | 13 0 | 18 0 | — |
| Proposed rate | 17 6 | 20 0 | — |
| Above twenty years' service:— | | | |
| Present rate | — | — | 22 0 |
| Proposed rate | — | — | 24 0 (e) |
| Above twenty-five years' service:— | | | |
| Present rate | — | — | 25 0 |
| Proposed rate | — | — | 27 0 |
| Above thirty years' service:— | | | |
| Present rate | — | — | — |
| Proposed rate | — | — | — |

10. The Committee also consider that the prospect of optional retirement at an earlier period than at present permitted would prove a further inducement to young Medical men to enter Her Majesty's Service; they therefore recommend that Army Medical officers should be permitted to retire after twenty years' service upon full pay; but, at the same time, with a view to guarding the interests of Her Majesty's Service, they are of opinion that the rate of half-pay awarded to officers so retiring should not exceed five-tenths of their full pay, and that officers with this service should be permitted to retire on the present half-pay of their rank, if, after one year on half-pay, they are reported by a Medical Board to be permanently unfit for further service.

11. The Committee further recommend that, as a special reward to officers of long and good service who, owing to the comparatively small numbers of the inspectorial ranks, have not been promoted to any higher position than that of Surgeon-Major, such officers of the rank of Surgeon-Major as have served for twenty-five years on full pay should, on being compulsorily retired at 55 years of age, receive the half-pay of £1 a-day, but such officers retiring voluntarily under 55 years of age should only receive seven-tenths of their full pay. And that all Medical officers who may be found unfit, by a Medical Board, for further service, in consequence of illness contracted in and by the Service, shall be allowed to retire on the rate of half-pay to which they may be entitled by service, according to the rates at present allowed. Surgeons-Major of twenty-five years' service so retired to be granted £1 a-day.

We have now to recommend—

1. That at all boards upon which Army Medical officers may be summoned as members, they should sit and take precedence according to their relative rank, and should preside, if senior in relative rank to the combatant officers, with the exception of courts-martial and courts of inquiry on military offences.

It is, however, suggested for the consideration of the authorities, whether it is not advisable to establish regulations for referring all necessary questions to Medical officers, for their opinion and report, and to discontinue all mixed boards.

2. With the view of preventing misunderstanding as to relative rank at mess,—that invitations sent by the colonel or officer commanding, in the name of himself and the officers of a regiment, be considered official, and that the senior combatant officer present should always preside; and that when a second position is formally assigned on such occasions, such position should be determined by relative rank, as defined by the Queen's Regulations and Warrants. We consider, however, that no second place should be recognised.

3. That in the Monthly Army List the names of the Medical officers of each regiment be inserted above those of the other regimental staff, with a heading, "*Medical Officers:*" also that a general list of all Medical officers in the Army be inserted in the Monthly Army List, and that in such list the relative rank of each class of Medical officers, with the corresponding rank of combatant officers, should be clearly stated, thus:—Inspectors-General of Hospitals (ranking with majors-general); Deputy-Inspectors-General (ranking with colonels), &c.; and that opposite the name of each officer should be the number of his regiment or the station on which he is serving. That Medical officers should be replaced in the list of the regimental staff in the classification of officers in the Queen's Regulations, and it is submitted for consideration whether the Medical Department should not be placed immediately after the lists of combatant officers in the Army List.

4. That Medical officers, ranking with field officers and being allowed forage, should be ordered to provide a charger and to appear mounted on parade.

5. That increase of pay and earlier retirement be granted as defined in paragraphs Nos. 9, 10, and 11.

(Signed) A. MILNE,
W. PAULET, A.-G.
DOUGLAS GALTON.
J. B. GIBSON, D.-G.
A. BRYSON.
W. O. MARKHAM.
GEORGE BUSK.

## MEDICAL NEWS.

**Royal College of Surgeons of England.**—The following members of the College, having undergone the necessary examinations, were admitted Licentiates in Midwifery at a meeting of the Board on the 28th ult.:—

Josiah Sarjant, L.R.C.P. Edin., Limehouse, diploma of membership dated February 23, 1859; Henry Rickard, L.R.C.P. Edin., H.M.S. *Wellesley*, Chatham, December 6, 1859; Frederick Mastyn Rickard, Stoke Plymouth, May 9, 1865; Richard Pugh, Llandovery, South Wales, July 25, 1865; and David Anderson Moxey, M.D. Edin., Turnham-green, November 16, 1865.

**Apothecaries' Hall.**—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, February 22, 1866:—

Thomas Franklin Lloyd, 42, Finsbury-circus, E.C.; Edward Matthew Owens, Sutton, Surrey, S.; Robert Wyllie, Robin Hood's Bay, near Whitby: Walter Smith, Bognor, Sussex; John Haigh Tarleton, Birmingham; Christopher Smith, Paris.

As an Assistant:—

Alfred Kent Laslett, Canterbury.

### APPOINTMENTS.

⁂ The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

**Babington, Benjamin G.**, M.D. Cantab., has been appointed Hon. Consulting Physician to the Hospital for Diseases of the Throat, Golden-square.

**Gowing, B. C.**, M.R.C.S. Eng., has been appointed House-Surgeon to the Whitehaven and West Cumberland Infirmary.

**Hoare, William P.**, M.R.C.S. Eng., has been appointed Medical Officer to Dartford Union Workhouse.

**Roberts, Frederick T.**, M.B. Lond., has been appointed Lecturer on Botany at the Liverpool Royal Infirmary School of Medicine.

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(d) So far as can be gathered from the Medical directories, the number of Practitioners in the United Kingdom has very slightly increased in the last five years; and the number of Medical students registered in the English schools has diminished during the same period. The number of Surgical Diplomas granted by the Royal College of Surgeons of London during the fifteen years ending December 31, 1849, was actually slightly in excess of the number granted in the last fifteen years.

(e) A proposal to increase the pay of the inspectorial ranks was made, but the Committee, being divided in opinion, do not make any recommendation.

Tuckwell, Henry M., M.D., has been elected Physician to the Radcliffe Hospital, Oxford.

Woodhouse, Thomas J., M.D. Lond., has been appointed Physician to the Royal Hospital for Incurables, West-hill, Wandsworth.

## BIRTHS.

Bond.—On January 25, at Southampton, the wife of Francis T. Bond, M.D., of a daughter.

Bullock.—On February 24, at Spring-grove, Isleworth, the wife of Henry Bullock, F.R.C.S. Eng., of a daughter.

Coleman.—On December 29, at Iquique, the wife of Dr. Coleman, of a daughter.

Cowell.—On February 25, at 112, Piccadilly, W., the wife of Thomas W. Cowell, M.R.C.S., Eng., of a daughter.

Cowie.—On February 24, at 10, Bridge-road, Finchley-road, the wife of Alexander J. Cowie, M.R.C.S. Eng, H.M.'s Bengal Medical Staff, of a son.

Elin.—On February 21, at Hertford, the wife of George Elin, M.D., of a daughter.

Jones.—On February 24, at 201, Queen's-road, Dalston, the wife of John D. Jones, M.D., of a son.

Maclean.—On February 9, at Ville au Roi, St. Martin's, Guernsey, the wife of Dr. Maclean, of twin sons.

Madge.—On February 26, at 32, Fitzroy-square, the wife of Henry M. Madge, M.D., of a son.

Muriel.—On February 23, at 71, St. Giles-street, Norwich, the wife of Charles E. Muriel, M.R.C.S. Eng., of a son.

Nutt.—On February 16, at Sherborne, the wife of Horace Nutt, M.R.C.S. Eng., of a daughter.

Rawlins.—On February 24, at Stoke Newington, the wife of Frederic W. Rawlins, M.D., of a son.

White.—On February 17, at Frome, Somerset, the wife of William A. White, M.R.C.S. Eng., of a son.

Wood.—On February 19, at 54, Upper Harley-street, W., the wife of Dr. W. Wood, of a daughter.

Worthington.—On February 21, at Worthing, the wife of Dr. Worthington, prematurely, of a daughter.

## MARRIAGES.

Sutherland—Dunbar.—On January 15, at St. Andrew's Church, Calcutta, Dr. Robert Sutherland, Assistant-Surgeon, H.M.'s 5th Lancers, to Elizabeth Hannah, second daughter of William Dunbar, Esq.

## DEATHS.

Boyd, Henry, M.D. Glasg., at Argyle-street, Glasgow, on February 18, aged 54.

Fosbroke, William, M.M., M.D. Edin., at Veranda House, Old Kent-road, on February 15, aged 50.

Hewett, William, Surgeon, at Sidney-terrace, Reading, on February 23, aged 72.

Jeffery, Edward, Surgeon R.N., at Sandwich, on February 20, aged 75.

Lucas, W. Owen, M.R.C.S. Eng., at 9, Taunton-place, Regent's-park, on February 25, aged 78.

Gillett, William E., L.R.C.P. Edin., at Paul's House, Taunton, on February 24, aged 67.

McWhinnie, Andrew M., F.R.C.S. Eng., of the Crescent, Bridge-street, Blackfriars, on February 27, aged 58.

Taylor, James, M.D. Glasg., at Barnhill, Glasgow, on February 16, aged 22.

## POOR-LAW MEDICAL SERVICE.

⁂ The area of each district is stated in acres. The population is computed according to the last census.

### RESIGNATIONS.

*Chertsey Union.*—Dr. J. H. Blount has resigned the Windlesham District; area 6099; population 2361; salary £40 per annum.

*Rochford Union.*—Dr. Arthur C. White has resigned the Great Wakering District; area 16,934; population 3614; salary £52 per annum.

*Weobley Union.*—Mr. Edward Crickmay has resigned the Dilwyn District; area 20,103; population 3701; salary £78 per annum.

*Wincanton Union.*—Mr. Wallis has resigned the Castle Cary District; area 9613; population 4108; salary £75 per annum.

### APPOINTMENTS.

*Birmingham Parish.*—Lucius Warrilow, M.R.C.S.E., L.S.A., to the Fourth District.

*Gainsborough Union.*—Charles F. George, M.R.C.S.E., L.S.A., to the Blyborough District.

*Neath Union.*—John Russell, M.R.C.S.E., L.S.A., to the First Central District and the Workhouse.

*Tonbridge Union.*—Edward Leeds, M.R.C.S.E., L.S.A., M.B. Oxon, to the Sixth and Seventh Districts.

Cambridge.—Dr. Humphry has been elected Professor of Anatomy, and Mr. Alfred Newton Professor of Zoology and Comparative Anatomy.

Greenwich Hospital.—Pensions to Naval Medical Officers.—Friday's *Gazette* announces that in the distribution of the Greenwich Hospital funds, there is to be one pension of £80 per annum allotted to the rank of Deputy Inspectors-General of Hospitals and Fleets, and fourteen pensions of £50 to those of Staff-surgeons and Surgeons. The service afloat required to render officers eligible for these pensions is in each case nine years.

University of Cambridge.—At a congregation on the 22nd inst., Mr. Edward James Augustus Trimmer, of Jesus College, and Secretary of the Royal College of Surgeons of England, had the Degree of "M.A." conferred on him.

Disinfection in Cattle Plague.—The Royal Commission on the Cattle Plague have issued a series of minute recommendations for the disinfection of sheds, lairs, trucks, etc. The principal chemical disinfectants on which they rely are carbolic acid, cresylic acid, sulphurous acid gas obtained by burning sulphur and chloride of lime.

Testimonial.—A handsome epergne, accompanied by an illuminated address, has been presented by the officers and attendants of the Cheshire Lunatic Asylum to Dr. Brushfield, their late Medical superintendent, who has been recently elected to the superintendency of the Woking Asylum.

A Relic of the Mammoth.—A tusk, measuring ten feet two inches in length and twenty-two inches in circumference at the thickest part, has been found ten feet below the surface in excavating for gravel for the Spalding and March Railway at the pits at Deeping St. James. It is in a good state of preservation.

Hæmorrhage after Division of the Frænum Linguæ.—Simple as this operation usually is, it may, when the frænum is very thick, unavoidably give rise to a hæmorrhage, which in young infants may not be without its danger. Various means of arresting this have been proposed, but that employed by M. Binaut is one of the most simple, consisting in the seizing the bleeding part by the ordinary dressing forceps, and keeping up compression as long as necessary. The duration of this compression must vary in different cases, and in the one he relates it was continued for three hours.—*Gaz. des Hôp.*, February 20.

The Poor-Law Board and the Bethnal-green Guardians.—On February 27 Lord Enfield, M.P., the Secretary of the Poor-Law Board, communicated to the guardians of Bethnal-green the Board's decision in the inquiries which were held relative to the sudden deaths, under peculiar circumstances, of two pauper inmates of the workhouse. The following paragraph in the Secretary's letter refers to the Medical officer of the workhouse:—"As regards the Medical officer of the workhouse, the Board think it would be a more satisfactory arrangement if this officer, or an assistant Medical officer, were required to reside in the workhouse. The Board also direct me to point out that the regulations in force for the arrangements of the workhouse do not admit of the duties of the Medical officer being delegated to a deputy, but require that those duties should be performed by him personally, subject to the appointment of a legally qualified Practitioner, to whom application may be made in the absence of the Medical officer."

Dr. Charles A. Lee, Professor of Hygiene in the University of Buffalo, gives the following summary of preventive measures against the cholera:—

"1. Quarantine relations cannot be too strict nor too rigidly enforced.

"2. The most thorough sanitary measures must be enforced and carried out in all places offered to the invasion of the disease, especially in large cities, where every effort should be used to have all houses, streets, allies, privies, drains, cesspools, etc., thoroughly cleansed and disinfected.

"3 All intercourse with places infected with the disease must be absolutely prohibited, or at any rate, guarded with the greatest care and precaution.

"4. Should the disease unfortunately be introduced into a place, cholera stools should never be emptied into necessaries and water-closets in common use.

"5. The poliee should be instructed to pour into every privy and water-closet suitable disinfectants or furnish the same for this purpose."

Mr. Worms' Treatment of the Cattle Plague.—The following is Professor Simonds' Report as to the condition of Baron Rothschild's cattle on February 22:—"*Result of Inspection of Baron Rothschild's Cattle.*—No. 1, attacked, February 9; died, February 12—This animal was first seen by Mr. Leper, veterinary surgeon, Aylesbury. She was placed under Mr. Worms' care the day succeeding the attack. Nos. 2 and 3, alleged attack, February 10; attacked, February 19—These animals were subjected to Mr. Worms' treatment on February 10. They were seen by me on February 14 and 17, and found to be unaffected with cattle plague. They are not serious cases. No. 4, alleged attack, February 12; Nos. 5, 6, 7, 8, and 9, February 13; Nos. 10 and 11, February 14—These animals were first seen by me on February 14, and again on the 17th, and found to be free from cattle plague. They still continue well. Were treated by Mr. Worms, and reported to me as cases of cure and convalescence. Nos. 12 and 13, alleged attack, February 15—Neither of these animals are suffering from the cattle plague. Seen first by me February 17, and reported as convalescent. No. 14, alleged attack, February 16; attacked February 20—Is rapidly sinking from the disease; was under Mr. Worms' care from February 16. No. 15, alleged attack, February 17—This animal still continues to be free from any symptoms of the cattle plague. No. 16, attacked, February 16; died February 19. Nos. 17 and 18, attacked, February 16; died, February 20. Nos. 19 and 20, attacked, February 17—Neither of these are severe cases. No. 21, attacked, February 20—This animal is rapidly sinking. No. 22, attacked, February 20 - Sinking, but not so rapidly as No. 21. No. 23, attacked, February 20—Not a severe case at present. No. 24, attacked, February 20—Gradually sinking. No. 25, attacked, February 21; died, February 22. *Summary of the Twenty-five Animals.*—11 are unaffected; 5 are not severe cases of plague; five have died; four are sinking under the attack; total, 25.—JAMES B. SIMONDS."

PREVENTION OF THE DIFFUSION OF THE CATTLE PLAGUE POISON.—Mr. White, M.R.C.S., of Finchley, in addition to the Disinfecting and Ventilating Porch described in the *Medical Times and Gazette* for February 17, has suggested a Cattle-shed Emanation Disinfector, or apparatus for ventilating and disinfecting the air issuing from cattle-sheds in general, and especially from sheds in which plague-stricken cattle are kept, and from slaughter-houses of diseased cattle. "Insert," says Mr. White, "a fire or flame in a flue in or near the top of the cattle-shed, and the greater part of the infectious effluvia will thus be drawn up out of the shed and be destroyed by the flame, and the means of contagion consequently be diminished. Let the flue, *e.g.*, be of fire-clay brickwork or of iron, and have in the lower part of its interior bars on which to place fuel (thrown in at the top of the flue) and an ash door, and let the flue be either on the top of the roof or in an elevated part of the side or the end of the shed, and facing the entrance to it." Mr. White gives the right of his above invention for the above purpose for the free use of the community. By adopting conjointly with this plan Mr. White's Cattle-shed Disinfecting and Ventilating Porch (a gratuitously offered plan), no infectious effluvia can escape out of the shed into the open air. A description of the Cattle-shed Emanation Disinfector may be obtained from Mr. Weir, Agricultural Engineer, 142, High Holborn.

**THE following are the last week's Cattle Plague Returns.**

| Census Divisions. | 1. Attacked. | | | 2. Result of reported Cases from the Commencement of the disease. | | | | |
|---|---|---|---|---|---|---|---|---|
| | Week ending February 17. | Week ending February 10. | Week ending February 3. | Attacked. | Killed. | Died. | Recovered. | Unaccounted for. |
| 1. Metropolitan Police District . . | 16 | 23 | 36 | 7553 | 3186 | 3453 | 327 | 587 |
| 2. South Eastern Co. . | 26 | 24 | 38 | 4950 | 1521 | 2767 | 442 | 220 |
| 3. South Midland Co. | 619 | 683 | 689 | 12874 | 2242 | 8696 | 1109 | 827 |
| 4. Eastern Counties . | 182 | 284 | 201 | 8613 | 3072 | 4374 | 646 | 521 |
| 5. South Western Co. | 26 | 69 | 48 | 1349 | 355 | 715 | 179 | 106 |
| 6. West Midland Co. . | 1431 | 690 | 195 | 7576 | 739 | 5054 | 827 | 956 |
| 7. North Midland Co. | 918 | 679 | 725 | 7549 | 1078 | 5021 | 627 | 823 |
| 8. North Western Co. | 4636 | 4942 | 3221 | 38505 | 714 | 27603 | 2750 | 7438 |
| 9. Yorkshire . . | 1836 | 1455 | 1426 | 25915 | 1040 | 16325 | 4445 | 4105 |
| 10. Northern Counties. | 691 | 379 | 330 | 4100 | 806 | 2109 | 600 | 591 |
| 11. Monmouthshire & Wales . . | 395 | 448 | 369 | 6787 | 102 | 5363 | 871 | 451 |
| 12. Scotland . . | 2225 | 1914 | 1875 | 40602 | 4372 | 24017 | 8269 | 3944 |
| | 13901 | 11590 | 9153 | 166379 | 19227 | 105497 | 21092 | 20563 |

DUTIES AND DANGERS OF A MILITARY SURGEON.—Speaking of the war at Waiapu, a correspondent of the *Hawke's Bay Herald* says, in reference to the Pukemaire affair:—"Owing to the roughness of the ground, and the great difficulty of conveying the wounded to the rear, the Medical officers were well up with the attacking party, and all hands speak well of them for their kindness and attention on this and other occasions. Dr. Grace might be seen in the thickest of the fight, taking charge of a poor fellow who was badly wounded, when, having dressed his wounds, he hurried back to the trenches with a surgical instrument in his hand somewhat resembling a revolver."—*Nelson Examiner, Nov.* 23, 1865.

THE following account of a casual ward and its inmates at Peking, extracted from Dr. Dudgeon's Report, may be a source of comfort to the guardians of the poor at Lambeth:—"In no other place in the world, perhaps, Rome, Naples, and Lisbon not excepted, is there to be seen regularly such a collection of filthy, unwashed, ragged, and naked people. It is not at all wonderful that skin diseases, and particularly scabies, should exist to a large extent. On account of their filthy habits, unwillingness to wash themselves, and inability to cleanse their cotton-wadded garments, the cures are neither rapid, permanent, nor numerous. I lately visited the yang-chi-yuen, an establishment for the support of the destitute, outside the western gate of the Chinese city. It was set apart for the purpose by the Emperor Kang-hsi, 180 years ago, and a marble tablet resting on a tortoise has been set up to that effect. The design was, that the destitute from all parts of the empire, on visiting the capital, might experience the imperial bounty and favour outside the city, just, as it were, before entering the celestial city. The age of this and similar charitable institutions, both here and in the south, is significant. They are not traced, as far as I know, to a period prior to the introduction of Christianity by the Jesuits, and therefore there is good ground for the notion that Christianity gave origin, impetus, and spirit to such institutions. During each winter there are upwards of 1000 beggars quartered here. They are distributed through the various courts of the building, with some reference to their circumstances; those having no clothes or money; the able-bodied men for whom there is no work in winter; cripples and diseased persons. Each room has two kangs, each about 12 feet long and 9 broad, The kangs are covered with mats and heated Upon these sit the beggars, men and boys, some completely naked, others nearly so, generally in rows to the number of forty or fifty. Each room has thus about one hundred inmates. The recumbent position is never obtained; they sit closely huddled together, each bolstering up his neighbour. In the centre of each room is a large brick stove where hot water is served out. Each room has a manager and a cook. One of the best behaved of the beggars is appointed foreman and is responsible for the good conduct of those under his charge. These overseers keep quietness, peace, and order, and prevent fighting, brawling, and confusion. The beggars are not allowed to speak; disobedience to this law brings a bucket of cold water about them. The windows and doors and all chinks are carefully papered. Some sanitary and Medical improvements were suggested, which they promised to carry out. The air of these rooms is almost insupportable. The mortality is very great—from forty to sixty per month. In one of the large rooms, used as a kitchen, are several large cauldrons, in which several hundred pounds of millet are cooked at one time. In the centre of the kitchen is a large cauldron full of heated charcoal, around which the beggars congregate, where they are supplied with their rations, which is two meals of millet per day, at the expense of the imperial exchequer. When the place is very crowded their allowance is diminished. They usually get about half-a-pound of millet and one ounce of vegetables. After the morning meal they are permitted to leave the premises to cater through the city, each one bearing an earthenware dish in which he carries some charcoal, or in which he receives the rice that may be given him. The cripples usually have theirs suspended to a rope which is thrown round their necks. At this establishment there is not, as at some places, a coverlet suspended from the roof which is let down upon them at night, with a view that all may equally share in its distribution and none may be able to carry it off. Ulcers, tumours, favus, porrigo, and scabies are very prevalent. I was recognised by some who had been patients at the dispensary, and numbers rose from their kangs to exhibit their sores. One court was appropriated to women, of whom there were about fifty. At this institution I recognised the patient mentioned in last year's report with the fractured femur, who had attempted to strangle himself; who had been in the Hospital for a long period, and who was resolved to live and die in it. His friends were found, and it was ascertained that he had been in a mandarin's suite; had been guilty of thefts; had broken his thigh in some such excursion, and had disappeared. He was a nuisance in the Hospital from his filthy habits and threats to kill himself, so as to give the Hospital the expense of his interment, a mode of revenge not uncommon in China."

# NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

*J. M., Leith.*—We always publish the official lists of the College.

*T. M.*—Bence Jones's translation of Mulder.

*T. W.*—St. Bartholomew's, St. Thomas's, and the Consumption Hospitals. Write to the Registrars.

We may advise our sanitary readers to petition in favour of Mr. M'Cullagh Torrens' bill for promoting the building wholesome houses houses for artisans and the labouring classes.

A public meeting will be held on Saturday (this day) at Willis's Rooms, at 2 p.m., under the presidency of the Earl of Carnarvon, to promote the views of the Association for the Improvement of the Infirmaries of London Workhouses.

*Associate, King's College.*—In the interesting memoir of Sir Wm. Fergusson in the *Illustrated London News*, it is stated he displaced Mr. Hawkins on the Council; it should have been Mr. John Bishop.

*Lithotomist, Exeter.*—The "Gentleman's Magazine" for 1733 states that Mr. Paul, a surgeon at Stroud, extracted from the kidneys of a woman, by an incision through her back, a stone as large as a pigeon's egg, and made a "perfect cure."

*A Registered Practitioner.*—The Council of Medical Education and Registration publish a black list of the names of those members who have been struck off the Register, with the reasons assigned for the proceeding.

*Bibliopole, Sheffield.*—Cornarius died in 1558. He was fifteen years employed in translating the works of the Greek Physicians. William Cunningham was a lecturer at Surgeons' Hall in 1563; he wrote a work on syphilis, called "*Chamæleontiasis,*" from the supposed resemblance between persons affected with it and the chameleon.

*Aspatria, Carlisle.*—We will endeavour to supply the information next week. At present all we can inform you is that the first-named gentleman committed suicide some years ago at Brighton. William Woodville, M.D., was Physician to the Small-pox Hospital, and wrote a "History of Inoculation." He died in 1805. Of his portraits, there is, we think, one prefixed to his "Medical Botany." John Leake, M.D., died in 1792. There is an engraved portrait of him by Bartolozzi, printed on satin. It may be seen in some private collections, and also in those of the College of Surgeons and Medical and Chirurgical Society. Consult Wadd's "Mems, Maxims, and Memoirs."

Since the French Government, after due inquiry, has accepted the results of my researches as correct, I feel that by having demonstrated that every case of cholera is *invariably* proceded by a diarrhœa for a few hours, or for a few days, or for a few weeks, and that if this diarrhœa is promptly cured, the developed stage—that of vomiting, severe purging, spasms, etc., etc.—is prevented and life is safe: I feel, I say, that I have placed the information within the reach of every one how to protect himself against an attack of developed cholera; that I have thereby done what no constituted Medical authority or private Medical Practitioner has done to benefit the human race; and that for myself I enjoy the conviction that, relative to cholera, my life has been useful to my fellow-men; that whatever fate may have in store for me, that my name, in connexion with cholera, will go down to posterity as a benefactor to the human race.—*From Dr. Macloughlin's last Pamphlet on Cholera.*

### The Report of the Commissioners on the Public Medical Services.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The report of the Commission on the Army and Naval Medical Services which has lately been published is a thoroughly English document. It is a capital example of our mode of getting over difficulties, and in this respect shows the stamp of the national genius as strongly as does our Established Church or our Constitution, or to come to modern instances, as clearly as must any Reform Bill which is to have the ghost of a chance of passing. Its characteristics may be summed up in a word—compromise. I am not going now to discuss the recommendations of the Commission on the important subjects of pay, retirement, and promotion, though it is evident that the increased rates of pay recommended are intended to counterbalance the omission of all reference to the sore subject of slow promotion. But look at the way in which the Commission got over the points at issue in connection with relative rank and precedence at boards of inquiry and mess. It is easy to see that the weight of evidence brought forward by the Army Medical officers completely established the justice of their claims, and it is also easy to see that the Commission have felt it their duty ostensibly to ratify these claims in every important particular; but it is equally clear that to carry justice into practice would scarcely be palatable at the Horse Guards; neither, probably, would it seem convenient to the Adjutant-General, Lord William Paulet, and Captain Galton, who had seats on the Commission. Accordingly the representatives of both parties have come to the conclusion that it will be wiser quietly to shelve the points at issue. The bones of contention are, in fact, to be dropped. The Commission acknowledge that Medical officers have the right to preside at mixed Boards on the principle of seniority laid down by the Royal Warrant. But they think it would be better to do away with mixed Boards altogether, and that the Medical officer should only be appealed to for his advice on scientific or Professional questions. Again, on the "important subject" of the second place at the regimental mess, which lies between the Surgeon and Major, they think it wiser to do away with the "vice" than that the Doctor should have to assert a right which on the score of seniority the Royal Warrant certainly gives him. "It is not advantageous to the service that there should be a second recognised place." This perhaps is the most delicate reproof to both parties which the Commission could have administered, at the same time it is the solution which common sense would suggest. It is clear that it must be most advantageous for the service that the best carver should be the Vice-president, and if my brother Medical Officers have the skill popularly ascribed to them, there need not be for the future any fighting for the arduous post. A nice exercise of judgment in the distribution of the turbot's fin would constitute a paramount claim. The fact is, Sir, that the better part of the Medical Officers of the army would be glad to see these trumpery squabbles set at rest. For one, although I could pick a good many holes in the Commissioners' Report, I think that in the main it does great credit to their common sense. A fair compromise is the best termination to any dispute, and leaves the smallest residuum of heart-burning. A Medical Officer who is a gentleman will receive respect and courtesy in any regiment. If he is not a gentleman, a hundred Commissions would not prevent his being tabooed. At least, that is the experience of Yours, &c., Vielle Moustache.

### The Griffin Testimonial Fund.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The following subscription has been further received on behalf o the above fund:—Christopher Tayler, Esq., Trowbridge, 5s.; amount previously announced, £134 0s. 8d.; received at *Lancet* office, £10 19s.

I am, &c.
Robert Fowler, M.D., Treasurer and Hon. Sec.
145, Bishopsgate-street Without, February 28.

### Corrigendum.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In the *Medical Times and Gazette* of February 17, under the head of Poor-law Medical Service, page 187, is:—

"*Walsingham Union.*—Mr. Damant has resigned the Fakenham District; area, 12,539; population, 4655; salary, £52 per annum."

I beg leave to state I have held the Fakenham District for the last fourteen years and have not resigned, nor is it my intention to do so. I will therefore thank you to contradict it in your next. I am, &c.

Thos. Wm. Damant, M.D., M.R.C.S. Eng.
Fakenham, Norfolk, February 26.

### Gordon's Splint for the Treatment of Fractures of the Radius.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In your impression of the 17th inst. appears an interesting communication from Mr. Lawson Tait on the treatment of fractures of the radius at the styloid process, by means of Gordon's splint. Mr. Tait, however, very inaccurately ascribes to me the authorship of the eminently practical paper on Gordon's splint which appeared in the *Dublin Quarterly Journal* for February, 1865. The paper in question is from the pen of my esteemed friend and colleague in the Meath Hospital, Mr. Porter. From my own experience, I can fully indorse all that Mr. Porter and Mr. Tait have stated with regard to the efficacy of Dr. Gordon's splint in the treatment of fractures of the radius. I am, &c.,

Dublin, February 19. William Stokes, Jun.

⁂ We have also received a note from Mr. Lawson Tait requesting us to correct the error Dr. W. Stokes points out.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Mr. Lawson Tait's description of Mr. Gordon's splint for the treatment of Colles' fracture of the radius is so interesting and practical, that I am sure it would be acceptable to the Profession if he would name some instrument maker from whom the splint may at first (as a pattern) be obtained. I am, &c.,

Leominster, February 22. Samuel Barnett.

### Condition of the First Stomach in Cattle Plague.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—An overlooked fact connected with the treatment of the cattle plague is, that the first stomach is so loaded with vegetable matter that no remedy given in the ordinary way has a chance to enter the system of ruminating animals, not even to bombard with onions, assafœtida, &c. It has been observed that, in all cases in this neighbourhood, the cattle (to use a common expression here) are maw-bound—descriptive of the mass of food found in the magnus venter. A landed gentleman, who has been most active in employing anything likely either to prevent the disease or to do good sent the following account to me lately, viz.:—"Two animals have been opened under my direction. Their livers were gone and the food and medicine were found in the first stomach." Cannot the stomach-pump be used to move this mass one way or other, and medicines made to effervesce in the first stomach, so that the hindrance to proper remedies may be removed in order to combat a disease so ably described by Professor Gamgee? I am, &c.,

Pocklington, Yorkshire, February 24. J. Watmough, M.D.

### On Flour of Mustard as a Therapeutic Agent in Reference to Cooper's Sinapine Tissue

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—It is well known that the activity of mustard poultice depends upon the development of a volatile oil—sulphocyanide of allyl—which does not exist in the flour of mustard until it is mixed with water to form a poultice, it is then formed by the action of an albuminous principle—myrosin—upon sinapisine or myronate of potassa. Although the poultice thus produced is almost universally used as a rubefacient, it is, nevertheless, accompanied with many disadvantages, such as the variable quality of mustard, hot water not being at all times readily obtained, and the difficulty of forming with linseed meal or with flour a homogeneous compound A perfect substitute for it, therefore, must be a valuable addition to our remedies. Cooper's sinapine tissue has appeared hitherto to be all that is required; it is permanent, light, portable, most readily applied, and produces a uniform effect—as it is merely a piece of thin paper lightly glazed on one side with the stimulant composition, it is evident, therefore, it does not depend upon the essential oil of mustard for its activity. The composition contains a transparent crystalline substance, having many of the properties of sinapisine, also an uncrystallisable substance (myronic acid), together with the principle of capsicum (capsicine). The principles of mustard enter more largely into its composition than capsicine; from this circumstance, I am informed by Mr. Cooper, that he named it "Sinapine Tissue." I have myself used it continually for more than twelve months without having perceived anything objectionable in its effect; in short, it appears to me to be every way superior to the old poultice, and from testimonials received by Mr. Cooper from numerous Physicians and Surgeons of high standing in various parts of the country, it would appear that it has gained for itself a reputation upon a sound basis; it may, therefore, be considered a great acquisition to us as a topical remedial agent. I applied a piece of the tissue last week which has remained upon my table since January, 1365, and it appeared not to have diminished the least in activity.

I am, &c., **George Down**, M.D.

⁂ Our criticism is confirmed by Dr. Down so far as it affirmed that *capsicine* is an ingredient in the paper.—Ed.

### Poor-law Medical Reform.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I shall feel obliged by your finding space for the names of the following gentlemen who have forwarded subscriptions to the Association during the past week.

I am, &c. **Richard Griffin.**

12, Royal-terrace, Weymouth, February 24, 1866.

Subscriptions received by Mr. Griffin:—Olivey, H. P., Taunton, 4s.; Cooper, W., M.D., Thingoe, 16s.; K. J., 4s.; Westell, J., Cookham, 20s.; R. J., 11s.; Morris, G., Hereford, 5s.; Thomason, R., Hereford, 5s.; Hanbury, G., Hereford, 5s.; Lane, J. C., Hereford, 5s.; Sankey, F. H., Bridge, 10s.; Norman, G. B., Basford, 10s.; Simpson, R., Settle, 5s.; Dobson, T., Windermere, 5s.; Holme, W., Kendal, 5s.; Hope, 5s.

Subscriptions received by Mr. Prowse:—Thompson and Felce, Launceston, 21s.; Marshal, J. T., York, 10s.; Williams, W., and Son, Guilsborough, 10s. 6d.; Mann, C. T., Boxford, 5s.; Jones, T., Ross, 10s.; W. S. Roots, Ross, 10s.; Dowson, A. H., Orford, 5s.; Furber, G. H., Maidstone, 5s.; Smith, R. L., Clare, Suffolk, 5s.; Williams, T., Pontypool, 10s. 6d.; Hughes, R., Bala, 10s. 6d.; Cogan, C. C., Greenwich, 5s.; Kingdom, A. S., Combmartin, 5s.; Yeoman, J., Whitby, 10s.; Vise, A. B., Holbeach, 10s.

Mr. Griffin has forwarded to those members of the Association who have subscribed during the last twelve months a pamphlet of 52 pages and the following letter:—

"12, Royal-terrace, Weymouth, March 1st, 1866.

"Dear Sirs,—The accompanying pamphlet is intended to be sent to each Member of Parliament so soon as we can get some gentleman to undertake the introduction of a Bill into the House of Commons. It is possible the proposed Bill may not meet with the entire approval of all, but it must be borne in mind that it is almost impossible to meet the views of every one, and much will depend upon the member who introduces the Bill as to the exact clauses that shall be retained.

"I intend to apply to one or two members about bringing in the Bill, but as it is possible they may not accede to my request, I hope each of you will consider that it devolves upon you individually to find a member; by adopting this course we shall be sure of success; should any of you require a pamphlet to send to a member to whom you may write, I will supply you with it. I regret I can only send pamphlets to the Medical Officers who have subscribed within the last twelve months, as the present subscriptions will only about cover recent expenses; I therefore trust that if any of your colleagues intend to subscribe, they will do so without loss of time, in order that the printer may strike off the requisite number of copies, as the type of so large a pamphlet cannot be re-set without great expense. It may possibly be said that much of the present pamphlet is merely a transcript of former ones, which I admit—indeed, I only view it as a rearrangement, with some additions, of much that has been written before; but had I not adopted this course, a majority of the present House of Commons would know nothing of the matter, and would take it for granted that the late Select Committee on Poor Relief (England) had fully gone into the subject, and from the evidence laid before them had decided that there was no need of fresh legislation; whereas now they will see that the subject was not fully gone into by the Select Committee, and that the evidence of a Poor-law Inspector had grossly misled them.

"I am, Dear Sirs, sincerely yours,
"**Richard Griffin.**

"To the Subscribing Poor-law Medical Officers
of the last twelve months."

### An Army Surgeon on the Report of the Commission at the Admiralty.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—We who have grown grey in this world's experience well know that the anticipations of evil or happiness have far greater influence over men's minds than the reality of either one or the other, and thus it was that when I cast my eyes over the Report of the Committee on the grievances of the Medical officers of the two services, I felt my heart sink with a sickening feeling of disappointment as I perused the recommendations which we, within the charmed circle of military Medical life, had fondly hoped would be the means of rendering us a happy and contented class. The wish was most probably father to the thought, but I believe that most men were in accord that both our military and social position would be improved by the inquiry that has lately taken place. Alas! how futile 'tis to put faith in men, for from the tenor of the recommendations that have been published our hopes have been sadly dashed. The happiness we anticipated has resolved itself into the minor degree of satisfaction that our incomes are likely to be increased by two shillings a day whilst we are actually serving, and into the lowest depths of depression that our pensions on retirement are to be little affected, and that the retirement we have so longed for, although conceded, is to be obtained at such a sacrifice that none but those whose private means are good can possibly take advantage of it. I have struggled on year after year upon an income only just large enough to supply my family with the plainest necessaries of life, and hence I know only too well the value of an addition to my means of £36 per annum. But yet I know also that however acceptable such an addition will be, yet that it will be totally insufficient to enable me to fulfil one of my highest duties—that of insuring my life, in order to make a reasonable provision for my family—let alone give me the means of allowing myself and them such trifling luxuries as I find every one of my moderately successful Medical brethren in civil life are well able to obtain. It was, therefore, with the hope that a liberal scale of retiring pensions would be recommended that I buoyed myself up, for I have looked anxiously forward to a time, not, I hoped, far distant, when I trusted to be placed in such a position as would enable me to work honestly at my Profession in civil life, and obtain that provision for my family which I find I am powerless to provide for them whilst serving. But by the recommendations of the Committee I am shut out for years from all such hope, for if I take my retirement after twenty years' service, I shall have to give up at once £219 a-year in money alone—a sum that might, indeed, be most easily made by many, but which I am not wise enough to think I could realise as a certainty until I had been a considerable time practising my Profession in civil life. There are other points, of no value whatever, such as the precedence of our names in the Army List, and such like trivial distinctions—dear, indeed, to the hearts of men who shine alone by the light reflected from the gold lace on their own and neighbours' coats, but worthless as true advantages to us, either as individuals or as a class; whilst in respect to that social position which is dear to the heart of every true gentleman—his perfect equality with whom he is in daily communion—we are positively and distinctly degraded, for the beardless cornet is now recommended by the Committee to take a position at the dinner-table which is denied to one who might very easily be his father. These phases of the question, I am free to confess, are selfish ones; but still they go home to one, and will, I think, sadly influence that which, in the eyes of the Government, should of course be the major consideration—viz, the welfare of the State. And now, from a brief review of the Report in reference to such, it cannot be denied that the best goods are the cheapest in the end, if they are required to last a reasonable time; and as the recommendations of the Committee are based upon the advisability of holding out such inducements as shall enable the State to secure the services of the most educated young Medical men, the question naturally arises, Are the inducements held out sufficient to tempt such men to enter the Medical service of the Army?

I abstain from touching upon the recommendations as they affect the Navy, though to my mind they are liberally framed in most respects, but I cannot do otherwise than endorse the honourable and clearly-put protest of Sir James Gibson in respect to the injustice done to the administrative ranks of the Army Medical Service by the ignoring of all claims on their part to any improvement in their position; whilst those of the sister service are materially advantaged. This, however, by the way, and let us hope that a Liberal Government will see the justice of treating both classes in an equal spirit, and not allow the higher grades in the Naval Service, who are, as a rule, almost stationary at home stations, to reap advantages unshared with those of their military brethren, whose servitude extends over the whole world.

But is it to be supposed that the *élite* of our schools will be tempted with the bait of a fair—nay, liberal—scale of pay upon first entering the service, and even for some few years afterwards, when the simplest sum in division must tell them that they cannot possibly be ever anything else than an Assistant-Surgeon—or, at all events, that they must remain in such a subordinate position twenty-six to thirty years! Add to this the fact that should they remain so long they cannot obtain more than 17s. 6d. a day, and 8s. 9d. a day pension, and I think the calculation will convince the most sanguine. The sum is an easy one, for it is but to divide 800—the number, or thereabouts, of the Assistant-Surgeons now serving—by 30, the number of average promotions per annum! It remains to be seen whether the simplicity of this test will take effect on the minds of men who are of a studious and thoughtful temperament, and whether they will shun a service that holds out to them no hope of distinction, but will ever keep them at the lowest round of the Professional ladder! And if these men will not come forward, as it is absurd to think they will, our ranks will be filled, and that, too, to overflowing, by a class of men who, to escape the honest hard work of a noble calling, will rush to the Army, in the hope that when gazetted they will be enabled to put off for ever and aye all that relates to their Profession except its name, and lead a life of idleness and dissipation. Too many there are already in the service who answer to this description, whose avowed intentions of doing as little as possible are as openly expressed as their ordinary walk in life shows their sincerity in this respect to be without deceit. Such men I have been in a Professional and official capacity intimately associated with, and hence I speak from neither speculative nor hearsay data when I prophesy such a result in the lamentably slow rate of promotion which the absence of recommendations of a liberal scale of retirement to the senior ranks will necessarily produce, unless remedied by the independent action of the Minister for War before such recommendations are embodied in the anticipated new Warrant on the subject. Such a scale of retirement may in a money point of view appear expensive, but it does not take a John Stuart Mill to prove that such an expenditure would be anything but a blot upon the political economy of the present day.

I am, &c.

February 27. **A Grey-headed Medical Officer.**

### The late Professor Schrœder van der Kolk.

The following letter, addressed to the editor of the *Reader*, appears in that journal for February 3:—

"7, South Anne-street, Dublin, January 16, 1866.

"Sir,—My attention has been called to the following passage, which appears in your impression of the 23rd December, 1865, p. 714:—

"'C. Schrœder van der Kolk, son of the great anatomist, has just published a work entitled "Soul and Body" (Seele und Leib), in which he endeavours to prove that what is called soul is simply the manifestation of brain, just as digestion is the function of stomach. He says, memory, imagination, reason, and even volition, are but the result of physical actions, or electro-molecular, excited by the operation of perception—the contact with the outer world.'

"It is true that Dr. H. W. Schrœder van der Kolk, son of the late distinguished anatomist and physiologist, and now Professor of Physics at Zutphen, in Holland, has edited essays entitled 'Ziel en Ligchaam' (Soul and Body), and that a German version of this work has recently been brought out by Vreweg, but the essays are from the pen, not of the son, but of the late Professor himself. I am assured that these essays, however, contain no theory of the action of the brain; what is stated in the paragraph I have quoted from your pages refers clearly to the "Handboeck van de Pathologie en Therapie der Kranksinnigheid" (Manual of the Pathology and Treatment of Insanity), a fragment published after the author's death, and subsequently translated by Theile into German. But neither are the views contained in this work correctly stated in the above paragraph. The words 'just as digestion is the function of the stomach,' strongly recall expressions of Vogt, but are not to be found in the writings of van der Kolk. As it fell to my lot to translate some of the works of the late distinguished Professor, and as I was privileged during the editing of my translations to enjoy a lengthened correspondence with him, I am enabled to say that he held opinions the very opposite of those implied in the passage just brought forward. I hope it will not occupy too much of your space to allow me to quote, in support of this statement the following passage from my translation of S. van der Kolk's work on 'The Minute Structure and Functions of the Spinal Cord,' a translation (published by the New Sydenham Society, London, 1859) which was carefully revised and corrected by the Professor himself. The author, speaking of the harmonization of movements, says, at p. 74 :—

"'Some, as E. Pflüger, observing such phenomena, have been misled into assuming a sort of voluntary power or mind in the spinal cord, an error attributable solely to want of examination of the ingenious arrangement of the tissue and of the structure of the cord, in which all these harmonized movements appear to lie hidden, pre-arranged in the several combinations of the groups of ganglionic cells, and ready to be excited by any stimulus, whether voluntary or reflex, so that they are produced just as the harmonic tones of a piano under the fingers of the player. Such a view is sufficient to excite amazement at the ingenious nature of all these arrangements and wonderful combinations, but, it is conceivable, and in my opinion not so difficult to imagine ; while the idea of volition in the spinal cord, without consciousness, with the entire rejection of the existence of a soul, as Pflüger suggests, is an absurdity not to be thought of. On the contrary, the deeper we penetrate into the knowledge of the mechanism of our body, the more we shall be convinced that the whole is arranged as a perfect minister of our spirit and of our will, in which both the amazingly correct insertion, size, and combination of the muscles, and certainly not less the combination of the ganglionic groups, whereby these muscles are harmoniously and suitably moved, are calculated with incomprehensible wisdom and fulness of purpose.'

"The sentiments expressed in the foregoing quotation will, I trust, be sufficient to defend their author from the imputation of any leaning towards materialism. I trust, therefore, Sir, you will allow me, as the friend and constant correspondent, during many years, of the late Professor Schrœder van der Kolk, to show by an example what the real tendency of his writings and teaching was, as it is possible that a contrary inference might be drawn from the paragraph which found its way into your number of the 23rd December last.

"I have the honour to be, Sir, your obedient servant,

"WILLIAM D. MOORE, M.D., Dublin, M.R.I.A."

COMMUNICATIONS have been received from—

HARVEIAN SOCIETY; MR. S. BARNETT; MR. R. GRIFFIN; DR. J. WATMOUGH; MR. A. NORMAN; THE DIRECTOR-GENERAL OF THE ARMY MEDICAL DEPARTMENT; MR. R. LAWSON TAIT; DR. FEARNSIDE; ANTHROPOLOGICAL SOCIETY; MR. J. PARSONS; MR. R. S. ELLIS; MR. W. PERKINS; MEDICUS; AN OLD SUBSCRIBER; MR. J. MURCHISON; DR. R. FOWLER; MR. C. H. GRIFFITHS; MR. W. ANDERSON; DR. A. ROBERTSON; DR. T. W. DAMANT; DR. E. FLEMING; EPIDEMIOLOGICAL SOCIETY; APOTHECARIES' HALL; MEDICAL SOCIETY OF LONDON; DR. FOTHERBY; DR. MURRAY; DR. HOWARD B. MONTGOMERY; DR. BALLARD; DR. H. BENCE JONES; MR. R. MARTIN.

BOOKS RECEIVED :—Bulletin de L'Académie Royale de Médécine Belgique. No. 10.—Obstetrical Transactions. Vol. VII.—Griffin's Letter to House of Commons on Poor Law Medical Relief.—Pim's The Negro and Jamaica.—Pharmaceutical Journal, March.—Ransome, on the Physiological Relations of Colloid Substances.—Logie, on the Cattle Disease.—Bishop, on a New Method of applying Remedial Agents to the Cavity of the Tympanum.—Annali de Médécina Publica, &c. Firenze. February 20th, 1866. No. 26.—Letter addressed to the Members of the House of Commons on Poor-Law Medical Relief, with a Proposed Bill and Commentary, &c. By Richard Griffin, J.P., M.R.C.S., and L.S.A. Pp. 51.—Symptoms and Treatment of the Cattle Plague ; with a Sketch of its History and Progress. By Arthur Wynne Foot, M.D. Dubl. Pp. 69. Dublin : McGlashan and Gill. London : Longmans.—Journal de Médécine Mentale, Janvier.—Quarterly Return of the Births, Deaths, and Marriages in Scotland up to December 31, 1865.

NEWSPAPERS RECEIVED :—Glasgow Herald—Chester Courant.

## VITAL STATISTICS OF LONDON.

*Week ending Saturday, February* 24, 1866.

### BIRTHS.

Births of Boys, 1189 ; Girls, 1161 ; Total, 2350.
Average of 10 corresponding weeks, 1856-65, 1940·7.

### DEATHS.

| | Males. | Females. | Total. |
|---|---|---|---|
| Deaths during the week .. .. .. | 912 | 718 | 1630 |
| Average of the ten years 1856-65 .. .. | 684·9 | 682·0 | 1366·9 |
| Average corrected to increased population.. | .. | .. | 1503 |
| Deaths of people above 90 .. .. .. | .. | .. | .. |

### DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

| | Population, 1861. | Small pox. | Measles. | Scarlatina. | Diphtheria. | Whooping-cough. | Typhus. | Diarrhœa. |
|---|---|---|---|---|---|---|---|---|
| West .. | 463,388 | 1 | 14 | 3 | 1 | 5 | 11 | 8 |
| North .. | 618,210 | 11 | 10 | 7 | 4 | 13 | 26 | 4 |
| Central .. | 378,058 | — | 9 | 7 | 3 | 5 | 7 | 1 |
| East .. | 571,158 | 10 | 4 | 12 | 1 | 18 | 10 | 3 |
| South .. | 773,175 | 4 | 9 | 8 | 2 | 29 | 15 | 7 |
| Total .. | 2,803,989 | 26 | 46 | 37 | 11 | 70 | 69 | 18 |

### METEOROLOGY.

| | |
|---|---|
| Mean height of barometer .. .. .. .. .. .. | 29·865 in. |
| Mean temperature .. .. .. .. .. .. .. | 36·2 |
| Highest point of thermometer .. .. .. .. .. | 51·7 |
| Lowest point of thermometer .. .. .. .. .. | 24·2 |
| Mean dew-point temperature .. .. .. .. .. | 31·7 |
| General direction of wind .. .. .. .. .. .. | W.S.W. |
| Whole amount of rain in the week .. .. .. .. | 0·04 |

## BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, February 24, 1866, in the following large Towns :—

| Boroughs, etc. | Estimated Population in middle of the Year 1866. | Persons to an Acre. (1866.) | Births Registered during the week ending Feb. 24. | Deaths. | | Temperature of Air (Fahr.) | | | Rain Fall. | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Corrected Average Weekly Number.* | Registered during the week ending Feb. 24. | Highest during the Week. | Lowest during the Week. | Weekly Mean of the Mean Daily Values. | In Inches. | In Tons per Acre. |
| London (Metropolis) | 3067536 | 39·3 | 2350 | 1400 | 1630 | 51·7 | 24·2 | 36·2 | 0·04 | 4 |
| Bristol (City) . . | 163680 | 34·9 | 102 | 73 | ‡98 | 49·5 | 23·9 | 36·4 | 0·64 | 65 |
| Birmingham (Boro') | 335798 | 42·9 | 270 | 163 | 217 | 51·0 | 25·8 | 36·5 | 0·14 | 14 |
| Liverpool (Borough) | 484337 | 94·8 | 401 | 281 | 367 | 48·8 | 33·4 | 41·0 | 0·45 | 45 |
| Manchester (City) . | 358855 | 80·0 | 273 | 203 | ‡244 | 50·0 | 22·8 | 34·9 | 0·84 | 85 |
| Salford (Borough) . | 112904 | 21·8 | 86 | 57 | 77 | 49·3 | 22·8 | 36·2 | 0·77 | 78 |
| Sheffield (Borough) . | 218257 | 9·6 | 167 | 115 | 155 | 48·5 | 27·2 | 36·8 | 0·84 | 85 |
| Leeds (Borough) . | 228187 | 10·6 | 164 | 116 | 168 | 52·0 | 26·5 | 39·0 | 0 53 | 54 |
| Hull (Borough) . | 105233 | 29·5 | 75 | 49 | 55 | .. | .. | .. | .. | .. |
| Nwcastl-on-Tyne, do. | 122277 | 22·9 | 98 | 65 | 61 | 48·0 | 29·0 | 37·9 | 0·25 | 25 |
| Edinburgh (City) . | 175128 | 39·6 | 122 | 84 | 126 | 45·7 | 29·0 | 36·2 | 0·60 | 61 |
| Glasgow (City). . | 432265 | 85·4 | 411 | 252 | 261 | 46·0 | 19·0 | 35·2 | 1·18 | 119 |
| Dublin (City and some suburbs) . | 318437 | 32·7 | 190 | †156 | 179 | 51·0 | 25·0 | 38·1 | 0·31 | 31 |
| Total of 13 large Towns . . . | 6122894 | 34·4 | 4709 | 3014 | 3638 | 52·0 | 19·0 | 37 0 | 0·55 | 56 |
| | | | | | Week ending Feb. 17. | Week ending Feb. 17. | | | | |
| Vienna (City) . . | (1863)<br>560000 | .. | .. | .. | .. | .. | .. | §<br>.. | .. | .. |

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·865 in. The barometric pressure rose to 30·20 in. on Wednesday, and fell to 29·54 in. on Friday.

The general direction of the wind was W.S.W.

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* The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.

† Registration did not commence in Ireland till January 1, 1864 ; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in that city were the same as the averages of the rates in the other towns.

‡ The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

§ The mean temperature at Greenwich during the same week was 38·9°.

## APPOINTMENTS FOR THE WEEK.

### *March* 3. *Saturday* (*this day*).

*Operations* at St. Bartholomew's, 1½ p.m. ; St. Thomas's, 9½ a.m. ; King's, 2 p.m. ; Charing-cross, 1 p.m. ; Royal Free Hospital, 1½ p.m.

ROYAL INSTITUTION, 3 p.m. Rev. G. Henslow, "On Systematic and Structural Botany."

### 5. *Monday.*

*Operations* at the Metropolitan Free Hospital, 2 p.m. ; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.

EPIDEMIOLOGICAL SOCIETY, 8 p.m. Dr. Thudichum, "On Epidemic Outbreaks of Trichiniasis (spiral flesh-worm disease)."

MEDICAL SOCIETY OF LONDON. 7 p.m. : General Meeting for Election of Officers and Council. 8½ p.m. : Clinical Discussion. Dr. Macpherson, "Case of Threatened Elephantiasis of Scrotum in a European."

ODONTOLOGICAL SOCIETY, 8 p.m. Meeting.

ROYAL INSTITUTION, 2 p.m. General Monthly Meeting.

### 6. *Tuesday.*

*Operations* at Guy's, 1 p.m. ; Westminster, 2 p.m. ; National Orthopædic, Great Portland-street, 2 p.m. ; St. Peter's Hospital for Stone, 3 p.m.

ANTHROPOLOGICAL SOCIETY OF LONDON, 8 p.m. A. Higgins, Esq., Hon. For. Sec. A.S.L, "On the Orthographic Delineation of the Skull." W. H. Wesley, Esq., F.A.S.L., "On the Iconography of the Skull." Dr. Paul Broca, "On a New Goniometer, for the Measurement of the Facial Triangle." C. Carter Blake, Esq., F.G.S., F.A.S.L., "On Certain Supposed Simious Skulls, Ancient and Modern, with Reference to a Skull from Louth, in Ireland."

PATHOLOGICAL SOCIETY, 8 p.m. Meeting.

ROYAL INSTITUTION, 3 p.m. Professor Frankland, F.R.S., "On the Nonmetallic Elements."

### 7. *Wednesday.*

*Operations* at University College Hospital, 2 p.m. ; St. Mary's, 1½ p.m. ; Middlesex, 1 p.m. ; London, 2 p.m. ; St. Bartholomew's, 1½ p.m. ; Great Northern, 2 p.m. ; St. Thomas's, 1½ p.m.

HUNTERIAN SOCIETY (Council, 7½ p.m.), 8 p m. An open meeting.

OBSTETRICAL SOCIETY OF LONDON, 8 p.m. Dr. Routh, "Fibro-cystic Disease of the Uterus." Mr. Baker Brown, "On the Use of the Actual Cautery in Ovariotomy." And other Papers.

### 8. *Thursday.*

*Operations* at St. George's, 1 p.m. ; Central London Ophthalmic, 1 p.m. ; Surgical Home, 2 p.m. ; Royal Orthopædic Hospital, 2 p.m. : West London Hospital, 2 p.m.

MEDICAL SOCIETY OF LONDON. Anniversary. 5 p.m. : Oration ; 6½ p.m. ; Dinner.

ROYAL INSTITUTION, 3 p.m. Professor Frankland, F.R.S., "On the Nonmetallic Elements."

### 9. *Friday.*

*Operations*, Westminster Ophthalmic, 1½ p.m.

ROYAL INSTITUTION, 8 p.m. Sir John Lubbock, Bart., "On the Transformation of Insects."

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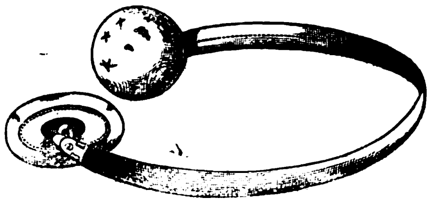

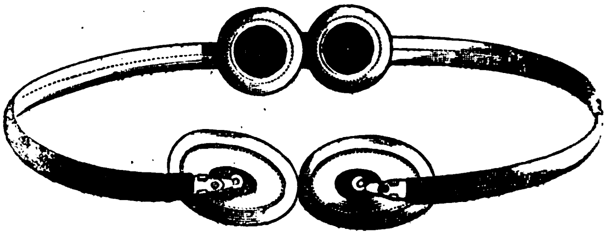

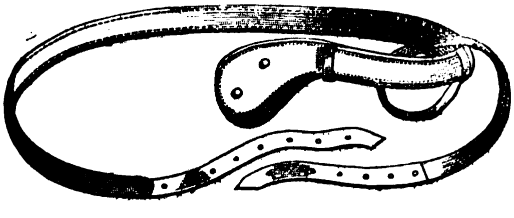

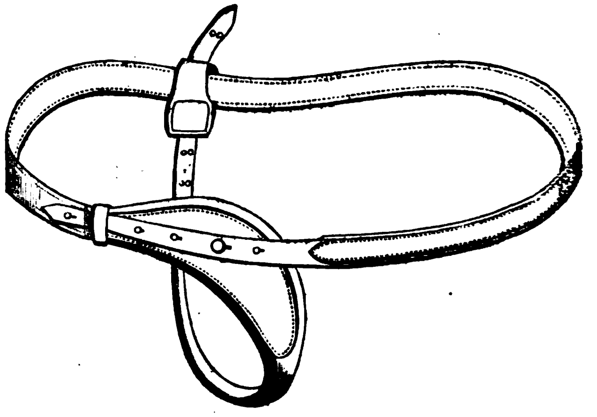

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# ORIGINAL LECTURES.

◆

NOTES ON

## SOME OF THE MORE RARE FORMS OF FRACTURES AND DISLOCATIONS,

BEING EXTRACTS FROM LECTURES (CLINICAL AND OTHERWISE)
DELIVERED AT
The London Hospital.

By JONATHAN HUTCHINSON, F.R.C.S.,
Surgeon to the Hospital and Lecturer on Surgery.

*Injuries to the Head and Neck of the Humerus.*—We will classify fractures of the humerus near to the shoulder-joint not into those at the surgical neck and those at the anatomical neck, but into those *below the tuberosities* and those *through the tuberosities.* Respecting the latter, I have now to ask your attention to a most important practical point, and one which you will find scarcely mentioned in books. A few months after a fracture through the tuberosities, or, what comes to the same thing, a separation of the epiphysis, it is very likely that all the appearances of a dislocation will be assumed. Owing to the altered form of the neck of the bone, the head is gradually displaced downwards, until a hollow is caused under the acromion, and the aspect of things is exactly like that of a dislocation. You may even feel the head of the bone in the axilla, though not so low down, nor so distinctly as in a true dislocation. It often happens that a patient in this stage of things consults another Surgeon, and is told that a dislocation has been overlooked, or, still more frequently, a Surgeon discovering this state in a patient whom he has himself treated, is led to the belief that he has made an almost disgraceful mistake. Sometimes this deceptive appearance is present from the first, but more usually it is produced when the patient begins to use his arm, and if present at first it always increases. I have seen this often, and have seen reduction attempted not unfrequently. A boy, aged 14, was brought to me by a Surgeon, who believed that he had overlooked a dislocation. The deformity was very considerable—a hollow under the acromion, the head of the bone felt in the axilla, the fibres of the deltoid stretched. Two months had elapsed, and the Surgeon who brought him expressed himself as certain that the symptoms now present were not there at first. I detected irregularity and thickening about the line of the epiphysis, and I found also that by pressing the arm straight upwards I almost fill up the subacromial hollow. I convinced myself and my friend that the accident had been a separation of the epiphysis, and that there was no reason to reflect upon the treatment. The most conclusive example of this condition, however, came under my notice nearly twenty years ago, when I was a student. Being at an autopsy on a lunatic who had died in asylum, I observed deformity in one shoulder, and remarked that it must be dislocated. The Medical superintendent remarked that he had treated the man a year ago for fracture of the neck of the humerus, and that he felt confident that there was no dislocation. He willingly gave me permission to remove the bones, although expressing his fears that I should expose some bad Surgery. We found on dissection that there was a fracture through the tuberosities, and the head of the bone had travelled down to a new articular facet just below the glenoid cavity. This specimen is, I believe, now in St. Bartholomew's Hospital Museum.

When the appearances of dislocation are present in a case of fracture from the first, they are due to displacement inwards of the upper end of the lower fragment, and the higher the line of fracture the more deceptive they will be. At this stage, however, we have the symptom of crepitus to help us, and it is decisive. The hollow under the acromion is also never so definite as it becomes at a later stage. At the latter, when the bone is consolidated, it is often exceedingly difficult to form a decided opinion.

From this clinical fact two corollaries arise—first, that we should be exceedingly careful in giving opinions respecting old cases which have not been under our own care from the first; and secondly, that when we have to treat such a fracture we should clearly explain to the patient what the result will be. In one case recently in the Hospital we had all the appearances of dislocation, with the most positive crepitus in the neck of the bone. At the end of a month, when the bone was united and the swelling had disappeared, we had yet more deceptive appearances, and explained to the man that, should he ever be examined by another Surgeon, he might very likely be told that a dislocation had been overlooked, and I offered him a written statement of what the nature of his injury had been. I may repeat that in the first stage the diagnosis is not difficult; the abnormal mobility, the crepitus, and the ease with which the elbow may be brought down to the side all point to fracture.

It is possible that dislocation and fracture may occur simultaneously. Two or three times I have suspected this complication, but I have never had an opportunity for proving it, or of examining a dissected specimen. It is *à priori* very improbable that such lesions should be produced together. When the neck of the bone snaps by violence there is no longer any agency by which the head of the bone, now discontinuous with the shaft, should be displaced, and on the other hand, if once the bone has been dislocated it would be exceedingly difficult by any continued violence to break it. I suspect strongly, therefore, that in most of the cases in which we hear of dislocation and fracture together, are really instances of fractures unusually high up, and in which, as I have just explained, the appearances of dislocation are subsequently simulated.

In any case of separation of the epiphysis in which the two fragments should be thoroughly liberated from each other, the epiphysis itself would in all probability be displaced by the three muscles attached to it (sub-scapularis, supra-spinatus, and infra-spinatus) in such a direction that its under surface, instead of looking downwards, would look directly outwards. There is nothing whatever to counteract these muscles. The appended sketch (Fig. 1) illustrates this hypothetical state of things. I have often suspected its existence, but have had no opportunity for dissecting a specimen. Should it occur, no Surgical art could bring the epiphysis down again, and the shaft of the bone would unite to it at an angle. Thus the neck of the humerus would come to resemble in form the neck of the femur of a young subject, and subsequently the elevation of the arm by the deltoid would push the head of the bone lower and lower in the glenoid cavity, and gradually produce the appearance of dislocation to which I have adverted.

FIG. 1.

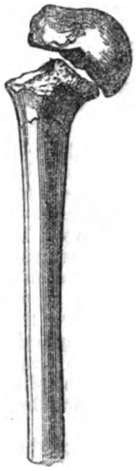

FIG. 2.

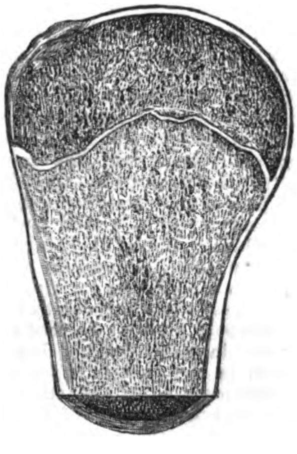

FIG. 1.—Detachment of the upper epiphysis of the humerus, with displacement of it by the action of the muscles inserted into the tuberosities. The black line through the Surgical neck shows the direction of the line of fracture in a case alluded to below.

FIG. 2.—Section of the head of the humerus from a boy of 14, showing the line of cartilage at the junction of the epiphysis.

I show you a sketch of a section of a young humerus that you may refresh your memories as to the direction of the epiphysal line. You must recognise clearly that a separation of the epiphysis is a quite different lesion from a fracture through the anatomical neck. The epiphysal line passes through the base of the tuberosities, and leaves the muscles inserted into these to act upon the upper fragment (the epiphysis). In all separations of epiphysis the periosteum is, I believe, stripped off from the upper end of the distal fragment, and left attached as a dense cup to the lower edge of the proximal one. This circumstance leaves the epiphysis with still more muscular fibres attached to it than would have been the case were a clean section made through periosteum and all. Thus, in the case of the humerus, the teres minor is inserted below the epiphysal line; but I suspect that it usually remains with the cup of detached periosteum in connexion with the upper fragment.

Dislocations of the humerus are very rare in children and young persons. Separations of the epiphysis and fractures below the tuberosities are not very uncommon. I have seen five or six cases in which the diagnosis of separation of the epiphysis seemed clear. In one instance it was remarkably definite, for the lower fragment was displaced forwards, and when the swelling had disappeared we could put the finger in a flat ledge of bone a third of an inch wide, looking directly upwards, and presenting the irregularities characteristic of an epiphysal surface. The patient was a lad aged fourteen, who had not been under my care in the first instance, but who was brought to me on account of the deformity described.

I possess a specimen of fracture below the tuberosities (see Fig. 2, in the preceding page) from a boy aged ten years, in whom, of course, the epiphysis was not united. In this instance the displacement was unusual, the lower fragment being external to the upper and drawn upwards behind it. In this position it was firmly held by the bands of detached periosteum, through which it had escaped, and which prevented its being brought even on the post-mortem table into accurate apposition with the other fragment. For the same reason we had found it difficult during life to produce crepitus. I have no specimens of separation of the epiphysis of the humerus, nor have we one in the London Hospital Museum.

Mr. Herbert Spencer, who was House-Surgeon to the London Hospital in 1863, now of the Bradford Infirmary, Yorkshire, once showed me a lad in whom it seemed probable that both upper and lower epiphyses of the right humerus had been detached. In the left arm there had been separation of the lower epiphysis, and he had besides had a fracture of one clavicle. These complicated injuries had been sustained in a fall from a ship's mast. The right humerus was much shortened, partly by arrest of growth and partly by union with displacement.

As regards the treatment of injuries to the neck of the humerus, we may note that in the majority of cases there is little or no displacement, and that the fragments are locked or impacted together. The higher up the injury and the thicker the bone at the site of fracture the more likely is this to occur. In such cases it matters little what plan of treatment is adopted. If there be displacement, it will probably be that of the lower fragment inwards, and to counteract this we must employ extension and put a large pad in the axilla. It may be sufficient in some cases to employ the plan of a large axillary pad with the arm bandaged across the chest. On the whole, however, I prefer to use a single long splint, well padded and pressed into the armpit, on which the arm and forearm may be extended with great efficiency. The only plan which would be likely to remedy the displacement which has been just described in reference to separation of the epiphysis would be by carrying the limb directly outwards at right angles with the patient's trunk. I have never tried this, and it would probably be very inconvenient in practice. In any case in which decided displacement existed despite extension in the straight, I should be inclined, in spite of the inconvenience, to try abduction of the arm, keeping the patient in bed and using plaster of Paris.

You will see that in discussing the treatment of these fractures we have to take notice quite as much of the extent of displacement as of the direction of the fracture. In many cases, whether of fracture through the tuberosities or separation of the epiphysis, there is only incomplete displacement of the fragments one from the other, and they still remain in apposition at parts. In such cases the fragments, by their mutual locking and pressure, prevent the muscles from effecting the characteristic distortion. The thicker any given bone is at the part where broken, the more likely it is that the displacement will be incomplete.

Then we must also recollect that in many cases the displacement will not be according to the direction of muscular action, but will be influenced rather by the position assumed by the bone at the moment that violence was applied. Very often the original displacement, although contrary to muscular action, is from some wedging of fragments, or more frequently from the intervention of tense bands of periosteum or fascia, never afterwards altered. Thus we know beforehand what the typical displacement is when the fragments are free to move under the influence of the muscles, but we cannot predicate of any given case what it will be, since it may be modified by other conditions.

(To be continued.)

# NO HEALTHY OR MORBID ACTION DUE TO PHYSICAL AND CHEMICAL CHANGE ONLY(a).

By LIONEL S. BEALE, M.B., F.R.S.,
Physician to King's College Hospital.

Of those who accept the now popular mechanical and chemical theories advanced to explain the changes occurring in fully-formed living beings many do not assent to the conclusion that the phenomena of development can be explained by physics and chemistry. They probably entertain the opinion that *development* is conducted upon principles totally different to those in operation in the fully-formed tissue, and that the phenomena regarded as peculiar to development operate only during the earliest periods of life. But although it has not been generally admitted that embryonic matter is present in the textures at every period of existence, it is, nevertheless, quite certain that textures are being developed in the adult, and that new tissue is produced even in advanced age, from living germinal matter which no one could distinguish from that existing at the earliest periods of embryonic existence. Not only so, but every one familiar with disease knows that new tissues may be formed and structures produced in old age, manifesting a power of growth as remarkable as that exhibited early in life. The facts of the case do not permit us to assume that there exists any differences in the essential nature of the formative or nutritive operations in the embryonic and fully-formed state of the tissues.

There is, however, the greatest difference with regard to the performance of *work* in the embryonic and fully-formed state. But *work* and the process of *formation* are two very different things. *Work* depends upon the *destruction* of that which has been already formed. The destruction of matter is doubtless due to physical and chemical changes; but it has never been shown that the matter destroyed was *formed* without the occurrence of *vital* changes. Work does not commence, force is not exhibited until the formation of the material to be destroyed is complete. The processes of nutrition, and growth, and multiplication are essentially the same at all ages and in all living things, but far more active in the embryo than in the adult; while, on the other hand, the amount of *work* that may result from the disintegration of material that has been *formed* is greater in the adult than in the child, and in the latter than in the embryonic condition. The phenomena of nutrition, growth, and multiplication enable us to draw a *sharp line and very positive distinction* between things *living*, at any period of life and under every condition of existence, and things *inanimate*.

It is not a little significant that those who assert in the most decided manner that the changes going on in living things are of the same nature as those occurring in the inorganic world, have not even attempted to explain any of the special phenomena peculiar to living beings. They content themselves with the most general assertions, and avoid in the most careful way the discussion of the particular phenomena occurring in a single cell, or, indeed, of any individual matter which would bring them and their opponents to a distinct issue. I have more than once begged chemists and physicists, who deny the existence of purely *vital* actions in living beings, to explain by physics and chemistry the movements which occur in a single living amœba, a pus corpuscle, or a white blood corpuscle, and have asked them to tell us how simple food becomes converted into the living moving matter, and why this matter divides and subdivides and thus gives rise to new separate masses, which grow like the first and give rise to others; but they neither explain nor admit that they cannot do so. They deny the existence of any peculiar force or power in things living which does not influence lifeless matter, and yet they are quite unable to account for the phenomena, peculiar as well as common to every living particle, by physical force. They will not discuss the matter in detail because,

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(a) Part of a lecture delivered during the course of Physiology and General and Morbid Anatomy at King's College, London, 1865, with additions.

I fancy, they perceive that the fallacy of some of their arguments would be exposed. In one way it is a safe course to assert and reassert of things living in general what no one dare assert of any single mass of living matter in particular.

Not a particle of tissue nor the red matter of a single blood corpuscle is formed without matter passing through the living state; and of the phenomena occurring in this living state chemists tell us nothing. They argue as if food might simply pass into the blood, and get oxidised there; but food, as food, does not pass into the blood. It is changed, and by pre-existing living matter. Neither can food be oxidised; but the matters oxidised result from changes occurring in matter that was living. This temporary living condition is really the important state to study, and this is the state which is ignored by many altogether. Every cell contains this living, formless matter, and without it the cell could not be nourished, or appropriate nutrient matter. It could not form tissue or secretion. It could not grow or give rise to other cells like itself.

Not only is it erroneous to teach that all, or nearly all, the actions going on in the living body are physical and chemical, but it is not true that any action characteristic of a living thing can be accounted for by what is yet known of physics and chemistry. The idea of disease comprises something more than mechanical defect or chemical alterations. If we may correctly speak of chemical and mechanical diseases, surely it is not incorrect to talk of the diseases of a steam-engine or the pathological phenomena of a spinning jenny. Any one who has studied and thought over the formation of a common abscess, or the occurrence of any simple, acute, or chronic inflammation, must have convinced himself that the changes comprehend phenomena which cannot yet be included under Physics or chemistry.

*Fermentation not a Catalytic Action.*—Much has been said about *fermentations* and *contact actions* or *catalysis*, and by some they have been considered to be closely allied, if not of the same nature; but recent investigations, and especially those of Pasteur, have led us to restrict the term *fermentation* to the changes effected by *living organisms alone*, and *catalysis* to the phenomena due to mere contact and surface action.

No true fermentation, and according to Pasteur, no putrefaction, can occur without the presence of *living particles*. Catalytic actions, on the other hand, may be induced by perfectly lifeless matter like platinum. Unless, therefore, it can be distinctly proved that fermentation is a mere contact action, independent entirely of the *vital* changes occurring in the living and actively growing organisms constituting the "*ferment*," we must admit that there is a great difference between *fermentation* and *catalysis*.

The old notion which attributed some of the most important changes occurring even in the organism of man and the higher animals to *catalysis* has been recently revived, but so long as it remains completely unsupported by observation and experiment, it is not likely to gain favour among scientific men at this time, more especially as many important facts recently ascertained in connexion with cell-nutrition render it still more improbable than it appeared when first advanced, if they do not prove it to be altogether untenable.

A very little consideration will show that there is little analogy between *catalysis* and the phenomena which occur in connexion with *living cells*. The lifeless catalytic matter never multiplies; the living always does. The lifeless passes through no definite stages or states of being; the living invariably does so. The lifeless catalytic body does not necessarily alter in chemical composition during its action; the living one is always undergoing change in its active state. The first cannot be said to *form new material;* the last always exhibits this property. Neither the assimilation of food, nor the conversion of food into blood, nor the conversion of blood into organ or texture, can be correctly spoken of as due to catalysis or contact action, for in these processes not only are certain elements of the pabulum taken into the very substance of the matter which is the catalytic agent, but these become a part of the agent itself. In no case does the food directly become blood, or the blood undergo direct conversion into organ or texture, but both food and blood pass through a transition stage during which neither the compounds existing before nor those which are to be produced can be detected.

If the catalytic platinum could take up and convert the materials around it into *platinum* and give rise to something differing in composition and properties from itself as well as from the matter around it which it had taken up, an analogy would exist between the phenomena above mentioned and catalysis. If it could be shown that in assimilation, in the conversion of food into blood, and blood into tissue, the pabulum became changed while the cells, like the platinum in catalysis, underwent no change, then it might be correct to regard living cells as catalytic or contact agents, but it has been distinctly proved that nothing save that which is alive can effect changes like those occurring in connexion with living cells, and that "*living*" comprehends more than mere chemical, mechanical, and catalytic changes, or all these together.

## ORIGINAL COMMUNICATIONS.

# FURTHER NOTES ON THE NEW METHOD OF PRODUCING LOCAL ANÆSTHESIA.

By BENJ. W. RICHARDSON, M.A., M.D., F.R.C.P.,

Senior Physician to the Royal Infirmary for Diseases of the Chest.

## THE PRINCIPLE AND THE PRACTICE.

The new method of producing local anæsthesia which I had the pleasure of introducing to the Profession in the pages of this journal on the 3rd of last month has created an interest which, at the most sanguine moments, I did not anticipate. This success is due in a great measure to the simplicity of the process, its readiness of application, and its determinate and demonstrative action; but the most important element in the success is, that the new process supplies a want long felt in every class of the Profession—namely, a ready means of removing pain arising from Surgical operations or other causes without the risk of sacrificing life.

The short paper I now write may be considered as an answer, in a general sense, to the various questions and suggestions that have been addressed to me since my last communication. For convenience, I may classify this series of answers under four heads. 1. The principle of the new process of local anæsthesia. 2. The instrument to be used. 3. The fluid to be used. 4. The mode of application.

### The Principle of the Process.

The principle of the new anæsthetic process consists in directing on a part of the body a volatile liquid having a boiling point at or below blood heat, in a state of fine subdivision or spray, such subdivision being produced by the action of air or other gaseous substance on the volatile liquid to be dispersed.

When the volatile fluid, dispersed in the form of spray, falls on the human body, it comes with force into the most minute contact with the surface upon which it strikes. As a result there is rapid evaporation of the volatile fluid, and so great an evolution of heat force from the surface of the body struck, that the blood cannot supply the equivalent loss. The part consequently dies for the moment, and is insensible, as in death; but as the *vis a tergo* of the body is unaffected, the blood, so soon as the external reducing agency is withdrawn, quickly makes its way again through the dead parts, and restoration is immediate. The extreme rapidity of the action of this deadening process is the cause of its safety. The process can suspend life without causing disorganisation; if I may use the expression, it produces syncope of the part —temporary death—but not necessarily destruction. When we produce general anæsthesia we virtually extend this mere local action to the body altogether—*i.e.*, we check the evolution of force at the centre, and produce an approach to temporary death of the whole of the organism.

### The Instrument.—Improvements.

The instrument by which the volatile fluid is dispersed is described at length in my paper published in this journal on February the 3rd of this year. It consists of a spray-tube and bottle worked by Dr. Andrew Clark's hand bellows. The tube differs from all other spray-tubes in that the volatile fluid is brought up for dispersion by air pressure produced by the same motion as that which causes the dispersion. The instrument also provides a means for regulating the current of fluid; it allows the ether to be carried along tubes of any convenient length and curve; and, lastly, it enables us to construct a *compound* instrument by which the effects may be multiplied to any reasonable extent for large operations.

In my original paper, referred to above, I described simply the single dispersion-tube. Since then, I have made a large number of tubes to answer various powers and purposes. I have a tube in which there is a bulb enlargement at the end with perforated side, or side and central jets. This tube is exceedingly useful for the cavities of the body, such as the vagina or rectum. It distributes the fluid in the same manner as a syringe with several perforations at its point. In practice, I find that the dispersion of the fluid delivered from one fine tube by a series of jets is not so efficient, proportionately, as when it is delivered by one jet: the fluid, that is to say, requires a certain degree of concentration to ensure success.

In order to multiply the anæsthetic producing power, I have other instruments constructed which may be called compound. In these cases the bottle holding the volatile fluid either receives a common central tube of large size communicating with a number of terminal jets, or each terminal jet has a separate jet running into the fluid. By this means I have a brush of jets, which may be circular, or long, or flat, as required. For this compound tube a six-ounce containing bottle for the fluid is necessary, and additional bellows power. The present small hand bellows will only work a compound jet of two elements with efficiency. I have tried to meet this difficulty by using a bellows worked by the foot, but not as yet to my full satisfaction. To get the air pressure I have tried various plans so as to do away with the hand bellows. I have used carbonic acid compressed into an iron bottle, and have applied the gas in its escape so as to act in the same manner as the air from the bellows. The apparatus complicates, and the pressure of gas cannot be nicely regulated. I have modified this plan also by trying to get force by generating carbonic acid gas at the time; also by generating hydrogen from zinc and dilute sulphuric acid, and using the pressure of the gas as the distributing agency.

Again, I have tried water pressure, as in the common gas holder; and I think in the dentists' room this plan would succeed well, if the preliminary expense were no obstacle. But taking all in all the hand ball bellows are as yet the most practical and most ready; they carry in the pocket, and one can go with them to the patient and commence anæsthesia at once—a great consideration. In many small operations, requiring only one or two strokes of the knife, the whole may be done painlessly, while the patient thinks that the preparations are merely being made—much, of course, to his gratification.

Several suggestions for the improvement of the jets offer themselves for consideration; the fish-tail gas-burner, the Argand burner, the conservatory water engine, and many other mechanical contrivances similar in kind will occur to every one as worthy of imitation, and as quickly as they can be made they will be produced and tested.

### The Fluid to be Used.

I still continue to use absolute ether for operations, and now, as Mr. Robbins has produced an ether of specific gravity 0·720 of negative effect on the tissues, and having a boiling point of 92° Fahr., a better fluid can hardly be demanded. Many other fluids have been suggested by various readers of my original paper—viz., methylic ether, amylene, monochloretted chloride of ethyle, pure chloric ether, nitrite of ethyle, a volatile hydrocarbon derived from the manufacture of portable gas, chloroform, rectified turpentine, and numerous compounds and mixtures. As regards these I may state that they have all been under my careful consideration, but that as yet none of them, taking their qualities all in all, are equal to absolute ether. Some are open to rejection at once from their boiling point being too high; others are unpleasant, and would not admit of being used in operations on the mouth or teeth; others cause irritation of skin; others in their pure state are so extremely volatile that they could not be kept in the surgery for any length of time—this is specially the case with methylic ether and nitrite of ethyle, both promising substitutes for ether; lastly, a body too volatile would somewhat affect the operator during the operation if it were diffused in the pure state. Nitrite of ethyl is open to this objection not so much as the nitrite of amyl would be, but to some extent.

In time we may, perhaps, by experiment get a compound volatile mixture which being as negative as absolute ether in its effect on the body shall boil a few degrees lower.

Before leaving this topic, let me state that the mere alteration or change of the volatile fluid used is no change of the principle of the present anæsthetic process. Ether itself is only a local anæsthetic on being employed according to this principle. This is important to be borne in mind, otherwise a principle may become confounded with a detail, and every fluid with a low boiling-point and the other necessary physical qualities, as I have described them, for producing insensibility will be dubbed a local anæsthetic. By a slip of the pen, indeed, this error was committed in the *Medical Times and Gazette* of last week, a short leading article having been headed "Kerosolene a Local Anæsthetic." Kerosolene—a body very impure, unpleasant, and of unsteady but low boiling-point—when applied by my method acts like ether, because it resembles ether physically. But kerosolene is no anæsthetic *per se*, although it would serve as a substitution agent for one part of the anæsthetic process, in the same manner, and in none other, as an earthenware bottle would take the place of the graduated glass bottle in which the volatile liquid is commonly retained.

Dr. F. D. Fletcher, of Southport, has suggested to me the employment of liquid carbonic gas, and, as will be seen by last week's *Medical Times and Gazette*, Sir James Simpson has had carbonic in view for some years. I believe the first physiologist who actually tried to apply the reducing agency of carbonic acid for the production of anæsthesia was the late Dr. Snow. He went to great trouble and expense to experiment on the gas in the solid state, and he applied it in that state to his own skin. Singularly enough, the insensibility produced was slow and imperfect, but the worst feature was that a slough was always produced on the part where the acid had been applied. Snow, therefore, gave up the effort, convinced that carbonic acid in the solid form could never be made applicable in actual practice, and that if it could it would not be a safe agent.

I myself moved for a time in a similar direction by using carbonic acid in the liquid form. Mr. Robbins supplied me with the gas reduced in a three-pint iron bottle under pressure. When the stop-cock was opened and the carbonic was liberated through a fine jet, an intense cold was produced; but I utterly failed in attaching a conveying tube that would be applicable for operations. The pressure, in a word, was unmanageable, and for ordinary practice, dangerous. In one experiment, while the jet was being directed on the back of my hand, the nozzle of the tube became set free, and, being projected with violence, injured me severely. I, therefore, like Snow, gave up carbonic acid as a body that would not submit to guidance, and as impossible to use in Surgical practice.

We need not, fortunately, trouble ourselves on this subject. I have shown that by the dispersion of fluids of low boiling points we can get a degree of cold which answers the required purpose without employing fluids or gases under pressure. If we want more than absolute ether, chemistry can furnish us with fluids which boil even at below 70° Fahrenheit, which fluids, dispersed as vapour, would fill the purpose of carbonic acid with only one disadvantage—that of being difficult to keep in store during many months of the year.

Next week I shall take up the subject of practice; shall relate my own successes and failures with the new anæsthetic process, and shall offer a few simple rules and suggestions for those who would employ the process.

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ON THE

# TEMPERATURE OF THE BODY

## AS A HELP TO DIAGNOSIS IN TUBERCULAR, CANCEROUS, AND OTHER FORMS OF CONSOLIDATION OF THE LUNGS.

By SYDNEY RINGER, M.D., and WALTER RICKARDS, M.D.

Cases not unfrequently occur where many of the symptoms and physical signs common to consolidation of the lungs from tubercle, cancer, and other growths are present, while those symptoms, etc., by which they may be distinguished are absent. The diagnosis in such cases is often impossible.

These observations were made with the hope that some information might be gained by which the consolidation from tubercle may be distinguished from that due to cancer and other growths. It has been shown by one of the authors of this paper that the temperature of the body is always preternaturally elevated while tubercle (a) is being deposited in any of its organs. If, therefore, it should be proved that cancerous and other growths in the lungs fail to elevate the temperature, we shall possess a ready means of distinguishing between the above-mentioned diseases.

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(a) This statement applies both to tubercle and to scrofulous pneumonia. The product of scrofulous pneumonia was formerly considered to be infiltrated yellow tubercle.

These cases, though not numerous enough to settle this question, point to this conclusion. The difficulty of diagnosis mentioned, of course, occurs only when the growths affect the apex of the lung. Physical signs only indicate physical conditions, that is, increased rarefaction or consolidation of the lungs, or the presence of fluid in the pleura. Therefore if the growths be limited to the lungs—if there be no mediastinal tumour to aid the diagnosis by producing symptoms of pressure on the various organs situated in the mediastina—the physical signs are very much the same, for in consolidation from tubercle and from cancerous and other growths we have in the early stage of the disease merely the signs of consolidation—that is, dulness on percussion under the clavicle, lessened expansion of the same part of the chest walls, increased vocal fremitus, with harsh bronchial or diffused blowing breathing. These are the signs of consolidation of the lung, and are consequently common to the diseases mentioned. Symptoms, moreover, are not sufficient to separate these diseases. It is true that the further progress of the disease often clears up the diagnosis. Thus the absolute limitation of the disease to one lung, especially if this be on the right side, extreme and extensive dulness, without evidence of breaking up of the lung (from either cavernous breathing or the presence of rhonchus) and the character of the expectoration may point to some growth in the apex of the lung, and prove that the consolidation is not due to tubercle.

But even when the symptoms have advanced to such a degree, the diagnosis is often difficult except by an expert in thoracic diseases. For it is often difficult to be sure that no disease is present in the other lung. There may be well marked cavernous or tracheal breathing (and the latter is difficult to distinguish from cavernous breathing), with well marked pectoriloquy. Nay, further, if any bronchitis be present, it may produce some submucous rhonchus at the apex of the lung. How are we, then, to distinguish between these diseases? In case of cancerous or fibro-plastic infiltration of the apex of the lung, the cavernous breathing (unless the lung tissue has broken down—an uncommon occurrence in this disease) is conducted by the infiltrated lung from the trachea or bronchi, and thus the cavernous breathing is best heard over or immediately by the side of the sternum, whilst cavernous breathing produced in cavities due to tubercular softening is mostly heard earliest and the best developed at the outer part of the infra-clavicular region of the chest. But this distinction, though often of service, can perhaps scarcely be alone relied on. It is on the evidence of the presence of mediastinal tumour indicated by the pressure symptom mentioned, and by the dulness it causes over the upper part of the sternum, that we chiefly rely. It is in doubtful cases where these symptoms or signs due to a mediastinal tumour, are absent, and where the diagnosis is so difficult, that we hope to show that the temperature of the body affords us a means of distinguishing these diseases. We now proceed to give a short account of the cases:—

*Recurrent Fibro-Plastic Tumour.*—The victim of this growth was a woman, aged 27. The tumour, which was situated to the right of the umbilicus, had been noticed for two years. It had been removed, and did not return for six months. After the interval it again appeared in the cicatrix of the wound. It had grown rapidly. While under observation the tumour rapidly increased, and was consequently removed, but it immediately reappeared in the wound and again rapidly increased. There were evidences of great consolidation of the apex of the right lung. Thus the expansion under the right clavicle was almost *nil.* Vocal fremitus was much diminished. The percussion note was absolutely dull as low as the third rib, below which it was excellent. The breathing was cavernous over and close to the sternum. This character of the respiration diminished on passing outwards and also downwards, so that it was scarcely heard at the acromial angle, and disappeared below the second interspace—indeed, in this interspace it was only heard over the inner half. There was distinct pectoriloquy close to the sternum over the second rib. There was no rhonchus. There was some dulness over the right apex posteriorly as low as the angle of the scapula, but this was by no means marked. The breath sounds were weak. As far as physical signs could be relied on, the left lung was healthy. The dulness of the right side extended to the middle of the sternum. There were no pressure symptoms, and the patient had never spat blood. The heart beat in its usual place. Post-mortem.—The large tumour was found in the abdomen. The chief part of the upper lobe of the right lung was converted into an encephaloid-looking mass, and throughout the rest of this lung and the whole of the left there were innumerable small tumours which varied greatly in size, from a walnut downwards. These tumours had common characters. They were soft, and easily broke down; they gave no milky juice, and had a brittle fracture. Dr. Wilson Fox was of opinion that the tumours were of the nature of fibro-plastic growth. The temperature was taken daily from March 14 to April 25. This varied from 98 to 100. On two occasions it rose to 100⅘. It was mostly below 99⅗.

*Scirrhus of Breast.*—This patient was 44 years of age. The tumour had been present for two and a-half years. During the nine months before her admission into Hospital it had grown rapidly. When she came under treatment, the tumour occupied the entire breast. The skin over the tumour was shiny, tense, and adherent to the growth beneath. The nipple was retracted. The tumour was of stony hardness. There was an enlarged gland in the axilla. Her temperature was taken daily in the axilla for eight days. The highest point reached was 99° Fah.

*Scirrhus of the Breast.*—The female was 42 years of age. The tumour was of the size of an orange, and had been present twelve months. It occupied the middle of the mamma, and the nipple was situated over the centre of the growth, to which it was adherent. The skin over the rest of the tumour was moveable. There were no enlarged glands in the axilla. The tumour was pronounced to be schirrus by the Surgeon in attendance. Her temperature was taken for two days. The highest point reached was 98⅘.

*Carcinoma of Stomach.*—This occurred in a man, aged 60. At the post-mortem there was seen a growth occupying nearly the whole of the pylorus, and infiltrating the tissue of that part. It had the appearance of schirro-encephaloid. It was nodulated and highly vascular. The temperature was taken night and morning for the fourteen days preceding his death. It never rose higher than 99⅕.

*Malignant Tumour of Buttock.*—This growth occurred in a boy, 4 years of age. It was of four months' duration. It had grown rapidly, and had reached the size of a large cocoanut. While in the Hospital, he was attacked with convulsions, in which he died. The tumour was found, after death, to have all the naked eye characters of an encephaloid growth. The lungs were crowded with secondary deposits, varying in size from a nut to a walnut. The temperature was observed for the six days previous to his death. Its highest temperature recorded was 99⅘.

*Tumour of Cerebellum.*—The patient was a boy of 11 years of age. The tumour was situated in the left side of the cerebellum, and had reached the size of a hen's egg. It was found to be composed of cells that were in no way characteristic. His temperature was taken for thirty-eight days. On two occasions it rose to 100; at all other times it was below this, and was often as low as 96 and 97.

*Mediastinal Tumour.*—John C., 53. He is still in the Hospital. There is a very extensive tumour occupying the mediastinum, and infiltrating or displacing a great part of the left lung. The nature of this is uncertain. It is certainly solid, and is not an aneurism. His temperature has been noted for seven days. The highest point it reached was 99⅘.

*Tumour in Neck.*—This was of nine months' duration; it was of rather considerable size. It was supposed to be malignant; as, however, the patient left the Hospital alive, this diagnosis is uncertain. His temperature was taken during eight days, and marked as its maximum 99⅕.

*Malignant Tumour of Face.*—Sarah J., aged 13, was admitted with a large tumour on the right side of her face. This had displaced the right eye and the nose. It also involved the gums and a large ulcerated growth occurred in the mouth. It lasted in all seven months. Its growth was irregular; sometimes it increased with great rapidity, and at other times its growth appeared to stop. A large abscess formed in the tumour, which burst and continued to discharge for some time. The tumour at last extended down the neck and into the mouth. It so far disfigured the child that her friends could not recognise her. At the post-mortem the tumour was found to possess all the characters of an encephaloid cancer. It was firm and rather fibrous in the centre, but much softer at its circumference, at which part it broke down readily. It was highly vascular, and gave an abundance of milky juice; it infiltrated and softened the bones, so that they could be cut with ease. Her temperature was taken daily from March 17 to June 12. During the whole of April the temperature was considerably elevated, rising daily to 103° and 104° Fah.; on the bursting of the abscess the temperature fell, and remained afterwards normal.

*Epithelioma of Face.*—The temperature of this woman was taken for seven days before the tumour was removed. It varied between 99 and $99\frac{4}{8}$.

We have here tumours of various kinds,—some of comparatively slow growth, others of very rapid growth. Some remained local to the end, in other cases very numerous secondary formations in the lungs were developed, and yet in only one case was the temperature elevated. In this it was most probably due to the abscess that formed in the tumour, as on the bursting of this the temperature fell to that proper to health, and remained so to the end of the life of the patient.

The views respecting the nature of cancer have of late been considerably modified. The definition has been so considerably limited that many growths that were formerly, and still are, clinically considered cancer are now referred to other species of formation. But, adopting the older views, some of these tumours were scirrhus, some encephaloid, some scirrho-encephaloid, and some simply fibro-plastic, and one epithelioma. Hence, as far as we are justified in drawing conclusions from so limited a number of cases, it would appear that these growths do not cause a preternatural elevation of the temperature of the body. One of the authors of this paper has already published one case of cancer of the lung where the temperature was normal.

Thus the observations at present made for the solution of the question put at the beginning of the paper render it probable that by the aid of the thermometer we are enabled to diagnose between consolidation due to tubercle and that due to cancerous and other growths.

Occasionally, moreover, much doubt exists in the mind of the Practitioner whether a swelling be due to a solid growth or whether it be due to pus. This can in most cases be decided by the help of a small trocar, yet sometimes this fails to clear up the doubts that exist, and, indeed, sometimes leads to an erroneous conclusion. Abscesses always at one part of their course cause a considerable rise in the temperature, and very often this continues till the pus is discharged. Whether there be such an elevation from the presence of a "cold abscess," the authors are unable to say. As far as one is justified in judging from the absence of all febrile symptoms, we may conclude that fever is not present in such cases; and, should this be the case, while the absence of fever will not prove that a tumour cannot be an abscess; on the other hand, if fever be present, will it not be probable that the swelling is not due to a solid growth, but to the presence of pus?

# REPORTS OF HOSPITAL PRACTICE
IN
# MEDICINE AND SURGERY.

## TOWN'S HOSPITAL, GLASGOW.

### CASE OF APOPLEXY WITH GREAT HYPERTROPHY OF THE HEART, BUT WITHOUT VALVULAR OR ARTERIAL DISEASE.—STATE OF SENSATION, SPEECH, THE REFLEX FUNCTION, AND THE IRRITABILITY OF THE PALSIED MUSCLES.

(Communicated by Dr. Alexander Robertson.)

S. C., aged 46, miner, was admitted into Hospital in the forenoon of the 25th of last January, suffering from hemiplegia of the left side, and in a state of apparent insensibility. He could, however, be partially roused by loud talking, and then appeared to have an indistinct understanding of the questions addressed to him, as he attempted to reply, though in a confused, muttering manner. His power of articulation was impaired, but not greatly, most words being pronounced so as to be understood individually without much difficulty, although they were somewhat incoherent in their connexion. Both eyes were shut; but, on raising the right eyelid and touching the conjunctiva, there was an instant contraction of the orbicularis muscle, whereas the same stimulus, when applied to the left eye, produced no effect; the eyelid just fell slowly over the eye as if by its own weight. The pupils were slightly contracted, the right being more so than the left; they were but little sensitive to light. The tongue was protruded towards the palsied and the face was twisted towards the sound side. The paralysis of the motor power in the left extremities was complete; there was not the least movement, either voluntary or involuntary. The sensory function appeared to be as completely lost as the motor. Thus, when the left arm or leg, or that side of the body, was pinched or pricked with a needle, there was no indication of sensation; but, when the right side was tested in the same way, the evidences of pain were unmistakable. The power of deglutition was impaired; he could swallow liquids, but, after a few mouthfuls, the glottis seemed to be imperfectly closed, and a paroxysm of coughing resulted. The urine was passed involuntarily, and it was found, on the action of purgative medicine, that he had no control over the sphincter ani. The irritability of the muscles was tested by galvanism. A *weak*, continuous current was passed down both arms, producing contractions equal both in respect of strength and rapidity in their respective muscles. Pulse 92, weak; head rather hot; coughed occasionally.

From the time of his admission till his death—which was somewhat sudden, four days afterwards—the symptoms varied very little in their character, except that on the day before he died the pulse was increased in frequency and fulness, and he complained of pain in the right side of his head.

The treatment consisted principally of purgatives, with sinapisms to the extremities, in the first instance, and afterwards leeches to the temples, blister to the neck, and evaporating lotion to the head when inflammatory action appeared to be threatening.

Before death the person with whom he lodged called at the Hospital, and it was ascertained from him that patient had left his home on the day previous to his admission here, apparently in his ordinary health, which he considered to have been excellent; in fact, he believed him to be a healthy, strong man. His acquaintance with him, however, had not been of long duration, and he could give no reliable information as to his habits.

*Autopsy.*—Pia mater and brain were greatly congested, and the sinuses were distended with dark blood. In the substance of the right corpus striatum and thalamus opticus was a clot, about the size of an ordinary hen's egg, dark and of considerable consistence. These centres were quite broken down, except that the wall of the lateral ventricle was not injured. Both ventricles contained dark serous fluid—the right about six drachms, the left about half that quantity. External to the effusion, to the depth of not more than a quarter of an inch, the brain substance was softened and deeply discoloured, and a yellowish tinge, gradually fading as it receded from the clot, evidently caused by the colouring matter of the blood, extended considerably farther. The arteries showed no indication of morbid change. The specific gravity of a section of the cerebral substance, taken from near the effused blood and including softened brain, was 1043, whereas a corresponding portion of the opposite hemisphere was 1046. No other abnormal condition was observable either in cerebrum or cerebellum. The heart was greatly hypertrophied, particularly on the left side. It weighed 23 oz. The wall of the left ventricle measured one inch in diameter at the base, and three-quarters of an inch near the apex. All the cavities were enlarged, though not proportionately to the hypertrophy of the walls. The diameter of the aorta was increased, and its muscular coats thickened, but they were soft and elastic, and appeared to be of normal structure. The valves were all healthy. The muscular tissue of the heart was of natural colour and consistence, but when examined by the microscope some of the fibres were found to have undergone a fatty metamorphosis, whilst others were evidently quite sound. Both lungs were greatly congested, and the lower lobe of the left one, except its anterior margin, was hepatised, sinking like a stone in water. The cortical substance of the kidneys was also, to a slight extent, the seat of fatty degeneration. There was a large amount of fat on the body generally, and there was more than usual on the surface of the heart. The voluntary muscles were fully developed, and had a thoroughly healthy appearance.

*Remarks by Dr. Robertson.*—The association of apoplexy with hypertrophy of the left ventricle, and without valvular disease, is well known to be of not infrequent occurrence; but along with these conditions it is usual to find distinct evidences of morbid change in the arteries of the brain. In the case described these vessels, so far as could be observed, were quite healthy. They must, however, have been subjected to an abnormal strain from the increased propelling power of the ventricle; and when the pneumonia occurred, involving a large portion of one of the lungs, the return of the blood from the head would necessarily be retarded, increasing the pressure upon the cerebral vascular system: hence, in all probability, the occurrence of the apoplexy.—The cause of the great enlargement of the heart is not so clear. There was no valvular disease to account for it. Some years since, Dr. S. Kirkes (*Medical Times*, 1835, page 515) directed attention to the occasional association of apoplexy, renal disease, and cardiac enlargement without valvular obstruction, regarding the renal as the primary affection and causative of the cardiac hypertrophy. But in his cases the kidneys were in an advanced state of degeneration, and the cerebral arteries were also the seat of morbid change, whilst in mine, the kidney disease was not great, and the arteries were healthy. As already stated, no reliable information was obtained as to the patient's previous habits, so that we may conjecture that possibly the abnormal state of the heart was due to augmented action caused by alcoholic or other stimulus.—The loss of sensation is worthy of note, as it has been thought by some that in apoplexy from sanguineous effusion in the central parts of the brain, it is but little involved. Indeed, Mr. Hutchinson, in a recent number of the *Medical Times and Gazette* (February 3) advances the supposed immunity of sensation in apoplexy of the central parts as a means of diagnosis from injuries of the superficial parts of the brain, where, he states, both motion and sensation are affected. This alleged escape of the sensory function in ordinary apoplexy does not consist with my own experience of many cases in which I have noticed its condition. I have found that sensation is generally impaired, though not so severely as motion. The mistake has probably arisen from the rapidity with which, in most instances, it is at least partially restored, even where there is not the least recovery of the motor power.—There was complete loss of the reflex action of the orbicularis palpebrarum muscle. This is not usual even in severe cases of hemiplegia. Generally, even though voluntary power over the eyelids no longer exists, if the conjunctival membrane is touched, greater or less contraction of the orbicular muscular fibres occurs. Thus, in another case which has been under my observation since the occurrence of the one described, and in which there was total unconsciousness, and palsy of one side, terminating fatally in a few hours, owing to a very large effusion of blood on the surface, and into the substance of one of the hemispheres, the same stimulus applied to the conjunctiva produced distinct though feeble contraction of the orbicular muscles of both eyes.—The presence, even though a little impaired, of the faculty of speech, including language and articulation, where the hemiplegic symptoms were so severe, gives negative support to the view advanced by M. Broca, and which has given rise to so much discussion, that loss of speech is associated with right hemiplegia alone. Since the publication of that observer's remark, my attention has been directed to the point in numerous cases which have been under my care in this institution, and certainly it must be granted that the association of these two conditions is very general. I have, however, notes of several patients where left hemiplegia and impairment of speech were conjoined, but in none did the latter symptom exist to a marked degree.—The comparative irritability of the muscles of the palsied and those of the sound side, as tested by galvanism, has been the subject of considerable difference of opinion. Dr. Marshall Hall considered that the palsied muscles were always more easily affected; but this view has by no means received unqualified support from succeeding observers. In my own case no appreciable difference was observed between the two sides.—The diminished specific gravity of the cerebral substance in the vicinity of the effusion is worthy of note, and is probably to be accounted for by the fact that the portion examined was partially softened.

**SINGULAR INQUEST AT WEST HARTLEPOOL.**—Under this head the local papers detail the particulars of an inquest held on the body of a seaman, named Stemberg, who died somewhat suddenly before Medical assistance arrived. The symptoms detailed by the non-professional witnesses might have been those of strangulated hernia or of poisoning. No Medical evidence, it appears, was called. The policeman who saw the body stated that he saw no marks of violence upon it, but that it was emaciated and diseased! This seems to have satisfied the jury, who returned a verdict of "Found dead from inflammation of the stomach."

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Medical Times and Gazette.

SATURDAY, MARCH 10.

## THE REPORT OF THE COMMITTEE AT THE ADMIRALTY.

No one can read this Report without perceiving that there must be something very defective in the relations of the central Medical with the executive authorities. Such appears to have been the impression on the mind of one at least of the civil members of the Committee, and this Report affords much corroboration of it. Whether this has arisen from want of power, or want of energy, on the part of the Medical authorities, we cannot say; but there is something very wrong somewhere in the working of the Medical Services. There does not appear to be any—or, at any rate, any adequate, representation of Professional feeling.

For the last four or five years men have been appealing through the public press for a redress of many minor matters, which might have been adjusted by half-an-hour's conversation between the official Medical representatives and the executives of the Horse Guards and Admiralty. Instead of this, things were allowed to take their course and acquire strength by doing so. Medical officers ought to repose the same confidence in their own administrators as the combatant officers repose in the Horse Guards and Board of Admiralty; but this is unfortunately not the case. There was no uniformity of regulation, and consequently no uniformity of action and custom. Warrants so loosely framed as to be capable of almost any interpretation; regulations, which ought to have been expressed with perspicuity, contradicting one another; and official memoranda at variance with all the rest! A Medical officer might find himself in *this* position to-day, and in *that* to-morrow, according as he had a different commanding officer. Such a state of things strikes at the root of all discipline, and the combatant officer must often have been as fairly puzzled as the Medical, how to guide his course aright. No one knew, apparently, who or what was right; and the consequence was, that matters were always "cropping up" every bit as distasteful to the executive as to the Medical officer. Then, again, no end of very small difficulties and disagreeables were accumulating, of no earthly interest to one set of officers, but productive of injury and serious discontent to another. Had the representation of our Professional instincts, feelings, and interests been more firmly carried out, we must think the authorities would never have pursued so dangerous and suicidal a policy. If this has not been done, then the official representation is very ineffective.

This inquiry was not set on foot until grave injury had been done to the State. The end has been that the Executive and Medical members of the Committee are unanimous in their Report. We learn that the Admiral presiding entered into and met all the grievances in a most considerate manner; and the other Executives conducted the investigation in as fair and impartial a spirit as was consistent with the interests they represented and had to protect.

Of course the Report is a compromise; but it is not the worse on that account. In dealing with the Army part of it, we could not avoid hitting off such a blot as the absence of promotion for the juniors. We were not singular in this, for almost all the witnesses examined represented the long continuance in a subordinate position as *the* grievance of the junior officers.

In the Naval Service it is different. Promotion has been, and must continue to be for some time, much quicker. Still the Naval Medical Officers undoubtedly were worse off than their Army brethren. The contrast between the two services in respect of rank, pay, allowances, and position was very unfair. The Report gives a good summary of those points of difference which were to the disadvantage of the Naval Medical Officer, and the Committee have endeavoured to rectify these, with so large a measure of success as to have called forth a strong protest from Sir James Gibson against the peculiar favour shown to the Navy. Unquestionably there are a great many personal and social discomforts attending a seafaring life, and the Naval Service is thus placed at a disadvantage in the competition with the Army. It is not every Medical man that loves the sea, and our Army friends must not grudge those who make the sacrifice a few extras by way of a "set-off."

Of course, it is impossible to please every one, and the Recommendations of the Committee for the Naval Medical Service will appear insufficient to some. All the major evils have been removed, and with regard to the rest, "the Committee being divided in opinion, we cannot offer a decided recommendation." The employment of Staff Surgeons instead of Deputy-Inspectors in foreign flag-ships is thought by some a defect; but they admit that there are many reasons to be urged on the other side.

We have gone through the Recommendations with some care, and we venture to express the hope and belief that all *reasonable men will be contented.* The pay is liberal for the junior ranks; the prospect of promotion very satisfactory when compared with the Army; and in all other respects the Committee appear to have been guided by an honest determination to put things upon a fair and good footing. The protest to which we have alluded ought at least to prove to our Professional brethren afloat that they no longer labour under relative disadvantage.

We were glad to see that Lord C. Paget is evidently disposed to adopt the Report of the Committee; and this reminds us that Sir J. Pakington did not lose the opportunity of saying a good word for that Department whose interests he has never lost one opportunity of protecting.

## THE VENEREAL COMMITTEE.

It will be remembered that one of the members of the Venereal Diseases Committee, Dr. Balfour, has dissented from his colleagues as regards that portion of their Report which relates to the prevention of syphilis. The objections taken by Dr. Balfour express the feelings of not a small number of the community. It is imagined that the scheme of compulsory weekly examination, if it necessitate the adoption of a plan of registration, would afford facilities for intercourse with prostitutes, that it would be, in other words, a *protective* and not a *repressive* measure. If a certificate of health were granted doubtless such would be the case. Dr. Balfour believes, also, that the weekly inspection would be degrading to the feelings of the respectable and married men, especially the petty officers, and thinks that "the proper course would be to order all men who contract disease, however trifling, to show it at once to the Surgeon, and in neglect of their doing so, to punish them for disobedience of orders."

The Committee, generally, are of opinion that compulsory measures would be less necessary if it were possible to compel or induce men to confess to the existence of disease, by modifying existing rules, so as to throw greater responsibility on the men for not at once reporting to the proper official the first signs of illness. Dr. Balfour is disposed to extend the details of the present Act but slightly; he would not allow prostitutes to loiter about for hire, nor to assemble together in public or night houses; he would make it an offence on the part of keepers of brothels to harbour a diseased woman; he would give a magistrate the power to send a suspected or loose person to the Lock Hospital for examination and detention, and provide ample room for all voluntary applicants, who may likewise be detained by order of the magistrate, if need be; he further allows that all men, save married men and sergeants, going on furlough should be examined, and again on their return to camp or quarters, thus recognising in fact the principle of compulsory examination in a partial manner. With regard to married men a difficulty arises, in so far that they are by no means infrequently diseased, conveying the mischief to their wives, who may in turn hand it on to others. It is worthy of notice that Sir Henry Storks, no mean authority, is an advocate for the inclusion of the married as regards preventive measures.

The compulsory system has been very successful when fully carried out, as appears from the report of Mr. Inglott, the Comptroller of Institutions at Malta, who writes:—

"The Malta law, you will observe, does not involve a system of legal recognition of public prostitution; it does not licence females to the unlawful occupation, but simply places those who practise it under a kind of surveillance, with the view of obtaining a sanitary advantage by enforcing a measure which tends to mitigate or prevent the awful consequences of neglected syphilitic affections. Besides periodical inspections, the Malta law also enjoins the establishment of lock Hospitals, without which the good results I have described would not have been obtained."

In the case of islands, the law such as obtains in Malta can be fairly and effectually applied, because all sources of access of diseased women can be cut off or guarded against, but under other circumstances, a great difficulty crops up. Take Gibraltar, for instance; it is there found impossible to prevent Spanish women coming into the place and infecting men freely enough. Such would be our case.

If the Government should determine to carry out the recommendations of the Committee—and these recommendations should be successful in garrison and sea-port towns—the public must expect further legislation in reference to the community at large.

A good deal has been said about the control of prostitution in Paris, but the working of police regulation there is much misunderstood. In France they deal only with what may be termed "notorious" prostitutes, and do not touch the details of clandestine prostitution. In reference to legislative enactments, it must be remembered that the class of prostitutes which infect our soldiers and sailors belongs indeed to the same category as that to which the Parisian police regulations are applied. Registered women in Paris are "subjected to such regulations as should disgust them with their position and induce them to make every effort to escape it." They certainly are compelled to keep with them a quasi-certificate, indicating their name, address, and the date of the last inspection, which perhaps is open to objection, but in addition they are obliged to afford information at any time to the police, to present themselves for inspection each fortnight, not to leave home until dusk, and to return to their homes before 11 p.m.; they dare not congregate, walk together, be accompanied by men or frequent public places; their dress must be simple—at least, not conspicuous; they cannot sport themselves in any open vehicle, nor show themselves at their windows. Should they infringe in any of these particulars they are punished. The French make their notorious and ill-behaved women act decently under pain of retribution. There cannot be a question that it would be a very great boon if the horrible and open debauchery and the licentious manners of many of our own prostitutes could be similarly regulated; it would then be possible for the respectable members of society to frequent many places which are now wholly given up to the possession of loose women.

French administration, it is affirmed, does not create tolerated houses, but exercises the most strict supervision over them, making the mistress of each house responsible to the fullest extent. All women, when diseased, are sent to the Hospital for treatment. Such are the statements contained in the Appendix of the Report of the Commission.

Diseased prostitutes should be regarded as public nuisances and dangers, and it is the duty of the Legislature to devise proper means for remedying the evils they produce, without giving encouragement to immorality.

Prostitution is equally a crime whether syphilis is present or absent in those who practise it. It is possible to legislate for the accompanying syphilis alone. The great and all-important thing to avoid—that, indeed, which would afford actual assistance to the spread of prostitution, is the granting of *anything* approaching the character of a certificate of health—in fact, a licence to prostitute. Adopt only the plan of detecting and detaining every diseased woman until she can by no possibility syphilise men, and lessen the chances of such an occurrence by the periodical examination (with the view of detecting the earliest signs of mischief) of those who expose themselves to the risk of disease.

## DIETARIES OF THE POOR IN THE METROPOLIS.

Amongst the numerous anomalies consequent on our charming system of local self-government, not the least appears to be the variety of diets adopted for paupers in the Workhouses of the metropolis. The means of securing a uniform scale of diet for the poor—such a scale as should not be so tempting as to offer a premium to the idle, nor so meagre as to operate harshly upon the deserving poor—would be to throw upon the Poor-law Board the responsibility of fixing the quantities and quality of the food. Under the existing arrangement each Board of Guardians or Directors follows its own sweet will in this respect, and, subject to the sanction of the Central Board,(a) regulates the degree in which it will starve or stuff the occupants of its Workhouse.

It will not be uninstructive to observe, from the following table, the allowances given in some of the metropolitan workhouses. These cases have been selected as showing the extremes of (pauper) luxury and parsimony:—

*Scale of Dietary for Able-bodied Men, per week.*

| | | Parish or Union. | | | |
|---|---|---|---|---|---|
| | | Hampstead, St. John. | Bethnal-green, St. Matthew. | Chelsea, St. Luke. | Fulham. |
| Bread .. | .. ounces | 118 | 92 | 84 | 96 |
| Meat .. | .. " | 10 | 15 | 15 | 15 |
| Potatoes | .. " | 16 | 24 | 1½ | 32½ |
| Cheese | .. " | 11 | 8 | 8 | 8 |
| Pudding | .. " | 14 | 28 | 14 | 14 |
| Gruel .. | .. pints | 10½ | 10½ | 10½ | — |
| Soup .. | .. " | 4½ | 3 | 4½ | 4½ |
| Broth .. | .. " | 1½ | 4½ | 4½ | 4½ |
| Totals:— | | | | | |
| Solids | .. ounces | 169 | 167 | 122½ | 165½ |
| Liquids | .. pints | 16½ | 18 | 19½ | 9 |

It is true that the Medical Officers have, by the Poor-law Regulations, a finger in the composition of the pauper pie; but, when we have before us recent examples of the treatment experienced by them when interfering on behalf of the poor under their care, it becomes unnecessary to point out the small chance they possess of amending the diet in Workhouses governed by Boards of Guardians who have in view no higher object than the depression of their poor-rate. It is, of course, undesirable to feed a pauper better than the struggling artisan who can barely pay the rate which defrays the cost of the Workhouse rations. Surely, however, it is about the worst possible thing for public morality that the convicted felon should be dieted better than either the ratepayer reduced to the Workhouse, or the honest workman straining every faculty to keep the wolf from the door.

To realise the actual state of facts in this particular, take the ordinary diet for a week at Portland Prison, as stated in 1863. It was, in ounces—Bread 150, cooked meat 39, potatoes 115, oatmeal 14, cocoa 2¼, milk 14, treacle 6¼, flour 16½, barley 3, suet 2¼, tea ½, sugar 3—giving a total of 364¾ ounces. Compare this with the diet allowed to the able-bodied at the Workhouse of St. Luke's, Chelsea, as before set forth, or put the allowance at the Portsmouth Convict Establishment—which gave a weekly total of 397 ounces—in contrast with the allowance at the Workhouse of the Fulham Union, and little room will be left for doubt as to, at least, one of the causes which, session after session, bring before Recorders gangs of the dissolute able-bodied, who receive with glee the sentence which sends them to fatten at the public expense for a further term, or to grow plump while working out a *punishment* (?) which they can do (to use their own expressive words) "on their heads."

## THE DAILY LIFE OF A NAVAL SURGEON.

The daily life of a naval Surgeon is spent in the performance of so many and such varied duties that it is not easy to describe them. It must vary with the station, with the size of his ship, and the causes which influence disease ashore and afloat. In addition to strictly Professional duties he has to perform or superintend the secretariat of his department, and devote a good deal of time to the winding of that red tape which seems so intimately interwoven with all English affairs. The Assistant-Surgeon in a large ship acts also very much as a clerk, and enters the name, age, and quality of each complainant in the "Rough Journal," adding the more prominent symptoms, from the dictation of his superior. The Assistant-Surgeon turns out at an hour Mr. Pepys would call "mighty betimes," and with the Surgeon has seen the sick and has breakfasted by shortly after eight o'clock. He then makes out two lists of the sick, one for the commander and another, called the "binnacle list," for the convenience of those officers who have to direct the police of the ship. The Surgeon has to make morning reports to the captain and to keep returns and a journal of practice, which are forwarded quarterly to head quarters.

By midday these duties have to give way to an inspection of the patients' dietary, dispensing Medicines, and attending to those casual cases which must daily present themselves in a large ship. At sea the wardroom officers dine at two o'clock, but for some reason or other when in harbour they satisfy the *sacra fames* with luncheon at that hour and dine at six. Another visit to the sick and further reports are made between four and six p.m., in order that the executive officers may know the exact number of effective men in the ship before arrangements for the night are made. To the land Practitioner all this seems extremely tiresome, and he shudders at such routine in the small compass of even a line-of-battle ship; fancy being obliged day after day to visit any one room of your house and put an entry to that effect in your note-book; that the housemaid has odontalgia, and the atmospheric electricity has affected the beer so necessary for the due performance of her duties. Let the shore Practitioner contemplate having his valuable time occupied not only in prescribing for patients inside his own house, but feeding, nursing, and writing biographical notices of them, bearing every great and little responsibility which the circumstances peculiar to life on board a ship add to the cares common to his calling. Moreover, the hardest-worked land Doctor can, at all events, feel himself his own master when his work is over for the day, "his mind to him a kingdom is," and no other may "tithe or toll in *that* dominion;" while the naval Medical man is, perhaps, unavoidably the servant of many masters, and liable to vexations which can hardly tend to cheerfulness. In short, the naval Surgeon is at great disadvantage in the treatment of cases. A civil Practitioner might be very severely taken to task if his instrument case was limited to the meagre supply we find in the case "fitted in accordance with the Admiralty regulations;" thus: two silver catheters and two gum elastic catheters. Considering that the former are liable to break, and the urethras of mankind are not of the same calibre, that gum catheters are certain to wear out very soon, and that vesical embarrassments are very common among all persons exposed to the vicissitudes of weather, the idea of the Admiralty "ordaining" that the Medical attendant of some four hundred men should have two silver catheters is astounding; especially as he must have *twelve lancets* and *six pewter syringes.* The list has not been revised for thirty years, but general Surgery has, and the man fresh from Moorfields may feel some surprise that there are no ophthalmic instruments supplied him with which he may deal with the eight hundred eyes for whose safety he is responsible. Adhesive plaisters and pills are made on board by the Assistant-Surgeon as they are required; both are troublesome things to do and must occupy hours that might be spent by a man with profit to himself and country, and all his opportunities for study are interfered with. Even the great naval Hospitals, Lisbon, Haulbowline, Nova Scotia, Cape of Good Hope, etc., can do the naval Surgeon but little good until they and all flagships are provided with inspectors having full administrative powers over the naval hygiene wherever they may be stationed.

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(a) Some places, under Local Acts, are not subject to this restriction.

Most of the cases occurring afloat are Medical, but in the event of battle, and even men of war *occasionally* are exposed to such a danger, the Surgeon may search among his lancets and pewter syringes in vain for an aneurism needle, so much more careful is the Admiralty to guard against the effects of the *prœlia veneris* than the blows of Mars. Of course naval Surgeons provide themselves with necessary instruments, but they do so at their own cost, and are without them at their own peril; for they might be severely blamed if any life were lost through the absence of some appliance for which not even the six syringes would be an efficient substitute. The remedies for all this are surely very simple, and highly necessary, for, although the men and boys entering the Navy are so carefully selected, there is a mortality of fifteen per thousand, while more than double that number break down on active service and are invalided. This is curiously shown in p. 28 of the Statistics for 1862, when the naval population amounted to "58,870 and the total number of cases of disease and injury came to 88,661, making nearly *three entries* on the sick list for every *two* men in the force. The total number of men either temporarily or permanently rendered unfit for active service (*i.e.*, invalided) being 1944; the deaths 902. The days on the sick list were 1,230,120 (p. 301). Now, surely we have said enough to show that the method of working our Profession on board ship is cumbersome and inefficient. The naval Surgeon seems to have no power Medically or Surgically; cramped in what Johnson calls "a prison with the chance of being drowned;" he combats with diseases of low vitality which he can explain but cannot cure; his patients meet with accidents, and the chances are he has not the necessary appliances, and if things go wrong his conduct is blamed, while the future promises but few rewards for a youth of self-abnegation.

England seems keenly alive to the necessity of an efficient navy; each year the old complaints about a scarcity of sailors are repeated. One means of improving matters would be preserving the material she already has, and if she does go through the form of having Medical attendants for her sailors, let these be provided with the powers and appliances which are necessary under all circumstances for the efficiency of Medical men, and let them have that encouragement to exertion and consideration which human nature requires and which no one gives more freely than John Bull to those who deserve well of the Commonwealth.

## THE WEEK.

### THE MEDICAL COUNCIL.

We understand that the Medical Senate of the United Kingdom is summoned to meet on the 17th of May. It is in vain to prophesy what amount of legislative work may be done this year; but we suspect that whether the Council succeed or not in obtaining from Parliament any amendment of the Medical Act, some very important results may be obtained though the use of "moral force," or, in other words, from the accurate knowledge of facts, and the plain inferences which common sense may draw from them. It is rumoured that a confidential report has been received from the members of the Council deputed to visit the examinations of the several licensing bodies, and that the tenour of this is such as to cause discomfort and alarm to the institutions whose short-sighted policy it is to dispense diplomas and titles to register upon the system of easy examination in one single branch of the healing art.

### THE CATTLE PLAGUE.

Our Parliamentary intelligence gives information only too precise and positive as to the spread of the cattle plague, and as to the failure of Mr. Worms' well-meant medicine. It disposes also, summarily, of the ungenerous slander which had been cast at Professor Simonds by the quackery-supporting papers, to the intent that he had refused to acknowledge that any of Baron Rothschild's cattle which recovered under the Worms' system had really had the cattle plague. Alas! the poor beasts settled this themselves, for after being cured of what the Wormsites said was cattle plague, though Professor Simonds said it was not, they did really die of the disease of which they had been said to have been cured. Meanwhile, it is a significant fact, that by an Order in Council, dated March 3, the Cattle Plague Commissioners are authorised and enjoined to save from the poleaxe and reserve any animals at their pleasure for experimental treatment.

### WORKHOUSE INFIRMARIES.

The meeting of the Association for the Improvement of the Infirmaries of Workhouses, which took place at Willis's Rooms on Saturday last, is at least an evidence that the public are fully alive to the necessity of reform in the Hospital management of the sick poor. It was attended by an Archbishop, several members of the Peerage and of the lower House, and by a large number of influential persons. We are glad to see that the subject is receiving the attention which it merits, and we should rejoice at the erection of infirmaries for the treatment of pauper patients, and at the appointment of adequate staffs of Medical officers and inspectors. But we doubt whether the London public are prepared to be taxed especially for this end, and we very much question the probability of the weak Government at present at the head of affairs venturing to impose a new Metropolitan rate. Whilst we earnestly wish that the Association may be successful in obtaining a better system of attendance and nursing for the sick poor, we would strongly advise them not to waste their energies in devising schemes too large to be realised.

### THE LATE DR. CONOLLY.

In another column will be found an obituary notice of this distinguished Physician and philanthropist, from one whose pen is tinged with the affection produced by the closest ties. We cannot, however, let pass the opportunity, on the part of the proprietors and conductors of this journal, of expressing their profound respect for the memory of one whose communications have so often given value to our pages. Amongst friends he was one of the most genial, kindly, and social of mortals: what Dr. Johnson would have described as "a clubable man;" and trivial though it seem, the possession of qualities which make a man beloved in society is no slight addition to the more substantial excellences of human character. In Professional life we need hardly say that he was much consulted, especially on maladies of the nervous system, and that few Practitioners met him without deriving pleasure and instruction from the interview.

### THE UNIVERSITY OF LONDON CALENDAR FOR 1866 AND THE B.S. DEGREE.

This calendar contains a notice of several important alterations in the Regulations relative to examinations for degrees. These shall be noticed next week. Meanwhile, we desire to call attention to the new degree of "Bachelor of Surgery," the preparations and qualifications for which leave nothing to be desired by those who demand that the Surgeon should not be a mere "one qualification" man, representing the ancient handicraftsmen, but that he should be a thoroughly instructed General Practitioner, with special knowledge of Surgery superadded. Every candidate for the B.S., must already possess the M.B., and must have attended a special course of Operative Surgery on the dead body. The examination will constitute a practical test of the candidate's knowledge in Surgical Anatomy, operations, diagnosis, and treatment. Students must bear in mind that this is not yet a *registrable qualification;* the possession of the B.S. would not yet entitle a man to register as having a recognised Surgical qualification, with its attendant privileges. But never mind. It remains to be seen whether the mere Membership of the College of Surgeons will *go to the wash* (as old women say) and whether its claims will stand. A B.S. + M.B. must be worth more some day than a M.R.C.S., which requires in its fortunate possessor no examination in Medicine, Materia Medica, Chemistry, and Botany.

### THE REGISTRAR-GENERAL'S WEEKLY RETURNS IN LONDON AND PARIS.

It is an old and too true saying that we are apt to overlook the immense labour required to get any work done smoothly and punctually when that work requires many hands for its accomplishment. We in London are accustomed to look out for the Registrar-General's Weekly Returns every Wednesday morning, just as one would for the price of the funds, or the latest telegrams; and we see, as a matter of course, how many have died, from what causes, in every corner of that "province covered with houses" which we call London. But we ought not to forget that some praise is due to the authors of a system by which returns from so many officers are received, recorded, and tabulated, and the results published so unerringly and so promptly. All over London, day by day, the district Registrars are receiving entries of deaths—in the small and better districts perhaps from two to six; in the larger and worse districts from twenty to forty per week. On Sunday just as much of the entries as concerns the statistician and sanitarian is copied on a convenient sheet and put into the post, directed to the Registrar-General, at Somerset House. No *names* are copied into this sheet; but merely the fact of death, with time, place, cause, sex, and age. On Monday these are tabulated and printed, and on Tuesday the Weekly Return is ready for distribution to the newspapers. Then all who take an interest in social and sanitary questions can see at a glance the death-rate, its causes and varieties, in every one of the 135 subdistricts; and thus it is quite impossible that any groundless panic should arise with reference to any alleged wholesale poisoning, whether from epidemic or other sources. Nor does the benefit rest here; for whilst the public is disabused of any unreal fear, the original Returns for the Registrars are forwarded every Wednesday to the Medical Officers of Health for each respective district, and these functionaries are thus able at once to cause visitation and purification of any houses in which deaths from contagious disease have really occurred.

Here we may express our thanks to Mons. the Sénateur Haussmann, Prefect of the Seine, for his kindness in sending us copies of the *Bulletin de Statistique Municipale*, relating to the city of Paris, from January to October, 1865. This bulletin is directed by an official ordonnance to be published monthly, and contains the number of births and deaths, the causes of death in each arrondissement, and an account of the meteorology, besides any other statistical matter which may arise from time to time. It is a quarto publication, extremely elaborate, with diagrams of the temperature of air and water for each day of the month. The causes of death, the number of deaths in private houses and institutions, of newly-born infants, etc., are all detailed with a completeness and precision such as might have been expected from French officials. But, if we may do so with courtesy, we would venture to point out to M. le Baron Haussmann that the smaller and less elaborate sheet of our Registrar-General, by the fact of its publication *weekly*, is really of more practical use as a means both of consoling the public mind and of averting real danger; and we suggest that the publication of such a *weekly* record in every capital of every European country, and especially in Paris, as being *par excellence* the capital of Continental Europe, would be a march of real progress in the history of civilisation.

### REGISTRATION OF DEATHS IN SCOTLAND.

Our readers are aware that a considerable injustice is enacted by the law of registration of deaths in Scotland. The Medical certificates of the cause of death, which in England and Ireland are supplied as a free-will public service by the Medical Profession, in Scotland are wrested from the Medical Practitioner under the threat of the infliction of serious penalties. To say nothing of the grossly unconstitutional character of a law which compels a Profession to render unrequited service to the public by an enactment of penalties and confiscation, the insult which the law fixes upon the Physicians and Surgeons of Scotland is worse than the injustice which it inflicts. We are very glad that the Glasgow Medical Association are not content to sit down quietly under such a flagrant grievance. At a meeting recently held at the Trades' Hall, it was announced by the Council of the Association that they were about memorialising every Scottish member of Parliament, together with the Colleges of Physicians and Surgeons, in order to obtain their co-operation in an effort to obtain a repeal of the obnoxious law. One argument used by the Association is, that although penalties are thus imposed, in practice they entirely fail to extort the information required. It was stated at the meeting by Mr. Walker "that the Returns issued from the Registrar-General's office for Scotland were not worth the paper on which they are printed; and that no Medical man acquainted with the facts put the least reliance on the document." This is just what we should expect. An unjust tax is always paid grudgingly, and evaded if possible. It is to be hoped that this shameful anomaly will not be allowed to continue law. The whole influence of the Profession in the three Kingdoms ought to be exerted for its revocation.

### POLITICO-MEDICO-MILITARY MATTERS.

We could not discover that Lord Hartington, in moving the Army Estimates on the 5th inst., gave any promise that the recommendations contained in the Report of the late Committee at the Admiralty would be embodied in an authoritative document. It surely cannot be that the Government is going to defer action until the result of the next competitive examination at Chelsea is known? Prophets are not wanting who still declare that nothing will be done for the Army Medical Officers; but we cannot believe them.

The Late Hong Kong Affair.—At the same debate this subject was touched upon by many members. General Peel remarked, on the saving effected by the removal of a regiment from China, that he was afraid there were very few more of that regiment to withdraw, in consequence of a total neglect of all the warnings of Medical men. Several other members adverted to the same subject, and it will be fully investigated before long, Colonel North, the member for Oxfordshire, having taken up the matter.

We were very glad indeed to see that Colonel P. Herbert adverted to the very costly fittings of some of our recently-constructed military Hospitals. The plate-glass, handsome chandeliers, and such like extravagances are ridiculous in such buildings. They answer no end as far as the health and treatment of the soldier are concerned, and we have been assured that these unfortunate men stand in constant dread of "breakages" and "barrack damages." Whatever ministers to health, cleanliness, comfort, and Hospital administration is all very well; but we heartily assent to a remark made, we believe, by the Commander-in-Chief, one day whilst visiting one of these kind of Hospitals, that such fittings were as grossly unfair to the private soldier as they were unnecessary.

A COLD BLAST.—In the obituary column of the *Times* of the 6th inst. we noticed the following record of deaths:—eight over 60 years, six over 70, four over 80, and two over 90 years of age. If the sudden accession of cold weather is terribly fatal to the aged, it is, at any rate, some "set off" to see that some of us have a good chance of dying old.

### BURIAL ALIVE.

THE abundance of other topics hinders us at present from saying a few words on the conditions under which there may be real danger of burial before life is quite extinct. Now we will only reproduce the cases reported by Cardinal Archbishop Donnet in the French Senate, in the discussion on a petition that the time between death and burial should be lengthened. We will add one instance, which we have heard on the best authority:—About thirty years ago, a young woman of 18, daughter of a Madame Laligand, living in the Rue des Tonnelliers, at Beaune, in Burgundy, was supposed to have died. The ordinary measures were taken for interment. The body was put into a coffin and taken to the church, the funeral service was said, and the *cortège* set out for the cemetery; but on the road between the church and the cemetery, the supposed dead recovered power of motion and speech, was removed from the coffin, put to bed, recovered, married, and lived eighteen years afterwards. She said that she had retained her consciousness during the whole of her supposed death, and had counted the nails that were driven into her coffin. Statements such as these, and such as those made by the Archbishop, will surely be subjected to the ordeal of a French scientific commission, and we may suspend our judgment for the present. To return to his Eminence. He said that he had the very best reasons for believing that the victims of hasty interments were more numerous than people supposed. He considered the rules and regulations prescribed by the law very judicious; but, unfortunately, they were, particularly in the country, not always executed as they should be, nor was sufficient importance attached to them. In the village he was stationed in as assistant-curate in the first period of his sacerdotal life he saved two persons from being buried alive. The first was an aged man, who lived twelve hours after the hour prescribed for his interment by the municipal officer. The second was a man who was quite restored to life; and in both cases a trance more prolonged than usual was taken for actual death. The other instances, says the *Times'* correspondent, I give in the words of the Archbishop:—

"The next case that occurred to me was at Bordeaux. A young lady who bore one of the most distinguished names in the department had passed through what was believed to be the last agony, and as apparently all was over, the father and mother were torn away from the heartrending spectacle. As God willed it, I happened to pass by the door of the house at the moment, when it occurred to me to call and inquire how the young lady was going on. When I entered the room the nurse, finding the body breathless, was in the act of covering the face, and, indeed, there was every appearance that life had departed. Somehow or other, it did not seem to me so certain as to the bystanders. I resolved to try. I raised my voice, called loudly upon the young lady not to give up all hope; that I was come to cure her, and that I was about to pray by her side. 'You do not see me,' I said, 'but you hear what I am saying.' My presentiments were not unfounded. The word of hope I uttered reached her ear and effected a marvellous change; or, rather, called back the life that was departing. The young girl survived; she is now a wife and the mother of children, and is this day the happiness of two most respectable families."

The Archbishop mentioned another instance of a similar revival in a town of Hungary during the cholera of 1831, which he had heard that day from one of his colleagues of the Senate as they were mounting the staircase. But the last he related is so interesting and made such a sensation, that it deserves to be repeated in his own words:—

"In the summer of 1826, on a close and sultry day, in a church which was excessively crowded, a young priest who was in the act of preaching was suddenly seized with giddiness in the pulpit. The words he was uttering became indistinct, he soon lost the power of speech, and sunk down on the floor. He was taken out of the church and carried home. All was thought to be over. Some hours after the funeral bell was tolled, and the usual preparations made for the interment. His eyesight was gone; but if he could see nothing, like the young lady I have alluded to, he could hear, and I need not say that what reached his ears was not calculated to reassure him. The Doctor came, examined him, and pronounced him dead; and after the usual inquiries as to his age and the place of his birth, etc., gave permission for his interment next morning. The venerable bishop in whose cathedral the young priest was preaching when he was seized with the fit came to his bedside to recite the *De Profundis*. The body was measured for the coffin. Night came on, and you will easily feel how inexpressible was the anguish of the living being in such a situation. At last, amid the voices murmuring around him, he distinguished that of one whom he had known from infancy. That voice produced a marvellous effect and superhuman effort. Of what followed I need say no more than that the seemingly dead man stood next day in the same pulpit. That young priest, gentlemen, is the same man who is now speaking before you, and who, more than forty years after that event, implores those in authority, not merely to watch vigilantly over the careful execution of the legal prescriptions with regard to interments, but to enact fresh ones in order to prevent the recurrence of irreparable misfortunes."

### MEDICAL OFFICER TO THE POOR-LAW BOARD.

WITHOUT reflecting for one moment upon the value of the body of gentlemen at present acting as Poor-law Inspectors,—who, we have reason to know, have almost all had at various times opportunities for improving the position of Medical officers, of which they have in many instances availed themselves,—it will be generally admitted that, in addition to, and in concert with, the general supervision exercised by those Inspectors, the mode of administering relief to the *sick* should form the subject of special inspection—inspection entrusted to men possessing peculiar aptitude for the work—to men, therefore, who have received an education of which each step has had immediate reference to the abnormal conditions of human health—inspection, in short, by Medical men. In the year 1865 Dr. Edward Smith was appointed as a Poor-law Inspector. This was the first instance in which the post was held by a Medical man: barristers had held it; baronets had adorned it; country gentlemen had disported themselves therein. It remained, however, for Mr. Villiers to appoint a Medical man as Inspector. The appointment of Dr. Smith gave general satisfaction apart from any Professional question. To us, however, it seemed to be an approach to the Medical inspection of which we have spoken above, and was, therefore, hailed as a good omen. Our anticipations have proved correct

—Dr. Smith has been appointed as "Medical Officer to the Poor-law Board," in addition to holding the appointment of Poor-law Inspector, and Medical officers have now a right to hope that the Board, when assisted by his advice, will have better opportunities for appreciating the difficulties and troubles of the Profession to which he belongs than they have hitherto appeared to possess. There can be little doubt that the future progress of Poor-law Medical relief will justify Mr. Villiers' selection—a selection made, doubtless, only after careful deliberation.

### FROM ABROAD.—BRUSSELS REGISTRATION RETURNS—"PROFESSOR" HOLLOWAY IN ITALY—TREATMENT OF CARBUNCLE.

M. Janssens has published the registration returns of Brussels for 1865, and we give here some of the figures. The population of the city, which amounted to 187,155 on the 12th January, had, by the 31st December, increased to 189,337, viz., 92,805 males and 96,532 females; the augmentation having, therefore, been during the year 2182 inhabitants, of whom 1347 were males and only 835 females. During the year there were 6021 *births* registered; of these 3118 were males and 2903 females. Of the 6021 births, 4572 (2371 males, 2201 females) were legitimate and 1449 (747 males and 702 females) illegitimate. During the year 168 twin children were born, 98 male and 70 female—36 being illegitimate. There were 1730 *marriages* solemnised during 1865 and 15 divorces decreed. The *deaths* amounted to 5853 (2960 males and 2893 females), comprising in that number 318 infants born dead. The number of deaths for the first six months of the year amounted to 3117, and of the last six months to 2736; the maximum monthly number (567) occurring in July, and the minimum number (394) in September. The month of November, which, with March, is usually the most fatal month of the year, only this year produced 396 deaths, 533 occurring in March. Among the deaths 1453 occurred in hospitals, hospices, or prisons, while 1830 indigent persons died *à domicile*. Among the principal causes of death the following may be specified:—Phthisis, 860; bronchitis and pneumonia, 545; organic diseases of the heart, 415; enteritis and diarrhœa, chiefly in children, 539; variola, 236; tubercular meningitis, 274; croup and diphtheric angina, 211; apoplexy and ramollissement of the brain, 193; mesenteric disease, 212; scarlatina and measles, 220; convulsions in children, 213; puerperal deaths, 79; deaths from accidents, 76; typhoid fever, 98; cancer, 61; suicides, 41 (24 during the first and 17 during the last six months of the year); alcoholic delirium, 21. Of the total number of deaths, 5535, obtained by excluding the infants born dead, 1404 took place under one year of age and 1148 between one and five years of age, *i. e.*, about one-half of the entire mortality, occurring before the fifth year. Between five and twenty there occurred 370 deaths; between twenty and forty, 792; between forty and sixty, 840; and above sixty, 985 deaths. The following are the returns of the four principal Hospitals:—On the 1st of January, 1865, there remained 1262 patients, and 15,530 were admitted, making a total of 16,792 persons treated during the year. Of these 14,256 were discharged, 1367 died, and 1169 remained in the Hospitals.

The question of admitting non-Medical advertisements into Professional periodicals has been often discussed; and sometimes our French *confrères* have been rather severe in their remarks upon the somewhat heterogenous assemblage which gains admission to our own and contemporaries' covers. Whatever views may be entertained on the matter, few, we believe, would ever suppose that the illustrious "Professor" Holloway would succeed in invading the pages of any Medical journal in any part of the world; but sure it is that he has obtained a conspicuous place on the cover of a well-known Italian periodical—the *Gazetta Medica di Torino*, of seventeen years' standing, and edited by Professor Borelli. Whether deceived by the assumption of a title or tempted by large payment, certain it is that the two "Professors" seem to have joined heart and hand; for not only is a long advertisement concerning the pills and ointment admitted, with a suitable graphic illustration, but Professor Borelli announces the gratifying fact that his journal may be read gratis at the central establishment in the Strand, where also advertisements and subscriptions are received.

M. Gosselin read a report on a memoir on subcutaneous incisions in carbuncle, by M. Alphonse Guérin, sent into the Academy some two years since, and since amplified and published by its author in the *Dictionnaire di Médecine et de Chirurgie Pratiques*. The procedure consists in plunging the narrow blade of a straight, probe-pointed bistoury into the centre of the carbuncle, and then, having turned it on its flat side, insinuating it beneath the skin to beyond the tumified margin. Having reached this point, the Surgeon, directing the cutting edge towards the deep-seated parts, incises from without inwards until he feels the sensation of resistance overcome. This incision is followed by three others, each radiating in the same way from the centre. M. Gosselin agrees with M. A. Guérin as to the danger of producing erysipelas and purulent infection by the ordinary incisions of anthrax, and he has in his own practice discontinued them for some time past. When the anthrax is small, he leaves it to itself, and a spontaneous cure is always the result; and when it is large he practises a great number of punctures, with the object of relieving the strangulation. M. Gosselin has only had the opportunity of trying M. A. Guérin's mode of procedure five times, and that when the anthrax had reached an advanced stage; so that he is unable to judge of its advantages when employed at an early stage. In his cases no erysipelas followed.—M. Velpeau, without adverting to M. A. Guérin's plan, which stands in need of yet more evidence in its favour, cannot agree with M. Gosselin in stigmatising free and open incisions. As erysipelas is, at certain times, whether in Hospital or private practice, induced by the most trifling circumstance, even the bite of a leech, it must be very difficult to determine how far an erysipelas which may complicate anthrax has been due to the incisions employed. His experience does not correspond with that of M. Gosselin as to the frequency with which erysipelas follows incision of carbuncle, as in very many cases such is never observed—unless, indeed, the erysipelas be prevailing epidemically. He feels convinced that incisions in carbuncle are useful in proportion to the number that are made. A small anthrax, which is, in fact, only a large boil, may heal without them; but when it reaches a large size, parallel incisions should be performed, at a centimetre's distance from each other, these being also carried pretty deeply and sufficiently long to reach beyond the affected parts on both sides. There should be no fear in making as many as are required, even from 15 to 20, if necessary, the patient, if he dread the pain, submitting to anæsthetics. This is the most certain and the least dangerous remedy, and so efficacious that M. Velpeau feels no temptation to change it; and M. Nélaton, who had once renounced incisions, has found it necessary to recur to them. How mere punctures can suffice for the treatment of large carbuncle M. Velpeau cannot imagine; and although small anthrax will get well of its own accord, yet even here multiple incisions will abridge the cure and render it more assured.—M. Guérin, sen., observed that he had long remarked that the very painful incisions in anthrax favour the development of erysipelas and purulent infection. So in the case of tumours, ablation by the knife much more frequently is followed by erysipelas than when caustics are employed—the mouths of the divided vessels under the operation of these last not remaining patent and apt for the absorption of the altered liquids. So in anthrax, spontaneous opening renders the occurrence of erysipelas less possible than when this is effected by incision, organic changes having obliterated the vessels and rendered absorption less active. The method now proposed by M. A. Guérin must, in fact, be rather regarded as a means of effecting *debridements* under the skin than as an example of the subcutaneous method, properly so called, which has for its object the prevention of the occurrence of suppuration, which in anthrax is already present. Still, incisions so made are certainly preferable to large incisions, open to the air.—M. Michon observed that M. Gosselin could not, when he spoke of punctures in anthrax, which, like M. A. Guérin's incisions, are mere means of *debridement*, have had in view the formidable form of anthrax which keeps increasing in size, and for which the large incisions mentioned by M. Velpeau are alone efficacious. Little matters whether they are crucial or parallel, providing that they are sufficiently extensive. No large anthrax is ever cured spontaneously; and M. Nélaton has abandoned the opinion he once held on this point, as well as that the affection is always fatal to the aged. M. Michon has seen an anthrax as large as the crown of his hat completely cured by free incisions, in an aged gentleman. He believes also that erysipelas more easily complicates carbuncles that have not been effectually incised than those which have been treated by large incisions. M. Cloquet also insisted upon free incisions, which will only prove efficacious on the condition of their being made deep and extending beyond the limits of the part affected. He has only met with erysipelas after incisions that have been made too small.—M. Larrey likewise believes that it has been the practice of making the incisions too superficial that has brought this mode of treating carbuncle into disfavour.

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PARLIAMENTARY.—THE CATTLE PLAGUE—VOTES TO THE NAVAL MEDICAL ESTABLISHMENT—METEOROLOGICAL OBSERVATIONS—DISINFECTANTS FOR THE CATTLE PLAGUE: M'DOUGALL'S POWDER—MR. WORMS' TREATMENT: REPORT BY PROFESSOR SIMONDS—CAPITAL PUNISHMENT.

In the House of Commons on Thursday, March 1,

In answer to Mr. Sandford,

Mr. T. G. Baring said the Third Report of the Cattle Plague Commissioners would, in all probability, give an account of the experiments as to the cure of the plague.

Votes of £57,368 for the Naval Medical establishments, and £75,664 for Medical stores for the Naval Service were agreed to.

On Friday, March 2,

Colonel Sykes asked the President of the Board of Trade whether any and what arrangements were making for taking systematic and permanent meteorological observations either at the Board of Trade or at the Greenwich and Kew Observatories, for British objects, and whether foreign Governments would be invited to co-operate, by causing simultaneous meteorological observations to be made with a view to arriving at a knowledge of the physical laws which cause atmospheric changes.

Mr. Milner Gibson: After the death of Admiral Fitzroy it was thought desirable to refer the question of the future arrangements for the conduct of the business of the Meteorological Department to a Committee of Inquiry, the members of which should be named by the Admiralty, the Board of Trade, and the Royal Society. This has been done, and the Committee are on the point of making their report. Until this report has been received and considered it is not possible to give a satisfactory reply to the question of my hon. friend.

On Monday, March 5, in the House of Lords,

Lord Granville announced that he should propose on Thursday that the Standing Orders be suspended, in order that the Cattle Plague Bill might pass through all its remaining stages on that day.

In the House of Commons,

Mr. W. Miller asked the Secretary of State for the Home Department whether he is aware that the Cattle Plague Royal Commission, in their endeavours to discover the best disinfectant, referred the question only to a single individual—namely, Dr. Angus Smith, who reported in favour of carbolic acid, or M'Dougall's powder, of which preparation he himself is co-partner with Mr. M'Dougall, and which is generally believed by chemists to be no disinfectant at all.

Mr. Baring said that the question was one which ought to be put to the member for Calne (Mr. Lowe), who was a member of the Commission. Dr. Angus Smith was annoyed at the reference to himself, and he wished that the question should be deferred until the report he prepared had been made and presented to Parliament. He had, however, given him the following information on that part of the question:—"I never had any interest, profit, or advantage from the sale or manufacture of M'Dougall's powder, or of any other substance made by him, or by anybody else." Dr. A. Smith added:—"I do not recommend M'Dougall's powder as the best disinfectant." And upon the third point he said:—"Carbolic acid is not M'Dougall's powder, but a liquid not manufactured by M'Dougall." With regard to the second branch of the question, he had received the following from Mr. Montagu Bernard, the Secretary to the Commission:—"Dr. Angus Smith was the person employed by the Commissioners to report on disinfection and disinfectants. He is an eminent chemist, as every one knows, and had previously turned his attention to the subject. After a long series of experiments on a great number of substances he reported in favour of chlorine, muriatic acid, sulphurous acid, and the two tar acids (otherwise called carbolic and cresylic acids). On a consideration of his report, the tar acids were deemed by the Commissioners most likely to be efficacious and best suited for general use. They then instructed a younger, but distinguished chemist, Mr. W. Crookes, F.R.S., to go to a district where the disease was raging to test in several ways the efficacy of the selected substances, and to ascertain by personal experience the best and simplest modes of using them. Mr. Crookes has been for some time at work, and the accounts received from him are very satisfactory. M'Dougall's powder is a preparation containing carbolic acid, with sulphites of magnesia and lime. It was among the many substances tested by Dr. Angus Smith, and he recommended it as useful in some ways, making no secret of the fact that it had been first produced by himself, together with Mr. M'Dougall, ten years ago."

In answer to the latter part of the hon. member's question, he had to state that the Home Office had no means of forming an opinion in regard to disinfectants, but when the Cattle Diseases Act was passed the Secretary of State for the Home Department directed a letter to be written to the Royal Commissioners, asking them to furnish him with the best plan for disinfecting premises, etc., from the contagion of the cattle plague. That information was supplied, and it had been circulated throughout the country. From the constitution of the Commission, and the manner in which they had directed the experiments to be made, it was impossible to suggest any body of persons better qualified to come to a proper conclusion on the matter.

On Tuesday in the House of Lords, Earl Granville read the following report by Professor Simonds on Mr. Worms' treatment of the cattle plague:—

"Veterinary Department of the Privy Council-office,
"Princes-street, March 3, 1866.

"Sir,—I have the honour to report that, acting on your instructions, I have to-day visited Mentmore for the fourth time, for the purpose of ascertaining the progress of the cattle plague in Baron Rothschild's herd, and the results of the treatment adopted by Mr. Worms. Since my last visit, February 22, the disease has made rapid progress, and I regret to add that the fatality has kept pace with its advance. It appears that, in consequence of the deaths which had occurred up to February 22, and the number of animals which were then sinking more or less rapidly from the disease, it was determined to give trial to Mr. Worms' remedy as a prophylactic as well as a curative agent, and, accordingly, all the remaining animals of the original 119 were dosed on succeeding days with the mixture. With a view also to limit the number of cases, the unaffected animals were taken out of the straw yards and placed in small lots in nine different yards, distant from each other, and temporarily fitted up on the south side of one of the plantations. The location of these yards and the manner of their construction were well suited for the required purpose. Before describing the state of things as now existing, it will be necessary shortly to refer to my former reports of February 15, 19, and 22, in which the particulars were given of the first 25 animals which had been removed from the herd and put under Mr. Worms' treatment. In the first of these reports it was stated that ten animals, which, at the time of my examination, gave no evidence of disease, were being treated by Mr. Worms, and that one—the original animal attacked—had succumbed to the malady. In my second report I stated that four other unaffected animals had also been taken out of the yards for treatment, with five more which were the subjects of the cattle plague. In my third report I stated that in the interim three of the animals which were unaffected at my first and second visits had been attacked with plague, and in addition to these other cases had also occurred. A summary was attached to this last-named report, which is here repeated:—February 22, 1866—Unaffected, 11; affected, but not severely, 5; died, 5; dying, 4—25. On my visit to-day I found that the whole of the 11 animals referred to in the summary, and which had been regarded by Mr. Worms as having been cured, had been attacked, and that nine of them had died. Under the peculiar circumstances of the case, it may be as well to add the result of the treatment of these 25 animals as distinct from the rest of the herd. Numbers 1, 3, 4, 5, 6, 7, 10, 12, 13, 14, 15, 16, 17, 18, 20, 21, 22, 23, 24, and 25 are dead, and numbers 2, 8, 9, 11, and 19 are convalescent. Passing from these cases, I have now to describe the general state of the remaining portion of the herd, the disease, as previously stated, having made fearful havoc among the animals since the 22rd of February. In the sheds were five heifers rapidly sinking from the disease. In contiguous yards were lying 13 cows and heifers which had been shot, some on the previous evening and the remainder on this morning, all having been so severely affected as to be beyond all hope of recovery. A bull and a heifer were about to share the same fate just as I arrived on the premises, but were allowed to live until my inspection was completed. I may here remark that none of these animals were destroyed by the orders of the local authority. In No. 1 extemporised yard were 24 cows, 10 of which were dying, and the remaining 14 were all more or less affected. In the eight other yards were 35 heifers, all of which were affected. Several were dying and three were dead. The general state of these animals was such that in a few days scarcely one of them may be expected to be alive; and so great has been the mortality, and so rapid the progress of the disease, that I was informed by the bailiff that all treatment had been abandoned for some few days, and the animals left to their fate. Graves were being prepared as quickly as possible, and all the requiremonts of the law were being properly carried out. The almost total destruction of this herd will, it is to be feared, be followed by a serious loss among the dairy cows on the estate. On Feb. 24 the malady unfortunately made its appearance among them, and on my inspection to-day I found that two had died, six been slaughtered, and two others were dying. Two bulls and seven calves were also rapidly sinking. The entire stock on the dairy farm consists of twenty-nine cows, twenty-four calves, and four bulls, all of them being animals of great value. In concluding this report I cannot refrain from expressing my sincere regret that another supposed means of arresting cattle plague by Medical treatment should have proved abortive.

"I have the honour to be, Sir, your obedient servant,
"The Clerk to the Council. "Jas. B. Simonds."

In the House of Commons,

Mr. Hibbert asked leave to bring in a Bill to permit capital punishments to be carried out in the interior of prisons, under certain regulations, of which he gave a brief explanation.

Sir G. Grey, in acceding to the motion, intimated that a Bill was being prepared in the Home Office to give effect to the recommendations of the recent Commission on this subject.

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Trichiniasis.—Outbreaks of this terrible disease keep occurring from time to time in Germany. One has recently occurred in Zittau, in Saxony, but unaccompanied by fatal cases, although as many as fifty-seven persons were affected after partaking of ill-prepared sausage-meat. Dr. Küchenmeister having no faith in benzine, recommends, in recent cases, equal parts of turpentine and sulphuric ether, with what effect remains to be seen. In two of these cases the trichinæ were detected by harpooning, and, as in other epidemics, children suffered least, while in several women menstruation was precipitated. In Görlitz, in Silesia, there has also been an outbreak, eighty persons being affected, but only one dying. All over Germany, either through the agency of the butchers themselves, whose trade is threatened with extinction, or more often by decrees of the various Governments, means are everywhere being organised for an effectual microscopical examination of the pork before delivery for sale

## REVIEWS.

*The British Army in North China and Japan: Peking,* 1860; *Kagosima,* 1862. By D. F. Rennie, M.D., Senior Medical Officer of the Force in the North of India, late Surgeon to her Majesty's Legation, and to the Legation of his Majesty the Emperor of the French. London: John Murray. Pp. 408.

When it was determined in 1860 by the British Government that an expedition should be sent to China, Dr. Rennie volunteered his services, and this volume is one very agreeable result of their having been accepted. Arrived at Hong Kong, he was soon actively engaged, at first among the military Hospitals, and subsequently as Surgeon to the Legation. It is impossible to do more than to select a few of the strictly Medical observations, for every page contains anecdotes of great value as illustrating Chinese men and their habits, fighting scenes worthy of "our own correspondent," and all told with a freshness quite exceptional in diaries.

Dr. Rennie seems to have been surprised to find in the Moray Barracks *every one* of those sanitary defects, besides others of a totally local character, which had been shown a few years before by the Army Sanitary Commission to exercise so destructive an influence on the health and the longevity of the soldiers in England, and concluded that climate was often blamed for the results of defective Hygiene. Subsequently he seems to have found other causes—*e.g.*, on December 7 there had been a marked deficiency of ozone, and with it an increase of cases of neuralgia and ague. "December 9.—During the night a great increase of ozone had taken place, and as suddenly the neuralgic patients grew suddenly better; many quite well. March 7.—The electricity was coming down in an unbroken stream, and it appeared to exercise an injurious influence in several cases of sickness. In one chronic case there was great nervous disturbance, which disappeared when the atmosphere recovered its normal condition. Undoubtedly the English soldier is rendered very susceptible to any morbid influence; loaded with ammunition so disposed as to require tight strapping over the chest, spleen, and liver, he suffers all the bad effects of tight lacing; sharing at night, with thirteen others, a bell-tent, which when occupied holds only 400 cubic feet of air, and living on a diet unsuited for the climate; while a residence in malarious localities, though not the special exciting cause, makes the soldier afterwards susceptible of certain atmospheric influences, subject to paroxysms of periodic disease. Another instance of atmospheric influence is given when the soldiers were at Tang-Koo, eating fruits and raw vegetables, and in an atmosphere of foul odours." Some very limited choleraic influence passed over the neighbourhood, and two soldiers separated from to three miles fell victims to it. Heat apoplexy, called *coup de soleil,* takes place chiefly at night or in cloudy days. When fever broke out among the coolies on the *Winifred* transport, the Chinese Doctor blamed "too muchee piecee men; too muchee piecee hot:" this is "pigeon" English, *i.e.*, business English. The Chinese seem apt phonetic scholars; Joss is the Portuguese Deos; and the scrawl on poor young Bowlby's coffin lid when read sounded Bo-bee. They seem to be expert apothecaries, and can powder camphor. They sell fish in the street preserved in three inches of ice; they steal the pots and pans up the chimney before the cooks' eyes, and we advise our readers to study their ways in Dr. Rennie's delightful narrative.

The second portion of the book is on Japan. From Shanghai Dr. Rennie proceeded to Japan in July, 1863. He gives a most pleasant account of this beautiful and little-known island, where the married ladies dye their beautiful white teeth black and gentlemen sit naked at their cafes; where shampooing is the monopoly of the blind, who shave their heads and wear a Doctor's dress, only they walk the streets ringing a bell, seeking employment, ready to use the *minimum, medium,* or *full power.* Dr. Rennie seems to have found both the first hard to bear, but they removed all sensations of fatigue. Tattooing is also a profession. Here Dr. Rennie had further proofs that cholera depends not upon worms in the stomach, as the Japanese think, but upon an electro-chemical change caused by atmospheric electricity coming in collision with some special condition of the electricity of the human body; in other words, the decomposition of the blood by the electrical agency transmitted from the atmosphere through the nervous system. Both parts of this compact volume are full of acute observation and suggestive remarks.

*Researches on the Medical Properties and Applications of Nitrous Oxide.* By GEORGE ZIEGLER, M.D., Physician to the Philadelphia Hospital, etc. Philadelphia: Lippincott. 1865. Pp. 66.

THIS pamphlet gives such an extravagant idea of the properties of nitrous oxide that men of more sober minds will probably be deterred from investigating its medicinal uses. It is, in fact, a laughable little book upon the laughing-gas. Not that the author intends to be amusing—far from it; but when a man tells us that nitrous oxide is a remedy for almost all diseases, he makes himself ridiculous.

Dr. Ziegler considers the uses of nitrous oxide under four heads—(1) Therapeutic and Hygienic, (2) Revivifying, (3) Antidotal, (4) Anæsthetic; and an unprofessional person, after reading a few pages, would suppose that at last an universal remedy had been discovered. What do our readers think of the following extract, which is taken almost at random?—"In comprehensive terms, nitrous oxide is a direct, potent, and permanent chemico-organic, arterial, nervous, cerebral, and general stimulant, secernent, depurant, aphrodisiac, and antitoxic, having a special tendency to the blood, brain, nervous system, and genito-urinary organs." The book abounds with such high-flown sentences as this. But, strange to say, this extravagant praise is not supported by any statistics; and only two cases are detailed, and those were cases wherein the use of nitrous oxide, as an anæsthetic, was followed by fatal results! Has Dr. Ziegler been experimenting upon himself, and was he still under the influence of the laughing-gas at the time he wrote this little book?

## GENERAL CORRESPONDENCE.

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### THE TREATMENT OF CHOLERA IN INDIA.

LETTER FROM DR. HOWARD B. MONTGOMERY.

[To the Editor of the Medical Times and Gazette.]

SIR,—I have this day perused with the most marked surprise and regret an attack upon the Professional abilities of the Indian Medical Service as regards the treatment of cholera, and I solicit your permission to protest against it as at once unjust and unjustifiable.

The attack to which I allude is under the authority of Dr. G. Johnson, Physician to King's College Hospital, and Professor of Medicine in King's College. It may be found at page 165 of the *British Medical Journal*, published on Saturday last. Dr. Johnson says—"One effect of the theory, that collapse is a result of the drain of liquid from the blood, has been to change—nay, almost to reverse—the treatment of cholera in India; and the consequence of this change of treatment has been a great increase in the percentage mortality from the disease. Thus it appears from a Report on the Public Health of Bengal, referred to in a leading article in the *Times* of February 12th, that whereas in 1818 'not one-third of the cases of cholera proved fatal, we now find three-fourths beyond remedy.' This increase of mortality is attributed to the increasing virulence of the disease; but surely change of treatment has had great influence. In 1818, and for many years after, purgatives were very generally given by the Indian Practitioners, and the practice of venesection was common; while of late years, under the influence of pathological theory, purgatives and bleeding have been almost entirely discontinued, and brandy and opium have been largely substituted."

The writer of the foregoing sweeping censure is himself the author of a very remarkable (and, I believe, very erroneous) theory as to the pathology of the disease in question; but this does not in my opinion justify him in imputing to the implied ignorance or obstinacy of the Indian Practitioners such wholesale slaughter of human beings as is here indicated. It is, of course, to be regretted that any one should fail to meet Dr. Johnson's views as to the treatment of this and every disease; but I would respectfully suggest that Indian Medical Officers are not as incompetent as he imagines, nor am I, as one of them, disposed to sit silently under a censure the most sweeping and insulting that could be offered to a body of gentlemen whose abilities are thus denied in this assertion of their alleged malpraxis.

Dr. Johnson's statistics are vague, and by no means convincing; and although I am prepared to accord entire credit to the intended accuracy of all reports of the Bengal Sanitary Commission, yet, as I have not had an opportunity of examining the grounds upon which their quoted conclusion is based, I personally am of opinion that 750 per mille is largely in excess of the rate of mortality observed in cases treated by European Practitioners in India generally.

I may remark that Bengal is the least healthy of the three Presidencies, and that it has witnessed epidemics of cholera of exceptional intensity (*e.g.*, that at Mean Meer); it may be, therefore, that actual numerical accuracy may give rise to erroneous conclusions if taken to be universally applicable.

As to comparisons between statistics of 1817-19 with those of 1864-65, I hold them to be utterly useless. In the first panic of a new disease many analogous affections are likely to be confounded with it and wrongly classified, while increased experience will draw the line of demarcation more distinctly, and, in such a case as that of cholera, admissions will bear a smaller excess over casualties when diagnosis is more accurate. This explanation may possibly account for the very marked difference shown in the following table of Dr. Ewart's, which exhibits a decrease in admissions and an increase in mortality of persons attacked in the three Presidencies subsequent to 1835, 1836-37, and 1838 respectively: the ratio of deaths to strength, however, in Madras, is somewhat lower subsequent to than before 1838:—

| Presidency. | Periods. | Percentage of admissions to strength. | Percentage of deaths to strength. | Percentage of deaths to admissions. |
|---|---|---|---|---|
| Bengal . | 1818-35 . . | 3·25 | 0·85 | 26·36 |
| ,, . | 1836—53-54 . | 2·62 | 1·04 | 29·75 |
| Bombay . | 1818-19—35-36 . | 2·96 | 0·64 | 21·64 |
| ,, . | 1836-37—53-54 . | 2·44 | 1·003 | 41·11 |
| Madras . | 1829-1838 . . | 2·7 | 0·74 | 27·10 |
| ,, . | 1842—1851-52 . | 1·2 | 0·64 | 50·2 |

Now, none of these returns give any support to the assertion of the high rate of mortality alleged as now existing in India. Without, however, questioning the general statement attributed by the *Times* to the Bengal Sanitary Commission, I may justify my own individual opinion by referring to a few more recent statistics regarding stations and troops under the Madras Presidency and elsewhere in India. Dr. Ewart (an Indian authority, and consequently, I suppose, in Dr. G. Johnson's eyes, incompetent) gives the following results regarding the mortality of Europeans from this disease (condensed from his "Vital Statistics," p. 147):—

| Presidency. | Periods. | | Admissions. | Deaths. | Percentage. |
|---|---|---|---|---|---|
| Bengal . | 1818 | to 1853-54 | 14260 | 4806 | 33·70 |
| Bombay. | 1818-19 | ,, 1853-54 | 6781 | 2206 | 32·53 |
| Madras . | 1829 | ,, 1851-52 | 4243 | 1478 | 34·83 |

The rates of admissions to strength were in the same order—2·87, 2·64, and 1·98. Bengal, therefore, ranks highest in frequency, and is the mean in mortality of the three Presidencies, according to these returns, but these tables do not include any returns later than 1854. But it would be idle to deny that cholera has almost universally been considered to show a tendency to prove more fatal during recent than in former years. One of the possible causes of this I have before alluded to, but a careful analysis of further facts will prove, possibly, a better means of fixing the cause accurately. Active service in the field, ill-ventilated barracks, bad drains or no drains at all, intemperance, and the like, all act as against the common soldier's recovery. Non-commissioned officers, officers, women, and children, show a less rate of per-centage of deaths to admissions than do the soldiers generally, and much less than that of the unmarried residing in barracks. From statistics now before me upon the experience of eight years, ending in 1854, it is plain that of every 1000 officers treated only 166·6 died, or 16·66 per cent., or about half the average mortality of troops from 1818 to 1854.

Now, these officers were treated by members of the Medical Profession in India, who have declined to bleed and purge their patients, and yet the mortality is far below that prevalent in 1818. Again, between 1838 and 1853 the average percentage of deaths in the European General Hospital at Bombay, all the year round, was little more than 55 per cent. of admissions, and a less ratio obtained in a similar institution at Calcutta, from 1842 to 1852; and I believe European Hospitals in India have the worst class of cases ever seen.

But perhaps it would be a still fairer test of practice in India to select other exemplars of the results of practice of more recent date, so as to refute the sweeping and unjust condemnation of it pronounced by Dr. G. Johnson. I have hastily compiled from the records of the *Madras Quarterly*

*Journal of Medical Science* several tables showing the mortality, in Southern India and in Burmah, from cholera treated by European Medical officers. These returns comprise different classes, Europeans and natives, as may be seen from the column of Remarks. I may add that they are all in reference to cases occurring since 1857, and may be taken to represent modern treatment during epidemics of cholera by various methods.

| Authori-y. | Admissions. | Deaths. | Percentage of deaths. | Remarks. |
|---|---|---|---|---|
| Dr. Griffiths . | 7 | 3 | 42·8 | Europeans, men, women, and children, 1863. |
| Dr. Sutcliffe . | 44 | 26 | 54·5 | 21 Europeans and 5 natives died, in same proportion to those attacked of each class, 1863. |
| Mr. McTavish. | 33 | 19 | 57·5 | |
| Mr. Balfour . | 196 | 80 | 40·8 | Soldiers, native and European, 1857 to 1862. |
| Do. | 292 | 159 | 51·8 | Native prisoners, 1858 to 1863. |
| Do. | 48 | 23 | 47·9 | Gaols (native), 1862 and 1863. |
| Total . . | 620 | 310 | 50·0 | |

The foregoing figures fall far short of the 750 per mille of the Bengal Sanitary Commission.

It would be useless to multiply statistics, if it did not seem desirable that, to vindicate the loudly-condemned ability of Indian Practitioners, I should quote from varied sources of recent information; and some of the following returns show a state of mortality which I do not think likely to be reduced by even bleeding and purgatives in the hands of any one. The cases are chiefly those of natives in regiments and gaols:—

| Authority. | Admissious. | Deaths. | Percentage of deaths. | Remarks. |
|---|---|---|---|---|
| Mr. Evezard . | 17 | 1 | 5·8 | Condy's disinfecting fluid, internally, stimulants, and counter irritation and nutrition. |
| Dr. Mackay . | 6 | 0 | 0 | Ditto. |
| Dr. Doyle . | 46 | 15 | 32·6 | Ditto, with astringents. |
| Mr. Fry . . | 35 | 15 | 42·8 | (Not known.) |
| Mr. Morgan . | 131 | 67 | 51·1 | Ditto. |
| Total . . | 235 | 98 | 41·7 | |

Now, it is to be remembered that these are all cases of natives, and that the people of the Madras Presidency are more fatally affected than those of Bengal or Bombay, and the mortality among them from 1828 to 1838 averaged 45·1 of admissions; it fell between 1842 and 1851 to 42·0, and it is here shown as 41·7. This is somewhat opposed to a progressive increase, as generally believed.

I will only add one further fact to show the results of treatment by the internal administration of turpentine, as recommended by Dr. Mudge, of the Madras Army, and as adopted by me when succeeding that officer in charge of a Civil Hospital in the city of Madras. The total number of cases treated by us amounted to 69, of the worst form of epidemic disease. Of these, 42 recovered and 27 died, or 30·9 per cent. It would be needless, however, on the present occasion to do more than sum up the results of the foregoing, which certainly show that a very much fairer estimate of actual average mortality would be 50 per cent.

But be the mortality what it may be, let our efforts be crowned with comparative success or eventuate in our worst discomfiture in the battle with disease, in the name of all that is just and Professional let us be henceforward free from such an attack as that against which I protest. We are not prone in India to abandon any line of treatment once adopted unless we find good reason to do so. Nor do we continue to pursue any line of treatment that we know to be unsuccessful. And, I may add, we are equally slow to adopt visionary ideas unsupported by argument and not based upon undoubted facts. We value life as highly in India as any at home can possibly do, and we spare no exertion to save it for our patients. The accusation that for thirty years or so we have been killing our patients from a change of practice is as hard to bear as a social insult, as it is a grave Professional error utterly without foundation. The hard lot that many of us have to bear through life there will not be lightened by such accusations as this one, for men accused are half condemned.

In order, however, to appreciate the utility or otherwise of treatment in any disease, it is essential that we should be informed what rate of mortality has been witnessed where no treatment, or treatment confessedly erroneous, has been alone resorted to.

The usual impression is, I believe, that of cases not treated 50 per cent. only will die, and if this were correct, then we should be compelled to acknowledge that European Physicians were singularly unfortunate in the results of their practice in India. But I believe that the foregoing estimate of mortality is far below the mark. The following is the only instance that I can find of such a state of things, and it is strongly confirmative of my own views, which are not recent, on this point.

At a village called Nuthum, epidemic cholera appeared, and was treated only by native Practitioners. The result was that 63 persons were attacked, and of these 50 died, or 79·3 per cent. Now, previous facts have demonstrated that practice in Madras shows a general average mortality of not more than 50 per cent. of deaths to admissions, so that Madras treatment exhibits in this instance a decrement of 29·3 per cent. of deaths to attacks. Perhaps no better illustration than this could be afforded that treatment does *some* good: that it does not do all we could wish, and that it still allows—or is powerless to prevent—a high rate of mortality, are and must continue to be painful facts. But even they do not justify such an imputation as that to which I have now replied.

May I venture to suggest to Dr. Johnson and others who, like him, are disposed to deny merit to all save their own immediate disciples, that Indian Medical officers are not quite so incompetent as he imagines, and that we can show a death-rate that is not indicative of any remarkable stupidity on our part? I find that in 1864 the total mortality of the Bombay Army was 13·36 per 1000; that of 1863 only 12·0, including in the former case 21, and in the latter 7, from cholera; and the average mortality in this army for some years back falls below that "hoped for" if sanitary reform was efficiently carried out. The death-rate in the Bombay Army is that of an army 12,000 strong. (These figures relate only to Europeans.) Similarly in Madras, with a standing army of Europeans numbering about 14,000 men, the actual mortality from all causes is reported as follows:—

| | |
|---|---|
| 1860 . . . . | 19·17 per thousand. |
| 1861 . . . . | 14·66 „ |
| 1852 . . . . | 17·09 „ |
| 1863 . . . . | 16·52 „ |
| Average . . | 16·86 |

It would prolong this paper too much were I to enter upon any discussion of Dr. G. Johnson's theories. My object is to protest against his extraordinary and unseemly attack upon a large body of gentlemen, his equals in position, and, I trust, his superiors in good taste, and to appeal to you, Sir, for some more generous estimate of Indian Practitioners than is revealed in the sweeping condemnation I have named, in which on insufficient data there is levelled against them an accusation of ignorance and incompetence that I know to be unjust and I believe to be untrue. I am, &c.

Howard B. Montgomery, M.D.,
Surgeon Madras Army.

16, Durham-terrace, Westbourne-park, W., Feb. 21.

*P.S.*—Since the foregoing was written, I have discovered that I have accidentally omitted the statistics of a very remarkable and fatal epidemic in the native gaol at Calicut, reported by Dr. Pearse. If this epidemic be considered, and the returns by Dr. Mudge, and some by Dr. Shortt, we get the following additional data:—

| Authority. | No. of admissions. | Deaths. | Percentage. |
|---|---|---|---|
| Dr. Mudge . . . | 69 | 27 | 30·9 |
| Dr. Pearse . . . | 140 | 91 | 65·0 |
| Dr. Shortt . . . | 25 | 10 | 40·0 |

If these figures be added to those in a previous table regarding native patients, the average of the whole would approach very nearly the 50 per cent. estimated by me.

I cannot, however, omit to state that Dr. Pearse suggests, and I think with propriety, that the high rate of mortality at Calicut may in part be due to the fact that few trivial cases occurred at the end of the epidemic in consequence of what I may call arrestive measures having been adopted—viz., the removal of the great bulk of the prisoners from the infected locality, their consequent non-exposure to contagion, and the improved sanitary condition of the gaol (previously much overcrowded) as regards those continuing to inhabit it.

*Preventive* and *arrestive* measures are, in my opinion, the great points to which we should look; and if Indian Practitioners can show that the percentage of deaths to strength is steadily decreasing, they are giving evidence of a far greater usefulness to the State than any apparent lessening of the rate of mortality in those attacked would of necessity indicate.

That this was done in Madras between 1842 and 1852 I have already shown the proportionate deaths to strength being from 1829 to 1838 0·74 per cent., and from 1842 to 1852 only 0·64. But in 1862 it had fallen in the European force to 0·350 percentage of strength, and in 1863 to 0·309; while, among natives, the proportion was very much smaller.

So long, therefore, as a diminution in the net percentage loss of life and of admissions, as compared to strength, occurs, one grand object of our exertions is amply fulfilled; and if a progressive improvement can be carried out, it will in time extirpate the disease.

February 28.

## ON THE DOSES OF ACTIVE MEDICINES.

### Letter from Dr. C. R. Bree.

[To the Editor of the Medical Times and Gazette.]

Sir,—It is a very thankless office to find fault. More particularly is this the case when those with whom you differ are men in an eminent position. I am now, however, going to appeal to all practical men in the United Kingdom. The subject with which I am about to deal is posology, and the men with whom I am going to find fault are the editors of the new abridged edition of Dr. Pereira's "Materia Medica and Therapeutics."

Every one knows how great was the outcry when the new Pharmacopœia was published without a posological table. We have now got one by the editor of the Pharmacopœia, Senior Physician to St. Bartholomew's Hospital, and Lecturer on Materia Medica, assisted by the President of the Linnean Society, one of the first botanists of the age, and Mr. Warington, a distinguished pharmaceutist and chemist.

Such an array of names must carry great weight with those who put faith in names. At all events, their posological table comes before the Medical world, and is thrown into the hands of the young Practitioner, chemist, etc., with the stamp of authority. It ought to be unexceptionable. I believe it to be very faulty. The chief objection I find with it is, that the minimum doses are, in a great number of important cases, too large, and cannot be prescribed in practice as such without danger, even in one or two instances to life. I will quote some cases in proof of what I say:—

1. Acid. hydrocyanicum dilutum, min. iij. to vij. There are many people in whom three minims of this acid would produce symptoms of poisoning.

2. Aloe barbadensis, gr. iij. to v. A much smaller dose than 3 grains will act as an active aperient. In the preparation introduced by Dr. Christison into the British Pharmacopœia, viz., the Pil colocynthidis et hyoscyami, and of which the dose is given in the posological table as gr. viij. to xx., I have found a 2-grain pill usually quite sufficient. I have never given more than gr. iv., and this was Dr. Christison's practice. In this pill the pil. coloc. co. is made of Barbadoes aloes, the only way to take which drug is to unite it with the extract of henbane. Did any of the editors ever take three grains of Barbadoes aloes?

3. Aloe socotrina, gr. iij. to v. A very effectual purgative may be made by adding gr. ¼ of ext. nux vomicæ to gr. iss. of socotrine aloes. Three grains, as a rule, is too large a dose to begin with.

4. Ammoniæ carbonas, gr. v. to gr. xv. Two or three grains is a most useful remedy in some forms of dyspepsia.

5. Argenti oxydum, gr. ½ to gr. ij. A quarter of a grain will, in nine out of ten cases, do as well as a larger dose, and with less risk of colouring the skin, which results from this preparation as well as the nitrate.

6. Atropia, gr. $\frac{1}{80}$ to gr. $\frac{1}{10}$! Minimum dose very much too large.

7. Capsicum, gr. v. to x. Minimum dose too large.
8. Ext. aconiti, gr. j. to ij. Ditto.
9. Ext. belladonnæ, gr. j to ij. Ditto.
10. Ext. hyoscyami, gr. v. to x. Ditto.
11. Ext. opii, gr. ¼ to ij. Ditto.

12. Ipecacuanha as an expectorant or sudorific, gr. j. A sixth of a grain will often answer every purpose.

13. Liq. morph. hydrochl., ♏xx. to ʒj. Minimum dose much too large.

14. Liq. strychniæ, ♏vj. to ♏xxx. Minimum dose gr. $\frac{1}{20}$ too large. It ought never to be more at first than $\frac{1}{40}$th of a grain.

15. Lobelia as an emetic, gr. x. to xx. Tinct. lobelia, tinct. lobelic æther, f ʒj. to ʒij. This medicine ought never to be given as an emetic, and the dose of the tincture is dangerously large.

16. Tinct. colchici seminis, vin. colch., f ʒss. to f ʒij. Minimum dose much too high. The maximum dose has been known to cause death.

17. Tinct. opii, ♏x. to ♏xl. Much good is often done by a much less dose than ten minims.

18. Zinci sulphas (as a tonic), gr. ij. to gr. x. Minimum dose too high. Maximum dose too low.

I am, &c.

C. R. Bree, M.D., Senior Physician to the Essex and Colchester Hospital.

February 14.

P.S.—Were I an examiner in the Practice of Medicine I would pluck any man who told me that he would use medicines in the doses given as minimum ones in this table.

## AN EASY METHOD OF REDUCING ORDINARY DISLOCATIONS OF THE SHOULDER JOINT.

### Letter from Mr. W. E. Porter.

[To the Editor of the Medical Times and Gazette.]

Sir,—In the observations relative to "Reports on Fractures," etc., in your number for January 6 last, you say suggestions will not be unwelcome to you, I therefore send you the following:—

While a student at the London Hospital a dislocated shoulder was brought in, which great force failed to reduce. On pausing for a short time before adopting other means, one of my fellow students picked up the arm and gently manipulated it; while doing so the bone slipped into its place—how, none could say, but the dislocation was reduced. I thought of it a great deal, and came to the conclusion that the humerus, without the exhibition of great force, was a sufficiently powerful lever, when used as one to reduce an ordinary dislocation of the shoulder. Not long after I left the Hospital, and had to wait some time before I had an opportunity of testing my plan.

While acting as House-Surgeon to the Dorset County Hospital in 1856, a dislocated shoulder was brought in; it was a stock case, that is, it came frequently; but it must have been troublesome to reduce, as they always used pulleys for it, and the Hospital porter began getting them in order; I thought, however, I would try my plan first.

The patient was a moderately muscular man, at about the middle period of life, and having undressed him I laid him on a mattress on the uninjured side; kneeling behind him, I placed the palm of one hand firmly on the head of the scapula and the fingers in the axilla under the head of the humerus; with the other hand I grasped the condyles and pressed the arm to the side, then drew it backwards and thus got a better hold with the fingers engaged at the head of the bone; by the next movement I slid the arm forwards and depressed the elbow, at the same time rotating outwards, and lifting the head of the bone it immediately slipped into its place.

Since I have been in practice I have tried the plan three times on healthy, muscular young men, all first dislocations; in two I succeeded quickly and easily, and failed in one which had been done three days; the old way of the heel in the axilla was in this case after some difficulty successful.

I am, &c.,

Lindfield, Sussex, March 3. Wm. Elliott Porter.

## GREENWICH HOSPITAL OUT-PENSIONS FOR NAVAL MEDICAL OFFICERS.

[To the Editor of the Medical Times and Gazette.]

Sir,—I perceive by a memorial from the Lords Commissioners of the Admiralty to the Queen, dated the 14th ult., that they have thrown aside the sectarian feelings which actuated them on the passing of the Greenwich Hospital Bill last Session, and appear disposed to distribute out-service pensions in a more catholic spirit.

You may remember that the noble and gallant Secretary of the Admiralty resisted every effort that was made to have the claims of Medical officers recognised, and, notwithstanding the indefatigable exertions of Mr. Hennessy, Sir John Pakington, and others, he was successful in his resistance for the time.

Under pressure of a blank list of candidates for Assistant-Surgeoncies, the Admiralty have re-considered the subject of Greenwich out-pensions, and are now prepared to give to Medical officers a moderate participation in the same.

I shall not now criticise the very peculiar allotment of pensions to the different classes of officers, or the very exceptional privileges attaching to the ten pensions allotted to Flag Officers. Mindful of the great kindness shown to the Medical Department of the Navy by the *Medical Times and Gazette*, I am unwilling to trespass further on your space than by asking you to bring to the recollection of your readers Mr. Hennessy's services to our Profession in the last Session of Parliament.

I am, &c. A Naval Surgeon.

## CONCUSSION OF THE SPINE.

[To the Editor of the Medical Times and Gazette.]

Sir,—When a boy about 14 years old, I was trying with others as to who could jump farthest from a waggon, backwards-way. In making a spring my feet caught, and I fell heavily upon the broad of my back on to the hard ground.

With a boy's impulse, I strove to rise, and succeeded in reaching, somehow, a stone that I could sit on—barely a yard from where I fell. On it I sat, unable to speak or to move a limb, and I could read, in the horror of my brothers' faces, how ill they thought me looking.

The fun was suspended barely for a minute, when the cry arose "Here's your father coming!" I could only turn my eyes to see how far he was off, and I shall not soon forget the mental process I went through, as to what could be done in about a minute and a half. I must either succumb—go to bed—have a Doctor—take some horrid jalap and black draught, or I must appear as sound as usual. I elected to man myself, and just as my father came up to us I rose and joined the group: all kept my secret; and "Tom, you look pale; is anything amiss?" was all I heard. My reply was simply that I had fallen and hurt myself, but was better now; and then with the party I proceeded, and to walk for a considerable distance, every minute improving my condition.

I have often looked back to this accident, and to certain others I have since met with and read of,—notably, the murderous attack of Mr. —— upon Captain ——, near Hungerford-market, and asked myself—"What does the Doctor mean by "spirits?" I remember how in Fitzjames' case—

——————— "To his heart
The life-blood went with thrilling start,"

yet how he

"Manned himself with dauntless air,
Returned the chief his haughty stare."

I can recal the horror of the sight of blood, so common amongst young Surgeons, and the vigorous efforts I made to prevent myself from fainting. I can recollect how fear has seemed to paralyse my muscles until the strong effort of "will" not to be overcome has forced them to obey my orders. Thinking of all these points has led me to the conclusion that there is the same difference in the "spirit" of men as there is in the "blood" or "breed" of horses and dogs. That some men, women, and children when knocked down, mentally or bodily, will lie till they are picked up by somebody; that other men, women, and children won't be knocked down at all if they can help it without instantly rising again. What the power of "will" is—how it comes, how it operates, how it is to be cultivated—must be understood ere we can form trustworthy opinions respecting the result of railway or other accidents, or understand the effects of fright, etc.

Had I been a "soft" fellow, had the family Doctor been a pleasant one, had I wished to escape school, I might truthfully have made out my case, as above, to have been a very bad one. A person may appear an impostor, or hysterical, simply because he has not the desirable amount of

Pluck.

**Dr. Dauglish.**—This gentleman, who was distinguished as the inventor of a peculiar process in the manufacture of bread, has lately died intestate, leaving personality to the amount of 25,000*l.*

## REPORTS OF SOCIETIES.

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## ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

### ANNIVERSARY MEETING.—March 1, 1866.

James Alderson, M.D., F.R.S., President.

The President declared the ballot for the election of officers and Members of Council for 1866-7 open for one hour, and nominated Dr. Markham and Mr. G. Gaskoin scrutineers.

The Auditors' report was then read.

Dr. Webster moved the adoption of the Auditors' report. He said the financial condition of the Society was most satisfactory, and remarked on the minuteness with which the accounts were kept. There was an item of 8s. for fines, and one of 10s. 6d. for old brass. Dr. Webster spoke with approval of the fact that half the expenditure for books was for foreign books.

Mr. Partridge seconded the motion.

Dr. Pitman said that Dr. Webster had probably forgotten that comparatively little was spent on English books because (from the liberality of Authors) many were presented to the Society.

The Report of Council was then read. After congratulating the Society on its prosperity, and on the unusually large number of Fellows elected, the Report gave an account of the present number of Fellows, stating changes by death, elections, and resignations. The financial condition of the Society appears to be very satisfactory. The Society has funded £500, and has carried £190 to next year's account. The sum now standing in the names of trustees is £4816 11s. 5d. There have been large additions to the library,—350 books, exclusive of continuations—182 presented, 168 purchased; 191 of these were English, 159 foreign. Dr. Ashburner had given sixty-one volumes on the early and later history of Mesmerism. Mr. Curling, who, to quote the words of the Report, has repeatedly laid the Society under similar obligations, had presented a rare and beautiful medallion executed in ware in 1788 of Dr. Joseph Black, the Professor of Chemistry in the University of Edinburgh. The thanks of the Society were due also to Sir Rutherford Alcock for a portrait of his father—an oil painting by Haydon—and for an oil painting by Mr. Inskipp, a portrait of Sir Rutherford himself. After speaking of special additions to the library, the Report says:—"The librarians, however, report with regret, and in the hope that this notice may attract the attention of the Fellows, that very few additions have been made to the Society's collection of photographic portraits of its Fellows and to the photographs of pathological specimens." Two committees had been appointed—one to report on the subject of "Hypodermic Injections," and the other on "Electricity in the Treatment of Disease."

The result of the ballot for officers and members of Council was then announced by the President:—*President*—James Alderson, M.D., F.R.S. *Vice-Presidents*—*Patrick Black, M.D.; *Henry Bence Jones, M.D., F.R.S.; *Prescott Gardner Hewett; *Charles Hewitt Moore. *Treasurers*—Henry Alfred Pitman, M.D.; *George Busk, F.R.S. *Secretaries*—*Henry Hyde Salter, M.D., F.R.S.; *George Green Gascoyen. *Librarians*—Alexander Patrick Stewart, M.D.; *Charles Brooke, F.R.S. *Other Members of Council*—Andrew Whyte Barclay, M.D.; Edmund Lloyd Birkett, M.D.; *John Clarke, M.D.; *Patrick Fraser, M.D.; *Richard Quain, M.D.; *James Dixon; *Edwin Humby; *John Abernethy Kingdon; *John Marshall, F.R.S.; Alfred Poland. Those gentlemen to whose names asterisks are prefixed were not on the Council, or did not fill the same office, last year.

Mr. Charles Hawkins moved the adoption of the Report. He said that, unlike Dr. Webster, he was not enamoured of large balances, and did not think that the present members of the Society should save money for people who came after them. After taking away the sum received for letting lodgings, there was a balance of five hundred pounds for books. He thought more ought to be laid out on English books, and he added the Society was quite rich enough to buy them. He thought the library ought to be not simply a Medical library, but that it should also contain books on Science, and books bordering on scientific subjects. Again, he could see no reason why the present members should remain stewing in that room in order that those who came after might find a large balance. In latter years, Mr. Hawkins, said the Anniversary Meeting had been held in the evening; he thought it would be better to hold them, as they used to be held, in the afternoon. It was only fair to do this, in order to insure a proper attendance as a compliment to the President.

Dr. **Fraser**, in seconding the resolution, said that he quite agreed with Mr. Hawkins that the Society was rich enough to buy English books, and ought not to depend on the generosity of authors.

The **President** remarked that the observations of the speakers would be borne in mind by the Council. He added that a small balance would prevent the Society from ever leaving its present room, as the sum asked for a larger place was much greater than their present balance.

Dr. **Pitman** then moved the alteration of one of the bye-laws, the resolution being "That the words *Fellows, Members, and Licentiates* be inserted in the place of the words *Fellows and Members*." The law, as it stood, excluded Licentiates, and the object of the resolution was to enable them to be proposed as members.

The resolution was seconded by Dr. Barnes.

Mr. **Partridge** asked if the rule thus altered would not include those who might be licentiates in special branches only, as for instance licentiates in Dental Surgery, Midwifery, etc.?

Dr. **Pitman** said it was not contemplated to include those who were licentiates in special branches merely.

Dr. **Sankey** asked if Masters in Surgery were included?

Mr. **Charles Hawkins** thought such an alteration ought to have been brought forward by the Council, and that the law should be worded so as to include all legally qualified Medical men. He remarked, too, that he thought the rule limiting the number of General Practitioners to one-third should be abrogated. He thought any one on the Register should be allowed to be a candidate.

Mr. **Partridge** would second Mr. Hawkins' proposal.

Dr. **Pitman** said that many Medical men did not think it worth while to register, and that there were many Fellows of the College of Physicians whose names were not registered. Mr. Hawkins' proposal, therefore, would exclude some properly qualified candidates.

Mr. **Hawkins** meant to say that any one, either properly qualified or registered under the Act, should be eligible. He thought, however, that Dr. Pitman's motion might be taken as a step.

Dr. Pitman's motion was then carried.

### THE PRESIDENT'S ADDRESS.

The **President** said he had first to fulfil the melancholy duty of speaking of the Fellows who had died during the past year. He selected the more prominent characters and grouped them, so as not only to bring forward their merits, but to deduce lessons from their career which might be useful to the living. He mentioned especially Dr. Ferguson, Physician Extraordinary to the Queen, his extensive practice and his general accomplishments, which made him welcome in the best society. Somewhat as an antithesis, he mentioned Dr. King, of Eltham, who was also a highly successful Practitioner and who was the object of the deepest attachment, and was satisfied with no more brilliant reward. Among the the honorary Fellows he particularly mentioned Mr. William Hooker and the greatly lamented Mr. Brande, and concluded his notice of the departed by referring to the obituary, paying a tribute to those whose less prominent career may not have been less useful and less happy and their loss not less deeply regretted. He then referred to the Congress to be held at Constantinople to inquire into the circumstances connected with the introduction of cholera into Europe, and trusted that the investigation might throw some light on the epizootic now present, and proceeded as follows:—"Many will be sorry to observe how this visitation is being treated under a sort of panic by the Legislature, with less regard than might have been desirable to the amount of knowledge which we already possess, or to the sensible deductions thence to be derived. I have no doubt that you, the Members of this Society, are too enlightened to fall into the peculiar notions adopted by the general public about this cattle disease, or plague, as they are pleased to call it; that you all perceive the futility of hunting for specifics, of trying to identify it with diseases of the human constitution, and of believing in its importation and propagation by contagion as the only cause. All these fallacious views seem to blind the Legislature as well as the public to facts which are clearly established. These facts are, that the cattle disease, like cholera, follows a certain course, which is undeviating in its direction, though the visitation skips over some localities; that the disease also, like cholera or any other epidemic, abides only for a certain period in each locality, and that it is most virulent and unmanageable at the beginning of each outbreak, and becomes amenable to simple treatment, or any treatment not positively injurious, towards the end of its presence in each place, whilst the ultimate cause of the disease and the law of its progress are unknown to us. All these facts display the fallacy of pretending to stop or exterminate—that is, in the presumptuous phraseology of the day, 'to stamp out' the disease by means of preventing contact; and the same facts testify to the sad want of judgment in sacrificing stock, and adding inconvenience to the farmers' loss, in order to obtain an end which, according to the knowledge which we possess, is obviously impossible. None will, of course, deny that there is a certain amount of power to communicate the disease by what is termed contagion or infection, and that moderate precautions to avoid needless contact are wise and good; but it is plain that when the best is done in this direction the laws of transmission and duration will defy all Orders in Council and all Parliamentary enactments either to obtain immunity or to effect 'stamping out.'" The President then congratulated the Society on the success of the past session, and on the character of the communications, as well as of the discussions which followed—discussions which had been conducted with the utmost amenity as well as advantage to Medical knowledge. He expressed a hope that more papers would be introduced on scientific subjects collateral to Medicine, and hinted that many of those which were laid before the Royal Society would find a more appreciating audience in the Society he was addressing. He concluded by referring to the Committees established in 1862, and on the valuable matter contained in the Reports of those of 1862 and 1864. He did not doubt that the two now sitting would be equally successful; that the records of these Committees would prove enduring memorials of the Society's vitality. He congratulated himself on having the honour of being President of a Society which is animated with the true spirit of inquiry, and follows out its object with willing and united feeling.

Mr. **Curling** moved a vote of thanks to the President for his able paper, with a request that it should be printed. To one point Mr. Curling said he might be permitted to refer. The President had spoken of the reputation of the late Mr. James, of Exeter. For his (Mr. Curling's) part he should have pointed out the present Mr. James, the father of the Mr. James lately deceased, as the Surgeon whose reputation had made the name James famous.

Mr. C. H. **Moore** cordially seconded Mr. Curling's motion. He remarked on the genial personal influence of the President in the Council as well as in the Society.

Mr. **Brooke** proposed, and Dr. **Gibb** seconded, a vote of thanks to the retiring Hon. Secretaries—Dr. Fuller and Mr. Birkett.

Dr. **Fuller** said the work had been a labour of love; they had both endeavoured to do their duty. He was pleased to be able to refer to the flourishing state of the Society. In leaving his office he wished to bear testimony to the very valuable services of the Sub-Librarian. It would, Dr. Fuller said, be very difficult for the Secretaries to get through their work were it not for the efficient aid of Mr. Wheatley.

Mr. **Birkett** had had great pleasure in performing the duties of the post he was about to leave. There was one point on which he would take the opportunity of commenting. He thought a little change was required in the manner of conducting the meetings of the Society. He thought it would be well to hold exhibitions of instruments. This would encourage instrument makers to send instruments.

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**The Italian Parliament.**—The Chamber of Deputies of the present Italian Parliament numbers ten Medical Practitioners among its members, and the Senate seven—in all, therefore, seventeen members. The Italian Medical journals congratulate themselves upon this accession of strength, believing that all questions relative to Hygiene, public education, and the penitentiary system will have a much better chance of being thoroughly discussed; while the hard conditions which the Municipal bodies, especially the Tuscan, make with their Medical *employés* will be thoroughly inquired into.

# OBITUARY.

## JOHN CONOLLY, M.D.

EARLY in the morning of Monday, March 5, there passed to his everlasting and long-desired rest, after a few hours of illness, one whose name will always be identified with a great and noble work. JOHN CONOLLY, to whose earnest convictions, faithful perseverance against all difficulties, and zealous labours, the modern humane treatment of the insane mainly owes its practical origin and its consummate triumph, is henceforth only a name in history. But if there is a good title to the gratitude of mankind in the alleviation of infinite human suffering—if there is a title to immortal fame in the faithful performance of a great and good work of reform, the memory of which must last as long as human sympathies endure, then his is a name which the world will not let die, and his a glory of which nothing ever can bereave him. He made the best part of a life having many vicissitudes a noble part of human progress: by his death individual ties and sympathies, virtues and foibles, all fall away, and the greatness of his life, standing more clearly out, becomes the concern, as it is the gain and honour, of mankind.

The late John Conolly, M.D., was born at Market Rasen, in Lincolnshire, his mother being of the name and family of the present Laureate. His father dying when he was only a few years old, he was early sent from home to school; and often and earnestly in after life did he revert to the dreary misery of that period, in which the semblance of learning was mechanically imparted by aid of frequent punishments. That he had obtained by stealthy purchase some volumes of the *Spectator* and a copy of the "Pilgrim's Progress" were gleams of bright reminiscence of that dark period; and he read and re-read the essays of Addison with a delight to which he ever loved to recur, and which we may well understand in one who wrote as elegantly and correctly as he always wrote. It may well be, indeed, that the influence of Addison's easy and graceful style contributed to the formation of his own correct taste in composition; for to the last scarce anything more offended his refined sensibility than coarseness and slovenliness in the expression and structure of a sentence.

Soon after leaving school, and when not yet eighteen years of age, he entered a Militia Regiment as ensign, and was stationed at different places both in Scotland and Ireland. The life of thoughtless pleasure and reckless excitement, common at that time amongst the officers of a regiment, could not fail to be for a time attractive to a young ensign of lively and impulsive temperament, with a passionate love of genial social intercourse; but it marks the superiority of his mental culture, as well as the skill of the pen which has often pleased and instructed the readers of this journal, that other officers used commonly to have recourse to his help to compose their important letters. Not long after leaving the regiment, and when only 22 years of age, he married, and went with his wife to France, where in a beautiful cottage near Tours, afterwards occupied by the poet Béranger, he passed in unheeding enjoyment the happiest year of his life. But at the end of a year, and when a child had been born, it became necessary to think seriously of adopting some profession or other regular means of livelihood. After consulting friends, one of whom was the amiable Dr., now Sir Arnold Knight, he resolved to commence the study of Medicine at Edinburgh. Leaving, then, behind him, with natural reluctance, his beautiful cottage and the unmingled poetry of life, he set forth with his wife and child to Edinburgh, and began in earnest the work of a Medical student. It was a great and dreary change, but its weight was lightened by the friendly hospitality of many of the illustrious men who at that time adorned the northern capital, and who were attracted to the student by the amiable disposition, courteous manners, and refined culture which distinguished him through life.

On graduating as a Doctor the subject of his thesis was "Insanity;" his attention being thus early occupied with the subject which was to be the field of his future labours and triumph. It will be erroneous, however, to suppose that he then foresaw the future scope of his work, or that he had any definite aim which he proposed to himself to work for. No man who has done anything great in the world of practical activity ever had such pre-determined aim, though he might think so afterwards; there is much blind struggling, amidst shifting uncertainties and untoward circumstances, before the appointed man and his work come together; and it is that which lies deep in his nature, that which is beneath will and beneath consciousness, and of which he can give no account; that unconsciously impels him on his course, and inspires him with the faith necessary to success.

On leaving Edinburgh, Dr. Conolly first went to Lewes, with the object of there settling in practice, but moved after three months to Chichester, where, about the same time, the late Sir John Forbes established himself. Their short rivalry was the foundation of a lasting friendship, and they were afterwards associated together as joint editors of the *British and Foreign Medical Review*, and with Dr. Tweedie in the production of the *Library of Medicine*. But Chichester was not equal to the support of two Physicians, and Dr. Conolly, after residing there a year, removed to Stratford-on-Avon, where he practised successfully for several years, and accomplished much literary work. Here, too, he enjoyed the friendship of the great Whig scholar and champion, Dr. Parr, the severest of schoolmasters, but the most kind-hearted of men. Leaving Stratford-on-Avon to assume the Professorship of the Principles and Practice of Medicine at University College, London, he established himself in Gloucester-place, and was during the time of his residence in London one of the most active members of the "Society for the Diffusion of Useful Knowledge." But as practice did not come sufficiently quickly, and as divisions existed in the councils of the college, and bickerings and heart-burnings within its walls, while no Hospital had yet been built, he resigned his appointment, after holding it for three years, and returning to the neighbourhood of Stratford, settled at Warwick. It was after he had been there six years that the office of Resident Physician to the Hanwell Asylum became vacant, and that he applied for the appointment; being defeated only by the casting vote in favour of Dr. Millingen. But a year afterwards the office was again vacant, and his second application was happily successful. And now at last, after many wanderings and much suffering, he had found the true sphere of his labours: he was appointed Resident Physician in June, 1839, and in September of that year every form of mechanical restraint had been banished from the Asylum. It was some time before the non-restraint system was generally accepted as practicable; much opposition had to be encountered and overcome; but the experiment made on so large a scale in an institution containing nearly a thousand patients, suffering from every variety of insanity, proved beyond all question not only the entire practicability, but the great benefit of the humane system of treatment. The complete record of its progress is contained in the admirable Reports of the Hanwell Asylum from 1839 to 1844. In the latter year Dr. Conolly resigned his appointment at the Asylum, but continued to devote his energies to the promotion of every good scheme having for its object the improvement of the condition of the insane. In conjunction with the late Dr. Reed, he was an active promoter and the constant supporter of the Idiot Asylum at Earlswood; and his warmest desires were fixed on the establishment of long and sorely needed public asylums for the poor insane of the middle classes.

Though it may justly be thought, perhaps, that one who did so much for the world was not adequately rewarded by it, when others who have not deserved so well have received great rewards, his services were not entirely unrecognised. A magnificent testimonial, consisting of a massive silver group of allegorical figures, together with his portrait, was presented to him in 1852 by public subscription; and in the same year the University of Oxford conferred upon him the degree of D.C.L. But his highest testimonial is the noble work which he has accomplished, and his highest honour will be in the grateful recognition of foreign lands and of future ages.

Of his literary works we cannot speak at length now. They are well known both in this and other countries; his book on the "Construction and Management of Lunatic Asylums" is a standard work of authority, and his little work on "Hamlet," published two years ago, is one of the most graceful, learned, and philosophical essays that has ever proceeded from any pen. His extremely polished style, the careful construction of his sentences, the elegance and precision of his language, make whatever he wrote most interesting to read.

During the last few years of his life he had, in consequence of failing health, gradually retired from active practice; and daily occupied in the study of classical authors, English and

Latin, he awaited with equanimity the great change. He had so lived that when the summons came he could meet it, not in fear and trembling; but, sustained by the consciousness of a good work well done, he willingly approached his grave as one who, the long day's task over, "wraps the drapery of his couch about him, and lies down to pleasant dreams." His end was sudden, as he had ever prayed that it might be; and his intellect was perfectly unclouded until close upon the fatal termination, as he had hoped with an exceeding earnest hope that God would grant it might be. A sudden attack of hemiplegia was followed by severe unilateral convulsions, and in a little more than two hours he entered on his everlasting rest. He was 71 years of age.

"After life's fitful fever he sleeps well."

## WILLIAM OWEN LUCAS, ESQ., M.R.C.S.

Death has just closed, at the age of 78 years, the career of a man whose loss will be widely felt. Mr. Lucas breathed his last on Sunday, the 25th ult., at his residence, Taunton-place, Regent's-park, from a sudden attack of epileptiform apoplexy, resulting from albuminuria. He was suddenly seized in church at the conclusion of the service, and never recovered consciousness.

He terminated a bright career of honourable and exemplary usefulness; and it is consolatory to his friends to reflect that the last act of an upright and unsullied life was that of prayer and thanksgiving in the temple of God. He was a man especially remarkable by his high tone of Professional conduct and feeling, and well worthy of the intimacy he enjoyed through life with most of the leading members of our Profession in London.

His manly and independent character, and genial manners, together with a thorough practical knowledge of his Profession, secured to him an extensive practice. While in private life he won the esteem of all who knew him—kindhearted, generous, and sympathising—he was always to be found foremost where any good was to be done, combining the integrity and courtesy of the gentleman with the kindness and affection of a friend.

"For worth he had ever a hand and smile,
And for poverty his purse and a tear."

## BOOKS RECEIVED.

Transactions of the Obstetrical Society of London. Vol. VII. For the Year 1865. With a List of Officers, Fellows, etc. Pp. 335. London: 1866.

*** This society continues to flourish, and the papers contained in the volume before us testify to its practical value. Dr. W. S. Playfair gives notes of a case of extra uterine fœtation. The tumour occupied the left hypogastrium. Potassa fusa was applied with the view of forming an aperture through which the fœtal structures might possibly be extruded. The patient, however, died. A cyst was found full of adipocere, studded with portions of fœtal bones. Mr. Wills, of Totnes, Devon, gives a case of double monstrosity, with account of the delivery. Two *left* feet protruded. Mr. Wills, assisted by Mr. Owen, placed the patient under chloroform and extracted two male children, attached face to face. The mother made a good recovery. E. Parson, M.D. Lond., gives a case of embolism of the pulmonary artery after ovariotomy (*embolism* means, entomologically and by usage, not the formation of a clot, but its being cast off and deposited in a vessel), beginning soon after the operation and causing death on the fourth day. Mr. Parson considers that the slowness of death was due to the clot being tubular and allowing blood to pass for a time to get into the lungs. He considers this might have been diagnosed before death. Albert Napper, Esq., of Cranley, describes a case of amputation of the upper arm under chloroform in the seventh month of pregnancy. The woman made a good recovery, and was subsequently delivered safely. This case is very valuable to practical Surgeons, as the question of operating during pregnancy is often a difficult one to decide. The annual address of the President, Dr. Henry Oldham, contains much of importance to Accoucheurs, especially his remarks on the necessity for an improvement in sick nurses. Dr. Greenhalgh exhibited a polypus of unusual size, and insisted on the desirability of cutting them away *in situ*. Dr. Bathurst Woodman, specimens of fibroid tumours, illustrative of the connexion between unfruitful sexual excitement and these growths. He also describes a case of chancre on the os uteri. The patient died of anæmia: the post-mortem appearances are carefully given. Mr. I. B. Brown recommends the actual cautery as a means of arresting bleeding from the pedicle as likely to lessen the dangers of ovariotomy. Dr. Snow Beck considers that the phenomena of puerperal fever may be produced by poisons introduced into the general system; that the uterine secretions would supply the poison, and the open sinuses of an imperfectly contracted uterus would admit it. He gives two cases to prove these deductions. Gives an able sketch of the present position and duties of the obstetrician. From New Zealand Mr. John Rouse sends the recovery of a still-born child, with a marking of the skin simulating the effects of an injury over the larynx, which might, under other circumstances, have been suspicious; it was covered with unbroken vernix caseosa. Mr. A. Harris, Camborne, Cornwall, gives a curious account of a membrane expelled from uterus a few days before delivery at the full term. Dr. Graily Hewitt and Dr. Meadows, after examination, consider the only explanation is that the woman has a partial or complete double uterus. Dr. Roper, of the Maternity Charity, has been led to the conclusion that labour in primiparous women late in the reproductive period of life is not so difficult as most obstetricians seem to believe. Dr. Alfred Meadows endeavoured to relieve a case of imperforate bowel by operation, but though the knife was passed up for an inch or more, it failed to reach the gut, and the child died. Mr. W. Gayton describes minutely a case of monstrosity born in the eighth month. Dr. Braxton Hicks contributes two cases of mento-posterior face presentation. Dr. Marion Sims figures a new curette for uterine fungoid granulations, made by Mr. L. Mayer, with a moveable joint in the shaft, which is a great improvement. Mr. King Pierce, a description, with a graphic illustration of a fœtus lacerated transversely at birth; also an elaborate report on the same by Drs. Meadows and Harley. Mr. Hammet Harley, F.L.S., figures an anencephalic infant who lived for seven hours. The mother had been frightened by an erotic idiot. Dr. Rash gives a case of œdema of the lower half of the body after a fall during pregnancy. Mr. Lawton's erectile tumour in the sheath of the funis is interesting. An engraving from Professor White, U.S., at p. 217, of the section of a pelvis, does not resemble the pelvis of females in Europe, and is calculated to mislead students. Dr. Greenhalgh's careful description of a distorted pelvis contrasts well with it. Dr. Aveling has a good case of ovariotomy, with remarks on the treatment of the pedicle. Dr. Uvedale West describes and figures very beautifully a form of battledore placenta. Professor Berry gives remarks on two cases of obstructed labour. The volume ends with an elaborate paper by Dr. Greenhalgh, on the Cæsarian Section and Craniotomy, and a catalogue of obstetric works in the Society's library.

The Medical Record: a Scientific Monthly Journal of Medicine and Surgery. No. I. New York, March 1, 1866. Four dollars per annum. W. Wood and Co., Publishers, 61, Walker-street, New York.

*** Contains original communications from W. H. Van Buren, Gordon Buck, Austin Flint, Alfred Port, E. Williams, and other men of great ability. May we ask our Professional *confrères* in America why they do not discountenance the wholesale kleptomania of their booksellers? Why should the works of English authors be appropriated without consent and remuneration? Americans who travel say that it is because of the profligate and disreputable class who attain political powers; but surely a learned Profession should be above such a practice. If an American Physician or Surgeon wants a book by Syme, or Tanner, or Hughes Bennett, why not get an authentic edition, and refuse to countenance piracy?

Bulletin de L'Académie Royale de Médécine de Belgique, Année 1865. Deuxieme Serie. No. 10. Bruxelles, 1855. Pp. 922.

*** With the public register appended. Begins with an address by M. Warlomont, on the Duties of the State towards the Widows and Orphans of Medical Men who have fallen Victims to Duty in Cholera Epidemics. A Paper on Pleuro-pleumonoia in Cattle, by M. Maire, and several other papers.

Journal de Médécine Mentale, etc., etc. Par M. Delasianne. Tome VI. No. 1. January, 1866. Paris: Masson and Son.

*** A paper on Mental Pathology; one on Medical Jurisprudence, by M. Pegrat; and on Suicide by Dr. Lemelaigne.

The Negro in Jamaica. By Commander Bedford Pim, R.N. Pp. 72. London: Trübner and Co., 60, Paternoster-row. 1s.

*** Consists of two parts; one, the African considered ethnologically, full of interesting and important research. Part II.—The African in the New World, which considers the Negro's position as a man fairly and rationally, and a clear and philosophical paper. Part III.—On the Past and Present Condition of Jamaica, worthy of the deepest attention of all persons in that beautiful, unhappy island.

A Dictionary of Science, Literature, and Art, comprising the Definitions and Derivations of the Scientific Terms in General Use, etc. Edited by W. T. Brande, D.C.L., and the Rev. G. W. Cox, M.A. London: Longmans. Part VIII., completing the Second Volume.

## ARMY AND NAVAL MEDICAL SERVICES.

### ABSTRACT OF THE REPORT OF THE COMMITTEE APPOINTED TO INQUIRE INTO THE WHOLE QUESTION OF THE RANK, PAY, AND POSITION OF THE MEDICAL OFFICERS OF THE ARMY AND NAVY.

(Concluded from page 240.)

### Medical Officers of the Navy.

The Committee having met to consider the rank, pay, and position of Naval Medical Officers, the Chairman stated that Captain Henry B. Phillimore, R.N., had been appointed a Member of the Committee, and would attend in the place of Lord W. Paulet, K.C.B., on the inquiry respecting the Medical Officers of the Navy.

The Evidence and Report of the Royal Commission in 1840 on Navy and Army Promotion; and
The Evidence and Report of the Committee of the House of Commons on the Navy Estimates in 1848;
were added to the other papers already on the table.

A memorial addressed by the Royal College of Physicians, dated the 12th July, 1865, to his Grace the Duke of Somerset, First Lord of the Admiralty, pointing out the "general and settled feeling of discontent with their condition which prevails among the Medical Officers of the Navy;" and "that it is highly desirable that the Medical services of the Army and Navy should be assimilated as closely as their relative nature will admit in rank, pay, position, and retirement," was read: also three letters respecting that memorial, from Dr. Bryson, C.B., Medical Director-General of the Navy, to the Lords Commissioners of the Admiralty.

At the commencement of the inquiry into the condition of the Naval Medical Service, the Committee was informed by Dr. Bryson that he experiences the very greatest difficulty in obtaining young men to join the service; and that at present he has only three candidates on his list, while upwards of forty Assistant-Surgeons are required to supersede Surgeons employed in lieu of Assistant-Surgeons, to fill up vacancies, and to provide for the common exigencies of the Service.

Deeply impressed with the gravity of this condition of the service, the

Committee have in the first place endeavoured to discover the reason for so great a deficiency of candidates, and from the evidence brought before them have come to the conclusion that it may be referred chiefly to the following causes :

1. The Committee was informed that when the Royal Medical Warrant of 1st October, 1858, became known to the Lords Commissioners of the Admiralty, they obtained an Order in Council, dated 13th May, 1859, and in the same month issued a Circular Order conferring rank, pay, and retirement on Naval Medical Officers, on the same terms as were granted to Army Officers.

It is alleged that the non-fulfilment of this Order in Council in some of its provisions has acted prejudicially to the interests of the service, by deterring Medical candidates from entering the Naval service, and that the professors at the various schools have dissuaded students from doing so.

The existence of this alleged grievance, and the unfavourable impression produced by it upon Medical teachers and students, and consequently its prejudicial effect upon the service, appears to be fully established by the evidence before the Committee, and it is also confirmed by Dr. Bryson in his letter of the 9th August, 1865.

2. A second reason may be sought in the fact that, although the number of Surgical diplomas from the Colleges of London, Edinburgh, and Dublin has apparently increased during the last ten years, the general impression of Medical gentlemen is that the actual number of Medical students has decreased or not kept up with the large increase of the population.

3. A third reason for the deficiency of Medical candidates for Her Majesty's Service, and one which would seem to be of great force when taken in conjunction with the foregoing, is the wider field which of late years has been opened for Surgeons, both in this country and abroad, in emigrant ships, and in the service of the large steam navigation, mining, and other companies, and in the colonies, etc.

Her Majesty's Service therefore is necessarily brought into a much more severe competition with the general public demand for Medical men than was formerly the case.

Exclusive, however, of these considerations, the Committee are led to believe that a general opinion prevails at the Medical schools that the Naval service does not hold out the same inducements, nor the same prospects as the Army Medical service; that, independently of the personal and social discomforts which are inseparable from a sea life, and which are especially experienced by young men on their first joining the naval service, the pecuniary and social advantages are in favour of the military service; and that young men, in the choice of a profession in which their future prospects are so materially involved, naturally prefer that service which appears to them to hold out the greatest advantages. That this is the case appears to be confirmed by the fact that, whilst the army obtains as many Medical officers as are required, the navy does not secure the requisite number of candidates for the service, and many young men resign their appointments to seek other employment.

The contrast between the two services with respect to the relative rank, pay, allowances, and position of the respective Medical officers is shown in the following statement of particulars; and from returns which appear in the Appendix it was ascertained that, although the full and half-pay and retirement are the same, there are certain differences in pecuniary and other allowances between the two services disadvantageous to naval Medical officers.

1. For instance, by the Royal Warrant of October 1, 1858, and the Order in Council of May 13, 1859, it is stated that there shall be four ranks of Medical officers, namely :—

Inspector-General; Deputy Inspector-General; Surgeon, who after twenty years' service shall be styled Surgeon-Major in the Army, and Staff-Surgeon in the Navy; Assistant-Surgeon. But in the Army the Surgeons-Major have not only been put on a separate list, but promotion to that list has been made by Royal Warrant, virtually establishing "Surgeons-Major" as an additional or fifth rank.(a)

In the Navy no such distinction has been made, either in respect to a separate list of Staff-Surgeons, or a distinct rank, the Order in Council only admitting of the four ranks. This difference of practice gives the army service an advantage.

2. The Assistant-Surgeon of the Army counts all the time he serves on full pay towards his future promotion, advanced pay, and retirement.

The Assistant-Surgeon of the Navy, although his full service counts towards increased pay and retirement, can only count ten years of his service towards his promotion as Staff-Surgeon.

3. The Army Surgeon is always on full pay, except in cases of reduction, consequently all his time from his entry into the service is available continuously for future advancement.

With the Navy Surgeon it is different; he is placed on half-pay so soon as his ship is paid off, and may not be again employed for one, two, or more years, all of which time is lost to his future advancement and retirement; and from the evidence as well as the return it appears the Naval Surgeon on an average has to be about twenty-four years in the service before he can complete twenty years' full-pay time.

4. Although the Order in Council of May 13, 1859, established the same rates of full and half-pay and retirement to Naval Medical Officers as were given to the same rank of Army Medical Officers by the Royal Warrant of October 1, 1858; yet the pecuniary and other allowances have not been equalised; for instance :—

5. At the military Hospitals at home, Army Medical Officers and Naval Medical Officers at the Royal Marine Infirmaries, in addition to their full pay, are allowed servants, or an allowance of one shilling a day for each, and the number of servants is fixed according to relative rank. They are also granted fuel and candles, or money allowance instead, also barrack furniture (abroad 1s. 6d. for servants).

The Naval Medical Officers at Hospitals above the rank of Assistant-Surgeon have no allowances of any description whatsoever; they have only the full pay of their rank, but on foreign stations have allowances in lieu of provisions.

6. The pecuniary travelling allowances for army officers are fixed according to relative rank.

The naval allowances are not fixed according to relative rank, but at a lower rate according to a classified scale (see Admiralty Instructions pages 235-6).

7. By the Royal Warrant prize money in the army is to be shared according to relative rank.

In the navy the distribution of prize money by Royal Proclamation is not classified in the same manner as in the army, and is consequently not shared according to the principles of relative rank.

8. Military officers when serving in India, and also in some of our colonies, receive pecuniary allowances of a local character.

The naval officer, unless when serving on shore, does not benefit by these regulations.

9. The senior Medical officer serving on a foreign station has an allowance according to the number of the troops on the station (see Article 9, of Medical Warrant).

The Naval Medical Officer has no such advantage.

It has been stated to the Committee, in the course of the evidence given by Naval Medical Officers, that, independently of the differences which exist in allowances granted to Army Medical Officers from which Naval Medical Officers are excluded, there are several other causes for complaint on their part in respect to their position, which they consider should be remedied.

10. They consider that they are entitled from their relative rank to the choice of cabins, in the same manner that army officers are entitled to choice of quarters, with the view of obtaining a cabin between decks for some period of their service instead of being always in the cockpit.

11. That the claim of Assistant-Surgeons to cabins should be more clearly acknowledged, as the existing Admiralty Order is sometimes not carried out or is evaded.

12. That Staff-Surgeons from their rank are entitled to more consideration than at present, in respect to servants.

13. That in the army, with nearly the same number of Medical officers above the rank of Assistant-Surgeon, there are seven Inspectors-General, and twenty-six Deputy Inspectors-General on full pay, whilst in the navy there are seven Inspectors and only fifteen Deputy Inspectors, three only of the former and thirteen of the latter being on full pay, and they request consideration as to an increase of these few rewards for long and meritorious service, either by appointing Deputy Inspectors to flag-ships, in place of Surgeons, or otherwise as may be thought fit.

14. That the periods of retirement by age should more nearly correspond with the Army Regulations, in order to advance promotion.

15. That more opportunities for shore or home appointments should be open to Naval Medical Officers by limiting such appointment to five years.

16. That they should have equal consideration in the award of honorary distinctions under the statutes of the Order of the Bath as Army Medical Officers.

17. That extra pay, lodging money, and compensation for losses to Naval Medical Officers should be determined according to relative rank.

18. That Naval Medical Officers should participate in the advantages of Greenwich Hospital pensions.

19. That when Surgeons are required by the exigencies of the service to perform the duties of Assistant-Surgeons they should enjoy all the advantages of the higher rank.

20. That from the difficulty of keeping up their Professional knowledge when at sea, Assistant-Surgeons should be allowed leave of absence to attend a Medical school to enable them to qualify for their examinations.

21. That Staff-Surgeons, in order that they may be placed in their proper position according to relative rank, should rank with Commanders by date of Commission, and that the wording of Articles 3, 4, page 40, of the Admiralty Instructions, and the last clause paragraph 9, of the Circular of May, 1859, require reconsideration as affects the position of Medical officers.(b)

22. That the full pay should be increased, as an inducement for those qualified candidates to apply for admission into the service, who now seek other and what they consider to be more advantageous employment.

1. The Committee have given careful consideration to these various subjects of complaint with respect to the service itself and to the circumstances which appear to be efficient causes of the dearth of Medical candidates, and impressed with the reasonableness of some of the alleged complaints, and with the propriety and justice not only of placing the Medical officers of the navy in the same position in regard to all advantages as those of the army, but in view of the circumstances which naturally render the naval the less popular service of the two to men who enter it at a mature age, they are of opinion that, so far as is practicable, such additional advantages should be held out to Naval Medical Officers as may in some degree compensate for the less favourable nature of the naval service; and particularly for the difference which exists between the two services in the matter of forced loss of time upon half-pay.

2. They are further of opinion that in order to meet the increased competition with other fields of employment open to Medical men in civil life, it is necessary to increase the pay and prospective advantages of the service in order to obtain a due supply of well and liberally educated candidates.

In fulfilment of these objects they have resolved to submit the following recommendations to the consideration of the Lords Commissioners of the Admiralty.

### *Recommendations.*

1. That Staff-Surgeons be placed on a separate list, and considered as a distinct rank, and that promotion to that rank (although twenty years on full-pay may not have been completed) should be open to officers for distinguished or special service.

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(a) In May 1865, Dr. Cogan, Surgeon of the 2nd Regiment, was specially selected for advancement to Surgeon-Major after only fourteen years, service, in consequence of meritorious service at Bermuda during the epidemic of yellow fever in 1864-65.

(b) On the subject of relative rank, it appears that on the promulgation of the Order in Council of May, 1859, the rank of Naval Medical officers became advanced, and they were placed in the same relative position as the Army Medical officers. The Naval Surgeon, from being junior to all lieutenants in the navy, become equal in rank with commanders, in accordance with the dates of their respective commissions; and when he became a Staff-Surgeon, he ranked with, but junior to, a lieutenant-colonel in the army, or a captain of the navy under three years' standing, and senior to all commanders. An Order in Council, in April, 1861, defined the relative rank of naval officers with officers of the army; by which the commander of the navy was raised in rank from major to lieutenant-colonel, but junior—the rank then held by Staff-Surgeons. In June, 1863, a further Order in Council was obtained, defining the relative rank between naval officers of the military and civil branches of the service, etc, ; in which the Staff-Surgeon was stated to rank with commanders, but junior of that rank. It is this clause which is said to place the Staff-Surgeon in a subordinate position; for although his relative rank with the army officer is the same—namely, lieutenant-colonel, but junior,—he considers himself, from his position in the naval service, to be below his proper rank with the Army Medical officer.

2. That the whole time an Assistant-Surgeon serves on full-pay should be allowed to qualify for the rank of Staff-Surgeon, provided he passes his examination for Surgeon before he completes ten years' service.

3. To compensate the Naval Surgeon for loss of time, by his being placed on half-pay and unable to obtain employment, the Surgeons' and Staff-Surgeons' full-pay should increase by periods of four years instead of five years as at present.

4. That Naval Medical Officers be granted the same allowances at Hospitals at home and abroad as the Army Medical Officers, in respect to servants, fuel, furniture, or pecuniary allowances in lieu.

5. That the scale of travelling allowances, extra pay, lodging money, and compensation for losses, be fixed for Naval Medical Officers according to relative rank.

6. With respect to the question of prize money, the Committee, owing to the present principle on which the Prize Proclamation is drawn, are unable to agree upon a special recommendation, but are inclined to the opinion that the share of Medical officers should, after the officer in command of the ship, be regulated by relative rank.

7. That in regard to cabins, while the requirements of the service renders it necessary that the senior executive officer and the staff-commander or master should have the cabins placed most advantageously for their special duties, Medical officers should, after them, have cabins more in accordance with their relative rank in the service, and that cabins for all Assistant-Surgeons should be specially ordered, to prevent future difficulties or neglect of the existing Admiralty Order.

8. That a Staff-Surgeon, ranking with commander, be allowed a servant.

9. That a Staff-Surgeon should be appointed to all flag-ships bearing the flag of a commander-in-chief on foreign stations, with an allowance of 5s. a day in addition to his established pay.

10. That the periods of retirement by age be fixed for

Staff-Surgeon, Surgeon, or Assistant-Surgeon, at . . 55 years
Inspector-General and Deputy-Inspector-General . . 65 ,,

but this regulation should only apply to new appointments.

11. That Naval Medical Officers be considered equally eligible to honorary distinctions as Army Medical Officers.

12. That they should have equal consideration for Greenwich Hospital pensions with other officers of the service.

13. That Assistant-Surgeons, after completing their time for examination for the rank of Surgeons, be granted two months' leave of absence on full pay, on the condition of their resuming their studies at a Medical school or Hospital.

14. That in order to place Staff-Surgeons on an equality in rank with Surgeons-Major in the army, they should rank with commanders by date of commission; but we are of opinion that officers in command of H.M. ships must on all occasions be considered senior in rank and precedence to all officers placed under their command, and that a ship, as a regiment, must always be represented by an executive or combatant officer, after whom all officers should take precedence according to the relative rank conferred on them by Royal authority. (See Clause 10, etc.)

15. That the pay of the Naval Medical Officers be increased in accordance with the following scale :—

*Scale of Pay proposed for Naval Medical Officers.*

| Rank. | Under 5 years' service. | | Above 5 years' service. | | Above 10 years' service. | | Above 14 years' service. | | Above 18 years' service. | | Above 22 years' service. | | Above 26 years' service. | | Above 30 years' service. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Present rate. | Proposed rate. | Present rate. | Proposed rate. | Present rate. | Proposed rate. | Present rate. | Proposed rate. | Present rate. | Proposed rate. | Present rate. | Proposed rate. | Present rate. | Proposed rate. | Present rate. | Proposed rate. |
| | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. |
| Assistant-Surgeons | 10 0 | 12 6 | 11 0 | 12 6 | 13 0 | 15 0 | 13 0 | *17 6 | .. | .. | .. | .. | .. | .. | .. | .. |
| Surgeons | .. | .. | .. | .. | 15 0 | 17 6† | 18 0 | 20 0 | 18 0 | 22 0 | .. | .. | .. | .. | .. | .. |
| Staff-Surgeons | .. | .. | .. | .. | .. | .. | .. | .. | 22 0 | 24 0† | 25 0 | 27 0 | 25 0 | 27 0 | .. | .. |
| *Deputy Inspector-General of Hospitals and Fleets | .. | .. | .. | .. | .. | .. | .. | .. | 28 0 | 30 0† | 30 0 | 32 0 | 30 0 | 35 0 | 34 0 | 37 0 |
| *Inspector-General of Hospitals and Fleets | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 40 0† | 45 0 | 45 0 | 47 0 | 45 0 | 50 0 |

* Provided he passes his examination before ten years' service. † Or on promotion.

16. That, as the prospect of optional retirement at an earlier period than at present permitted would prove a further inducement to young Medical men to enter Her Majesty's service, Naval Medical Officers should be permitted to retire after twenty years' service on full pay; but at the same time, in order to guard the interests of Her Majesty's service, the rate of half-pay awarded to officers so retiring should not exceed five-tenths of their full pay, and that officers with this service should be permitted to retire on the half-pay of their rank, if, after one year on half-pay, they are found, on Medical survey, to be permanently unfit for further service.

17. That as a special reward to officers of long and good service, who, owing to the comparatively small numbers of the inspectorial ranks, have not been promoted to any higher position than that of Staff-Surgeon, such officers of the rank of Staff-Surgeon as have served for twenty-five years on full pay should, on being compulsorily retired at 55 years of age, or retired on Medical survey, receive the half-pay of £1 a day.

We further recommend that competitive examination for admission of Medical officers into the navy be established at Greenwich Hospital, after the plan adopted in the army, at Chelsea, and that Professional instruction by a course of lectures and attendance at Haslar be given to Medical officers on first entry, in some measure on the system adopted at Netley Hospital.

Some of the Medical witnesses have stated that it is desirable that naval boards of survey should be made purely Medical boards, as they are in the army; on this question, however, the Committee are not agreed, and therefore offer no opinion.

(Signed) A. MILNE.
H. B. PHILLIMORE.
DOUGLAS GALTON.
J. B. GIBSON, D. G.
A. BRYSON.
W. O. MARKHAM.
GEORGE BUSK.

### APPENDIX.—PROTEST FROM SIR J. R. GIBSON.

In signing these reports, I feel called upon to record my dissent from those recommendations in which the Committee suggest a different rate of pay for the officers of corresponding rank in the respective services, and a different period of service as qualifying for an increase of pay.

I do not think that the inspectorial officers of the navy are subject to more unfavourable conditions of living than those of the army. I fully concur in the augmentation of pay recommended for the former, but I am clearly of opinion the claims of the latter to equal consideration have been as fully established.

The proposal to give the Medical officers of the navy an increase of pay after four years' full pay service, while the same advantage is only attainable in the army after five years, is still more objectionable. Full pay service in either department is equally valuable to the State, and so long as the rate of pay is regulated by length of service, no distinction as to the duration of the periods qualifying for the increase should be made.

When Medical officers of the navy are unavoidably placed on half-pay while still effective, and when, in consequence of such reduction, they are deprived of an opportunity of completing the full pay service necessary to entitle them to the highest rate of retired pay, before being retired, under the superannuation clause of the existing Warrant, their case might be met by giving to all officers so superannuated the highest rate of retired pay for which they are by rank eligible, without reference to their full pay service, and their compulsory retired service might be allowed to count for increase of pay on their re-employment. Such a measure would be but just to those whose cases form the grounds of the Committee's recommendations, and it would remove all cause of complaint, without provoking discontent or affecting injuriously the interests of the Army Medical service, and, through it, of the army.

(Signed) J. R. GIBSON, Director-General
Army Medical Department, February 8, 1866.

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## MEDICAL NEWS.

**APOTHECARIES' HALL.**—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, March 1, 1866 :—

William Smith, Gorton, near Manchester; Henry Marten Body, Cheriton Fitzpaine, Devon; Abraham Robt. Verity, Bridgend, Glamorganshire; George Arthur Rogers, 32, Queen-square; Charles Thomas Dalley, Leicester; Allen Fenninga, St. Ann's-road, Notting-hill.

The following gentlemen also on the same day passed their First Examination:—

George E. D'Arcy Adams, King's College; John Canning Wilkins, University College.

### APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

**BAILEY, Mr. I.**, has been elected Dispenser to the Radcliffe Infirmary, Oxford.

**BRADLEY, JOHN**, M.R.C.S. Eng., has been appointed House-Surgeon to the Northern Hospital, Liverpool.

**FARRELLE, WILLIAM K.**, L.R.C P. Edin., has been elected House-Surgeon to the Belfast Union Infirmary.

**HICKS, Dr. J. BRAXTON**, F.R.S., has been elected Honorary Fellow of the Berlin Obstetrical Society.

**NICHOLS, WILLIAM P.**, F.R.C.S. Eng., has been elected Mayor of Norwich.

**PEIRCE, W.**, M.D., has been appointed Second Assistant Medical Officer to the Dorset County Lunatic Asylum, Dorchester.

**SMITH, ALFRED R.**, M.D. Edin., has been elected one of the Physicians to the General Infirmary, Hereford.

**SPEARING, ANDREW**, M.D. Glasg., has been elected Medical Officer to the Antrim Union Workhouse.

**WARD, JOHN**, M.R.C.S. Eng., has been appointed Medical Officer to the Penistone Union Workhouse, Yorkshire.

### BIRTHS.

**ANNESLEY.**—On March 8, at Devenport, the wife of Francis C. Annesley, M.R.C.S., Deputy Inspector-General of Hospitals, of a son.

**BENNIE.**—On February 24, at Lympstone, Exeter, the wife of A. Bennie, L.R.C.P. Edin., of a daughter.

**Blagden.**—On March 4, at 2, Rowcroft, Stroud, the wife of Robert Blagden, L.R.C.P. Lond., of a son.

**Caddy.**—On March 4, at Watcombe, Torquay, the wife of Dr. Caddy, R.N., H.M.S. *Ganges*, of a son.

**Cresswell.**—On March 1, at Dowlais, Glamorganshire, the wife of Pearson R. Cresswell, M.R.C.S.E., of a daughter.

**Puddicombe.**—On February 16, at Silverton, Devon, the wife of E. M. Puddicombe, M.R.C.S. Eng., of a son.

**Sanders.**—On March 4, at Chigwell, Essex, the wife of Dr. Charles Sanders, of a son.

**Sarell.**—On February 17, at Pera, Constantinople, the wife of Richard Sarell, M.D., of a son.

**Somerville.**—On February 11, at Gosforth, Whitehaven, the wife of W. Somerville, M.D., of a daughter.

**Thomas.**—On February 21, at St. Clear's, Carmarthenshire, the wife of J. L. Thomas, M.R.C.S. Eng., of a son.

## MARRIAGES.

**Holmes—Arrow.**—On March 8, at the Cathedral, Manchester, Frank Holmes, M.R.C.S., to Annie Elizabeth, second daughter of the late Henry Arrow, Esq.

**Lyall—Rowe.**—On February 22, at St. Thomas's, Haverfordwest, David Lyall, M.D., Staff-Surgeon R.N., to Fanny Anne, only daughter of George Rowe, Esq.

**Price—Haverson.**—On March 1, at All Saints' Church, Upper Norwood, William P. Price, M.D., to Annie Eliza, eldest daughter of J. P. Haverson, Esq.

**Ring—Miller.**—On March 3, at Willesden Church, John Ring, M.D., to Louise, youngest daughter of the late Reader Miller, Esq.

**Taylor—Swann.**—On March 1, at St. Mary Magdalen, St. Leonards-on-Sea, John Taylor, M.R.C.S., to Elizabeth, elder daughter of H. T. Swann, Esq.

## DEATHS.

**Law**, Dr. J. D., at Liverpool, on February 12, aged 33.

**M'Nish**, W., M.D., at Warriston-crescent, Edinburgh, on February 16, late Surgeon, 63rd Regiment.

**Sankey**, William, F.R.C.S. Eng., at Guildford Lawn, Dover, on March 5, aged 76.

**Watson**, John, M.R.C.S. Eng., at Regent-terrace, Newcastle-on-Tyne, on February 11, aged 30.

**Watters**, Henry B., L.R.C.P. Edin., at 110, Islington, Liverpool, on March 1, aged 31.

**Williams**, John M., M.R.C.S. Eng., at Bridgend, Glamorganshire, on March 1, aged 89.

**Wyber**, Dr. John, at the London Fever Hospital, recently, aged 26.

## POOR-LAW MEDICAL SERVICE.

⁂ The area of each district is stated in acres. The population is computed according to the last census.

### RESIGNATIONS.

*Bradford (Yorkshire) Union.*—Mr. Samuel Brown has resigned the Horton East District. Remuneration by case.

*Bridge Union.*—Mr. Robert Tassell has resigned the Third District; area, 4248; population, 2409. Remuneration by case.

*Hastings Union.*—Mr. Skinner has resigned the Third District; area, 8144; population, 1552; salary, £40 per annum.

*Louth Union.*—Mr. W. D. Ditchett has resigned the Grimoldby District; area, 17,217; population, 2854; salary, £40 per annum.

*Poplar Union.*—Mr. Robert Webb has resigned the Western District; population, 26,168; salary, £75 per annum.

*Walsingham Union.*—Dr. Thomas W. Damant has not resigned the Fakenham District.

*Wem Union.*—Mr. Edward Gwynn has resigned the Wem District; area, 12,196; population, 3526; salary, £70 per annum, including the workhouse.

### APPOINTMENTS.

*Alton Union.*—Charles Hammond, M.R.C.S.E., L.R.C.P., to the Bentley District.

*Bourn Union.*—James L. Pritchit, L.S.A., to the Castle Bytham District.

*Halifax Union.*—Thomas Henry Turney, M.R.C.S.E., L.S.A., to the Sowerby District.

*Stockport Union.*—Thomas Moore, M.R.C.S.E., L.S.A., to the Marple District.

*Taunton Union.*—Albert L. Peacock, M.R.C.S.E., L.S.A., to the Church-stanton District.

*Thorne Union.*—Henry W. Pullan, M.R.C.S.E., L.F.P. & S. Glas., to the Belton District.

**The New Professorship of Zoology and Comparative Anatomy at Cambridge.**—At the late election Mr. Alfred Newton and Dr. Drosier were the only candidates. Mr. Newton received 110 votes, and Dr. Drosier 82.

**Prize Question.**—For the subject of the prize of 1600 francs instituted by Madame Aubanel, the Paris *Société Medico-Psychologique* proposes the following question:—"Remissions, Intermissions, and Lucid Intervals in the Various Forms of Insanity, considered in a Medico-Legal Point of View." Essays to be forwarded to the Secretary, M. Brochin, 7, Boulevard St. Michel, before March 31, 1867.

**Mr. Worms' Treatment of Cattle Plague.**—Mr. J. Banks Stanhope asserts in the *Times* of Saturday, March 3, that Mr. Worms' plan of treatment has been fairly tested on his farm at Revesby, and has proved a failure.

**The Levée.**—At the *levée* on Wednesday the following presentations to the Prince of Wales on behalf of the Queen took place:—Mr. James Pattison, Cromarty, Civil Surgeon, Tavoy, British Burmah, by the Earl de Grey and Ripon; Dr. Dumbreck, C.B., on appointment as Honorary Physician to Her Majesty, by Sir J. B. Gibson, K.C.B., M.D.; Sir James Brown Gibson, K.C.B., on appointment as Knight Commander of the Bath, by the Duke of Cambridge; Dr. Leonard, Inspector-General of Hospitals and Fleets, by the Duke of Somerset; Dr. Logan, C.B., on appointment as Companion of the Bath, by Sir J. B. Gibson, K.C.B., M.D.; George Pain, Surgeon, 11th Prince Albert's Own Hussars, by the Earl of Cardigan. The following gentlemen attended the *levée*:—Dr. Arthur Farre, M.D.; and Mr. White Cooper.

**Mr. E. R. Lankester**, of Downing College, Cambridge, who has been elected to the Physical Science Scholarship at Christ Church, is the eldest son of Dr. Lankester, the Coroner for Middlesex.

**Magdalen College, Oxford.**—There will be an election at this College in April next to a Demyship in Natural Science of the value (room, rent, and tuition included) of 75*l.* per annum, and tenable for five years from the day of election. The examination will commence on April 17. Particulars relating to the examination may be obtained by applying to the President or Senior Tutor.

**Testimonial to Dr. Lobb.**—A valuable testimonial, consisting of a silver salver and a tea and coffee service, accompanied by a handsomely-illuminated volume, containing the names of the subscribers, was presented at the Albion Tavern, on the 3rd inst., to Dr. Lobb, of Aldersgate-street, by several of his friends and patients, on his retirement from practice, in which he had been actively engaged for upwards of 40 years. After the presentation, Dr. Lobb was entertained at dinner; Dr. C. Brodie Sewell, the treasurer of the Testimonial Fund, presiding.

On the evening of Feb. 28 Mr. R. V. Tuson, Professor of Chemistry, was invited to attend a meeting in the theatre of the Royal Veterinary College, at which he was presented by by his pupils with a testimonial "as evidence of their esteem, as well as a slight recognition of the able and energetic manner in which he has laboured in their behalf, and of his uniformly kind and gentlemanly behaviour towards them." The testimonial consisted of an address signed by seventy-two students, and of one of Smith and Beck's binocular microscopes, with numerous appliances. We have reason to believe that Professor Tuson's popularity amongst the students is well deserved.

**Contest for a Coronership.—Success of the Medical Candidate.**—On Saturday the Under-Sheriff for Yorkshire made the official declaration of the poll for the Coronership of Yorkshire (Doncaster district), for which there had been a severe contest on the preceding Thursday between Dr. Guy, the Deputy Coroner for the Borough of Doncaster, and Mr. Edward Nicholson, the clerk of the peace. The numbers were—for Dr. Guy, 582; for Mr. Nicholson, 377; majority for Dr. Guy, 205. Voters were brought from a distance of seventeen miles, as far as from Crowle, on the borders of Lincolnshire. The freeholders, 110 in number, of Thorne, where Dr. Guy had been Union Medical Officer for fourteen years, and where he had gained a very distinguished reputation for skill, energy, and kindness, voted unanimously for him.

**Compensation for Railway Accidents.**—The Metropolitan Railway Company have presented to Parliament a Bill asking for additional powers, and containing a clause limiting the company's liability for injury by accident on the railway to cases in which notice of the claim is given to the company within two months. The Board of Trade suggest if such an alteration of the law be made, it would be more convenient that it should be by a general Bill than by special Acts of railway companies creating exceptional immunities in their favour. One or two companies are also applying this Session for Bills which if passed as presented will create an exception in their favour in regard to liability to make compensation for injures to third-class passengers. The liability has been limited to 100*l.* in relation to passengers by certain morning and evening trains which various companies ere compelled to run at extremely low fares for the accommodation of the working classes; one company now desires to have this limited liability to third-class passengers applied to all its Parliamentary trains.

**A Strike at the British Museum.**—The *Athenæum* says that the chief officers and their assistants, including Professor Owen, Dr. J. E. Gray, and Mr. J. W. Jones, have presented a memorial to the Government asking for an advance of pay.

**The Profession in Islington and the Coroner for Central Middlesex.**—At a numerously-attended meeting of the Islington Medical Society, specially convened to consider the subject, the following resolutions were carried unanimously:—1. That it is the opinion of this meeting that when a charge is made against a Medical man before the Coroner, it is unjust that any vote of censure should be passed by the jury without the accused having an opportunity of defending himself. It is, therefore, a matter of regret that the Coroner for Central Middlesex should not have borne this principle in mind in certain recent cases. 2. That the preceding resolution be published in the following Medical journals:—*Lancet*, *Medical Times and Gazette*, and *British Medical Journal*.

**Royal Institution of Great Britain.** — At the general monthly meeting on Monday, March 5, 1866, Sir Henry Holland, Bart., M.D., D.C.L., F.R.S. President, in the chair, Charles Joseph Hyde Allen, Esq.; George Acland Ames, Esq.; John Boyle Barry, Esq., M.R.C.S.; Edward Ladd Betts, Esq.; John Conolly, M.D., D.C.L.; Mrs. Katherine Sophia Elizabeth Foote; James Park Harrison, Esq., M.A.; Mrs. Elizabeth Mary Hopgood; John Mortimer Hunt, Esq.; Sir James Lacaita; Sir Charles Nicholson, Bart.; Brinsley de Courcy Nixon, Esq.; J. Bertrand Payne, Esq., F.R.G.S.; Joseph Payne, Esq.; Sir Samuel Morton Peto, Bart., M.P.; David Trail Robertson, Esq.; Pandeli Ralli, Esq.; James Graham Stewart, Esq.; Daniel Charles Stiebel, Esq.; and William Castle Smith, Esq., were elected Members of the Royal Institution. The special thanks of the members were returned to the donors of the following additions to "The Donation Fund for the Promotion of Experimental Researches:"— Captain Douglas Galton, C.B., £10; Harry Mackenzie, Esq., third donation, £10 10s.; Samuel Reynolds Solly, Esq., F.R.S., fourth annual donation, £20; Adam Murray, Dsq., second donation, £5 5s. The decease of Wm. Thomas Brande, Esq., D.C.L., F.R.S., L. & E., etc., Honorary Professor of Chemistry in the Royal Institution, was announced from the chair. [Mr. Brande was elected Professor of Chemistry in 1813, and Honorary Professor in 1852.] The presents received since the last meeting were laid on the table, and the thanks of the members returned for the same.

**Illegally Receiving a Lunatic.**—At the Oxford Assizes on Saturday, March 3, Richard Harris and John Aries were indicted for illegally receiving a lunatic into their respective houses for profit without a licence, contrary to the statute 8th and 9th of Victoria, cap. 100, section 90; and also for ill-treating the lunatic, contrary to the statute 16th and 17th of Victoria, cap. 96, section 9. Mr. Huddleston, Q.C., and Mr. J. O. Griffits were for the prosecution; Harris was not defended by counsel; Mr. Harrington was for Aries. Harris pleaded "Guilty" to the charge of receiving the lunatic for profit without a licence, but stated he was ignorant of the law; Aries pleaded "Not Guilty." It was then stated that the prosecution was at the instance of the Commissioners in Lunacy, and that the lunatic was a woman named Elizabeth Sims. Harris was a gardener, earning from 12s. to 13s. a-week; Aries was tenant to the mother (a widow) of the lunatic, and farmed forty-two acres at Marston, and the defendants had received the lunatic at the request of her mother. Aries received 16s. a-week with her. At his house the lunatic was seen by Mr. Hitchings, a Surgeon, who found her in a room destitute of furniture, the door of which was secured by a chain, but there was no evidence of any cruelty or neglect. It was then agreed by the learned counsel, with his Lordship's sanction, that a verdict of "Not guilty" should be taken as to both prisoners on the counts of the indictment charging cruelty, and that Aries as well as Harris should plead "Guilty" to the rest of the charge. His Lordship then ordered the defendants to be discharged on their own recognisances to come up for judgment when called upon.

**Workhouse Infirmaries.**— The Association for the Improvement of the Infirmaries of Workhouses held a public meeting at Willis's Rooms on Saturday last, the Earl of Carnarvon in the chair. There was a very full attendance of noblemen, members of Parliament, members of the Medical and clerical Professions, guardians of the poor, and the general public. The first resolution was proposed by the Archbishop of York, and seconded by Mr. T. Hughes; it was "That the present management of the sick in the Metropolitan Workhouse Infirmaries is highly unsatisfactory; that the buildings are inadequate and unhealthy, the Medical attendance insufficient, the nursing merely nominal, and the general system of administration radically defective." Mr. Ernest Hart moved:—"That, with a view to the humane and efficient treatment of the sick paupers, it is desirable to consolidate the Infirmaries of the Metropolitan Workhouses, to support them by a general Metropolitan rate, and to place them under uniform management in connexion with the Poor-law Board." The motion was seconded by Mr. W. H. Smith. Mr. Davenport Bromley, M.P., moved:—"That in order to give effect to the foregoing resolutions, it is necessary that immediate steps should be taken to introduce a fitting measure in the House of Commons, and that a deputation be appointed to wait on the President of the Poor-law Board to ascertain whether he will be willing to bring in a Bill for the purpose." And "That, in the event of the President of the Poor-law Board declining to take charge of this question, the Committee of this Association is requested to take independent means to bring forward an appropriate measure in Parliament during the present Session." Sir J. Kay Shuttleworth seconded the resolution.

**Injection of Perchloride of Iron in Varicocele.**—M. Maisonneuve laid before the Academy the results of his trials of the injection of perchloride of iron in varicocele. Encouraged by the successful treatment of varices by this means, he extended its operation to varicocele, employing the Pravaz syringe used for hypodermic injections. A single injection of from twenty to twenty-five drops has always proved sufficient to induce the obliteration of the whole varicose mass, owing to the numerous anastomoses which exist among the veins of the cord, and their termination in one common trunk.—*Gazette Médicale, January* 20.

**Medical Ethics.**—May I venture to touch on a subject of Professional obliquity, if not misconduct, which is truly lamentable? May I lay bare a wound which cankers in our body, and which, like all sores, may be the better for being exposed? Is it possible to explain favourably the conduct of a man who, too readily, appears as a prosecutor, or on the side of the prosecution, against a fellow Practitioner for so called malpractice? In the majority of cases it is tolerably certain that no good ends are to be gained either by the public or Profession, and it is clear also, that much harm accrues to both; under these circumstances, it would be well to put an end to such a practice, and this is to be attained by our own efforts. If all men refused to appear in court against a Medical brother—except in cases of a criminal nature, when all Professional relations should cease to influence—these actions of malpractice would disappear, and this great blot upon our order would be erased. Should such a case come before you, and your opinion be asked by the legal adviser of the prosecutor, apply at once to the Medical man who was in attendance, for a full and complete account of the case submitted to you, and then having mastered it, give your judgment. In all probability it will dispel the errors with which the case was surrounded, and put the question in the right light, thus tending to stay the process, and arrest the action. At any rate, your part in the proceeding will be honourable, and, whatever the issue, your conscience will be clear. . . . There is yet another practice into which some men have fallen, and which needs only to be mentioned to be condemned; it has special reference to those who act as Medical advisers of a railway company. Is it consistent with the Medical man's true position, to become the agent of such a company in any extra-Professional capacity? Is it right that he should avail himself of the facilities open to him as a Medical man, for gathering information extra-Professional? Without doubt, such breaches of Professional faith do much harm in disturbing that healthy confidence in our discretion and honour which the public so generously repose in us. I say it is derogatory to our Profession and humiliating to our honour to do such things. When employed by a railway company, give your Professional opinion fairly and honestly upon the case before you as it stands, but never be led into any attempt to entrap a patient into an admission with a view of its being legally used against him, and to the benefit of your employers. Never use, or allow to be used with your sanction, any information given to you in confidence as a Medical man for other purposes than those for which it was given. Never assume duties which are unconnected with your Professional capacity, nor allow yourselves to be used as means for the adjustment of claims which it is clearly the business of others to determine.—*Introductory Address at Guy's Hospital, October* 2, 1865.

THE following are the last week's Cattle Plague Returns.

| Census Divisions. | 1. Attacked. | | | 2. Result of reported Cases from the Commencement of the disease. | | | | |
|---|---|---|---|---|---|---|---|---|
| | Week ending February 24. | Week ending February 17. | Week ending February 10. | Attacked. | Killed. | Died. | Recovered. | Unaccounted for. |
| 1. Metropolitan Police District . . | 12 | 16 | 23 | 7569 | 3193 | 3464 | 333 | 579 |
| 2. South Eastern Co. . | 16 | 26 | 24 | 4966 | 1537 | 2775 | 442 | 212 |
| 3. South Midland Co. | 711 | 619 | 683 | 13658 | 2380 | 9190 | 1237 | 851 |
| 4. Eastern Counties . | 262 | 152 | 284 | 8879 | 3168 | 4510 | 663 | 538 |
| 5. South Western Co. | 48 | 26 | 69 | 1399 | 369 | 728 | 186 | 116 |
| 6. West Midland Co. . | 293 | 1431 | 690 | 7963 | 803 | 5293 | 855 | 1012 |
| 7. North Midland Co. | 830 | 918 | 679 | 8602 | 1415 | 5539 | 780 | 868 |
| 8. North Western Co. | 3938 | 4636 | 4942 | 42849 | 1205 | 31304 | 3522 | 6818 |
| 9. Yorkshire . . | 1369 | 1836 | 1455 | 27336 | 1324 | 17313 | 5009 | 3690 |
| 10. Northern Counties. | 577 | 691 | 379 | 4688 | 966 | 2390 | 759 | 573 |
| 11. Monmouthshire & Wales . . | 268 | 395 | 448 | 7066 | 103 | 5595 | 970 | 398 |
| 12. Scotland . . | 1843 | 2225 | 1914 | 42714 | 4475 | 25116 | 9013 | 4110 |
| | 10167 | 13001 | 11590 | 177689 | 20938 | 113217 | 23769 | 19765 |

NOTE.—281 Inspectors have not reported this week in time for this return. Among these, and belonging to the county of Salop, is one Inspector; to Staffordshire, 5: to Cheshire, 5; to York, 5 not reported, and one received, but unintelligible; to Cumberland, 2; to Flint, 1; and to Scotland, 16. These Inspectors returned 2847 cases last week; and the apparent decrease of the disease is probably more due to the absence of these reports than to any real diminution of attacks. In Cambridgeshire, one Inspector has returned five fresh outbreaks and 151 cases; but this information was received too late to be included in this return. This increased work necessarily entailed in carrying out the provisions of the Cattle Disease Prevention Act may, in many instances, account for this delay.

# NOTES, QUERIES, AND REPLIES.

◆

He that questioneth much shall learn much.—*Bacon.*

An obituary notice of the late Mr. McWhinnie will appear in our next number.

Reviews of the following works are in the printer's hands:—"Statistical Report of the Health of the Navy for the Year 1862."—"A Practical Treatise on Urinary and Renal Diseases, including Urinary Deposits." By W. Roberts, M.D.—"Peking and the Pekingese." By D. F. Rennie, M.D.—"Report on the Sanitary Condition of Edinburgh."—"Text-Book of Mental Diseases." By Dr. Max Leidesdorf.—"Recent Anthropological Publications."

"*Dr. Wilson.*"—The drawings of Sir Charles Bell have been removed to the Military Hospital at Netley.

*A Studious Reader.*—Will you send the paper, with your name, for inspection?

*Hexham.*—Royle's Materia Medica, edited by Dr. Headland; Squire's Companion to the British Pharmacopœia; Waring's Therapeutics.

*Rahere, Ely-place.*—The first Hospital for sick persons was founded at Canterbury by Lanfranc, Archbishop of that diocese, in 1070.

*Petros, Worksworth.*—Lithotomy was first attempted in Paris in 1474.

*B. B.* should have received a private letter if he had sent his name and address. We can assure him that no part of the reports of societies is intended to be omitted, and we shall be glad to publish anything he may send us on the very interesting subject which he refers to.

*Aspatria, Carlisle.*—You will find a pencilling of Dr. Addison by "*Probe,*" in the *Medical Times and Gazette*, vol. IX., p. 108, and a memoir published immediately after his death in the same journal, for July 7, 1860. The will was sworn under £60,000. Mr. John Addison, of Brook House, Cumberland, was one of the executors. There are photographic portraits of him to be obtained. Consult "Men of the Times," and Wadds' "Mems., Maxims, and Memoirs."

In the *Medical Times and Gazette* of December 15, 1860, will be found the description of an instrument I invented for forming artificial pupil in the centre of the iris by the aid of suction. The tubular arrangement in this instrument is essentially the same as in that used by Mr. Teale for the removal of certain forms of cataract, which instrument he described and figured in the Royal London Ophthalmic Hospital *Reports*, vol. iv., part ii., between three and four years after the first appearance of my invention. Both instruments were made by Weiss; and the same description, as far as it related to the suction apparatus, answers for either.—*Mr. Greenway, of Plymouth, in "Brit. Med. Jour.," March* 3, 1866.

Dr. W. Marsden, of Quebec, publishes a very elaborate and complete system of quarantine against the invasion of cholera. He says:—

"The following plan of quarantine for Asiatic cholera is the result of a special study of the etiology and pathology of the pestilence which five distinct visitations have afforded me during the last thirty-four years. It is no part of my present design to touch the *vexata questio* of contagion or non-contagion, the proposed plan being founded on the principle that Asiatic cholera is a portable, controllable, and communicable disease; and like the plague, may be transmitted and communicated both by persons and effects. The basis of the plan is therefore absolute non-intercourse for a short period with persons from abroad suspected of being infected and a thorough disinfection of personal effects. I assume the principle propounded by Kennedy in his 'History of the Contagious Cholera,' that the peculiar variety of cholera that has visited various parts of the world during the past half-century is identical with that which broke out in India in 1817, and 'assumed a contagious property which there is no evidence to prove it ever before possessed.' My opportunities of investigating facts connected with the disease on this continent have been extensive and ample, and I have been enabled from personal observation and inquiry to trace the introduction of the disease into this country on each occasion to importation from infected places. Its subsequent diffusion throughout the British provinces and the United States has also been strongly marked by the ordinary characteristics of infection, notwithstanding the statement of individual writers to the contrary."

*The Guardians of St. Pancras and their District Medical Officers.*—In a report presented to the St. Pancras Guardians, it was stated that during the past three months the cost of the cod liver oil disposed of by the District Medical Officers to out-door sick poor was £3 2s., and of quinine dispensed by them £3 12s. 10d. The total cost was £6 14s. 10d., being an average expenditure of about 2s. per week by each District Medical Officer. The value of Medical extras supplied during the period was £89 13s. 4d., showing a decrease of £4 7s. 4d., compared with the preceding quarter. The result was considered in the report as "highly satisfactory." There was, however, an increase of £2 7s. 4d. as to cod liver oil and quinine. It was also stated in the report that the supplying of nourishments by the relieving officers, instead of by the Medical officers, had been attended with good results, and the system is found to answer well. In proof of this, it was stated that "during the thirteen weeks ended February 23 last, the number of Medical orders issued was 4097, which was a decrease of 534 as compared with the thirteen weeks ended December 1, 1865" Having regard, therefore, to the superior administrative powers of the relieving officers, the report concludes by recommending "that in cases of great emergency only that may occur during the hours the relief offices are closed the Medical officers be authorised to give an order for meat in the first instance only, and that such cases shall be afterwards referred to the relieving officer to be dealt with in the usual manner. Also that the District Medical Officers shall furnish to the Stores Committee every Monday a return of the meat so ordered, setting forth the name, residence, and nature of the illness of each patient, and the date and hour on which the meat was ordered." There is also a further check placed on the Medical officers in order to avoid extravagance on their part. Cod liver oil and quinine are to be supplied to them at the Workhouse Infirmary only. The quantities to be supplied at any one time to each District Medical Officer are one Winchester quart of cod liver oil and one ounce bottle of quinine, and they are required to be particularly careful to report weekly the quantities they supply to each patient. After a discussion the report was unanimously adopted by the Board.

### SWELLING OF THE TONGUE.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—We have all met with individuals who suffer from urticaria on taking certain (to them) known articles of diet, of which fish is the commonest. I have notes of its occurrence after eating strawberries, fresh figs, and cocoanut. The latter is an ingredient in most curry powders, and two friends of mine cannot take curry in consequence, for in them it produces great swelling of the tongue, lips, and throat, with an eruption of urticaria on the face, neck, and extremities. Dr. Downie's case of swelling of the nose is a parallel instance of the effect of irritant injecta on the pneumogastric producing reflex excitement in the nerves of the skin, and other nerves in more direct relation with that nerve.

I am &c.

11, Craven-hill-gardens, March 3. J. BRENDON CURGENVEN.

### THE TREATMENT OF CATTLE PLAGUE.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—If the fact brought forward in your last impression by Dr. Watmough in reference to the condition of the first stomach of cattle suffering from Rinderpest in his neighbourhood hold good in other parts of the country, would it not be advisable to introduce something by the hypodermic method? As no rational treatment has yet proved successful, a list of the more powerful agents might be drawn up, and these agents tried *seriatim*.

No doubt Dr. Richardson could give some very useful hints as to what agents would be most likely to be of service. I see that he has succeeded in reducing pyæmia poison to the state of an extract or powder; and no doubt by this time he has discovered something that will destroy its power out of the body. If so, why not in the body also?

Surely, then, by using solutions of the most powerful agents, separate and combined, some antidote might possibly be met with. If permanganate of potash suffices to destroy the poisonous matter of Rinderpest in articles that are saturated with it, the injection of this, or some other agent, into the areolar tissue of the body may, perhaps, be followed by good effects. Is it not worth a trial? I am, &c.,

March 5. JAMES TAYLOR, M.R.C.S. Eng., etc.

### MR. CALEB BARRETT'S CASE OF NYCTALOPIA.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I cannot help thinking Mr. Barrett has found a mare's nest in his case of nyctalopia narrated in your last number. What is there remarkable in a patient's vision becoming impaired in the evening about twilight, improving when the candles were lighted, and becoming restored in the morning? Mr. Barrett goes on to say, "The ophthalmoscope showed some dulness of the vitreous humour, a deeper colour of the retina, and larger size of its vessels." Twenty days later Mr. Barrett "found"—"thought he found" would be nearer the truth—the "vitreous humour clear, the vessels of the retina still large here and there, but the retina self, especially near the optic nerve, paler than in health."

As the patient "recovered his sight entirely in the morning," I think we may fairly ascribe Mr. Barrett's "observation" of "dulness" in the vitreous humour to his own imperfect focal adjustment of the ophthalmoscope. The "larger size" of the retinal vessels—we are not told larger than what—and their being "still large here and there," would be a more precise observation if we were told whether the enlargement affected the arteries, the veins, or both. But what are we to think of Mr. Barrett's knowledge of ophthalmology when he begins talking about the "colour" of the retina? The retina is a transparent and generally invisible membrane, through which the colour of the choroid is seen. If Mr. Barrett had, however, stopped at the statement that the retina was of a "deeper colour," I could have understood that he meant to say it was turbid from some infiltration or deposit, but when he says that "the retina itself" was "paler than in health" he involves himself in error beyond any hope of redemption or escape, and displays an innocence of the very alphabet of the ophthalmoscope and of the most elementary anatomy of the eye.

I regret to have had to criticise Mr. Barrett's evident inexperience in the use of the ophthalmoscope; but when he comes forward in the character of an expert he invites such criticism, and anything is preferable than that others should be misled by wonders which have no real existence but in the imaginative mind of their exponent.

I am, &c.

A Metropolitan Ophthalmic Surgeon.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Mr. Caleb Barrett favoured us last week with some particulars of a case of night blindness, in which there was turbidity of the vitreous not impairing vision in the daylight; and where there was a coloured retina, that, chameleon-like, changed its hue. Mr. Barrett's eye "in fine frenzy rolling" may, with the aid of his magic mirror, have seen visions denied to common men. To some of these "airy nothings" he has given "a local habitation and a name" in the fair pages of the *Medical Times and Gazette*. But common men will think that a turbid vitreous will impair vision by day as well as by night; and sceptics will disbelieve the existence of that which they will never see, and have now heard of for the first time. He will deem the coloured retina—another Ariel—the creature of a fond imagination, and the turbid vitreous, a Caliban of an imperfect focus.

Many wonderful discoveries have been made with the aid of the ophthalmoscope, and learners have a happy knack of finding mares' nests. But to Mr. Barrett is due the credit of being the first to record the finding of such a nest with two fine eggs.

I am, &c.,

M.R.C.S. (Not a Surgeon to any Hospital.)

**COMMUNICATIONS have been received from—**

Dr. Berry King; Mr. H. Terry, jun.; Mr. G. T. Keele; Mr. J. Frank Payne; Mr. W. Nisbet; Mr. W. H. Walker; Dr. J. Potter; Mr. James Taylor; A Metropolitan Ophthalmic Surgeon; Dr. J. Braxton Hicks; Dr. H. Jeaffreson; Mr. T. Constable; A Studious Reader; Ethnological Society; Dr. T. Stainthorpe; Royal Institution; Mr. W. Meeham; M.R.C.S.; Mr. R. Griffin; Dr. J. B. Curgenven; Mr. W. E. Porter; Mr. David Walker; Dr. T. Guy; Pluck; Apothecaries' Hall; Harveian Society; Dr. Howard B. Montgomery; Dr. B. W. Richardson; Dr. Tilbury Fox; Dr. Lionel S. Beale; Dr. Ridger; Dr. J. H. Jackson; Mr. J. Hutchinson; Mr. J. Chatto; Dr. T. B. Moriarty; Mr. E. Bellamy.

**BOOKS RECEIVED—**

Guffroy on Cod's Liver.—Lee on Diseases of the Veins. 2nd Edition.—Year Book of Pharmacy, 1865.—Dr. Dobell on Tuberculosis.—Brande's Dictionary of Science. Part 8.—Journal of Social Science. No. 5.—The Richmond Medical Journal. No. 1.—Dr. Drysdale on Prostitution.

**NEWSPAPERS RECEIVED—**

The Builder—Brighton Herald—The Sunday Gazette—The Edinburgh Daily Review—The New York Medical Record—Doncaster Chronicle.

## VITAL STATISTICS OF LONDON.

*Week ending Saturday, March 3, 1866.*

### BIRTHS.

Births of Boys, 1026; Girls, 1061; Total, 2087.

Average of 10 corresponding weeks, 1856-65, 1974·6.

### DEATHS.

| | Males. | Females. | Total. |
|---|---|---|---|
| Deaths during the week .. .. .. | 762 | 783 | 1545 |
| Average of the ten years 1856-65 .. .. | 688·8 | 657·4 | 1346·2 |
| Average corrected to increased population.. | .. | .. | 1481 |
| Deaths of people above 90 .. .. .. | .. | .. | .. |

### DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

| | Population, 1861. | Small pox. | Measles. | Scarlatina. | Diphtheria. | Whooping-cough. | Typhus. | Diarrhœa. |
|---|---|---|---|---|---|---|---|---|
| West .. | 463,388 | 4 | 12 | 4 | .. | 6 | 9 | 8 |
| North .. | 618,210 | 4 | 14 | 9 | 1 | 11 | 15 | 6 |
| Central .. | 378,058 | 1 | 8 | 2 | 1 | 5 | 4 | 2 |
| East .. | 571,158 | 5 | 2 | 11 | 4 | 14 | 11 | 2 |
| South .. | 773,175 | 2 | 7 | 9 | 4 | 16 | 12 | 6 |
| Total .. | 2,803,989 | 16 | 43 | 35 | 10 | 52 | 51 | 24 |

## METEOROLOGY.

*From Observations at the Greenwich Observatory.*

| | |
|---|---|
| Mean height of barometer .. .. .. .. .. .. | 29·331 in. |
| Mean temperature .. .. .. .. .. .. .. | 34·4 |
| Highest point of thermometer .. .. .. .. .. | 48·0 |
| Lowest point of thermometer .. .. .. .. .. | 22·5 |
| Mean dew-point temperature .. .. .. .. .. | 29·0 |
| General direction of wind .. .. .. .. .. .. | N.E. & S.W. |
| Whole amount of rain in the week .. .. .. .. | 0·74 |

**BIRTHS and DEATHS Registered and METEOROLOGY** during the Week ending Saturday, March 3, 1866, in the following large Towns:—

| Boroughs, etc. | Estimated Population in middle of the Year 1866. | Persons to an Acre. (1866.) | Births Registered during the week ending March 3. | Deaths. | | Temperature of Air (Fahr.) | | | Rain Fall. | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Corrected Average Weekly Number.* | Registered during the week ending March 3. | Highest during the Week. | Lowest during the Week. | Weekly Mean of the Mean Daily Values. | In Inches. | In Tons per Acre. |
| London (Metropolis) | 3067536 | 39·3 | 2087 | 1400 | 1545 | 48·0 | 22·5 | 34·4 | 0·74 | 75 |
| Bristol (City) . . | 163680 | 34·9 | 108 | 73 | ‡190 | 45·3 | 22·0 | 33·4 | 0·45 | 45 |
| Birmingham (Boro') | 335798 | 42·9 | 240 | 163 | 215 | .. | .. | .. | .. | .. |
| Liverpool (Borough) | 484337 | 94·8 | 420 | 281 | 421 | 45·1 | 27·3 | 35·7 | 0·05 | 5 |
| Manchester (City) . | 358855 | 80·0 | 262 | 203 | ‡253 | 48·8 | 20·0 | 31·0 | 0·01 | 1 |
| Salford (Borough) . | 112904 | 21·8 | 79 | 57 | 80 | 46·2 | 19·7 | 33·3 | 0·04 | 4 |
| Sheffield (Borough) . | 218257 | 9·6 | 173 | 115 | 147 | 43·6 | 19·7 | 32·9 | 0·07 | 7 |
| Leeds (Borough) . | 228187 | 10·6 | 177 | 116 | 172 | 48·5 | 19·0 | 33·5 | 0·03 | 3 |
| Hull (Borough) . | 105233 | 29·5 | 85 | 49 | 53 | .. | .. | .. | .. | .. |
| Nwcastl-on-Tyne, do. | 122277 | 22·9 | 96 | 65 | 84 | 43·0 | 23·0 | 32·6 | 0·39 | 39 |
| Edinburgh (City) . | 175128 | 39·6 | 119 | 84 | 89 | 40·7 | 23·0 | 33·2 | 0·80 | 81 |
| Glasgow (City) . . | 432265 | 85·4 | 376 | 252 | 274 | 43·6 | 23·3 | 33·5 | 0·92 | 93 |
| Dublin (City and some suburbs) . | 318437 | 32·7 | 187 | †156 | 196 | 46·5 | 17·5 | 34·3 | 0·30 | 30 |
| Total of 13 large Towns . . . | 6122894 | 34·4 | 4409 | 3014 | 3620 | 48·8 | 17·5 | 33·4 | 0·35 | 35 |
| | (1863) | | | | Week ending Feb. 24. | Week ending Feb. 24 | | § | | |
| Vienna (City) . . | 560000 | .. | .. | .. | .. | .. | .. | .. | .. | .. |

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·331 in. The barometric pressure was 29·71 in. on Sunday, and it fell to 29·01 in. on Wednesday.

The general direction of the wind was N.E. & S.W.

* The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.

† Registration did not commence in Ireland till January 1, 1864; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in that city were the same as the averages of the rates in the other towns.

‡ The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

§ The mean temperature at Greenwich during the same week was 3

## APPOINTMENTS FOR THE WEEK.

### *March* 10. *Saturday (this day).*

*Operations* at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free Hospital, 1½ p.m.

Royal Institution, 3 p.m. Rev. G. Henslow, "On Systematic and Structural Botany."

### 12. *Monday.*

*Operations* at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.

### 13. *Tuesday.*

*Operations* at Guy's, 1 p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; St. Peter's Hospital for Stone, 2 p.m.

Ethnological Society of London, 8 p.m. Sir John Lubbock, Bart. and Fred. Lubbock, Esq., "On the True Assignation of the Bronze Weapons, etc." Rev. F. W. Farrar, "On the Adaptation of Races of Man."

Royal Institution, 3 p.m. Professor Frankland, F.R.S., "On the Non-metallic Elements."

Royal Medical and Chirurgical Society, 8½ p.m. Meeting.

### 14. *Wednesday.*

*Operations* at University College Hospital, 2 p.m.; St. Mary's, 1¼ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.

Microscopical Society, 8 p.m. Annual Meeting.

### 15. *Thursday.*

*Operations* at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.

Harveian Society of London, 8 p.m. Dr. Meredith, "On the Duality of Venereal Ulcers."

Royal Institution, 3 p.m. Professor Frankland, F.R.S., "On the Non-metallic Elements."

### 16. *Friday.*

*Operations*, Westminster Ophthalmic, 1½ p.m.

Royal Institution, 8 p.m. Balfour Stewart, Esq., F.R.S., "On the Evidence of the Existence of an Ethereal Medium Pervading Space."

## ORIGINAL LECTURES.

# ON GENERAL AND LOCAL CHEMICAL DISORDERS ARISING FROM MODIFIED PEROXIDATION,

AND ON THE MECHANICAL DERANGEMENTS THEY PRODUCE.

By H. BENCE JONES, M.D., F.R.S.

### Part III.—Lecture X.

### On Fermentations and Fevers.

(Continued from page 221.)

### *Treatment of Ammoniacal Urine.*

The treatment of ammoniacal urine resolves itself into keeping the urine acid and stopping the inflammatory action; and as the alkalescence by its chemical action keeps up the inflammation, the stoppage of the formation of carbonate of ammonia in the bladder becomes the main object to be attained.

Usually, as the urine comes into the bladder, it is acid; as soon as it gets there it finds some ammoniacal urine there already; this not only neutralises the acid that comes from the kidney, but sets up decomposition of the urea, and forms fresh carbonate of ammonia; so that the removal of the ammoniacal urine that remains in the bladder is absolutely necessary, unless sufficient acid can be made to come from the kidney to neutralise it.

Vegetable acids far more quickly run off in the urine than mineral acids, of which sufficient cannot be taken to pass in quantity through the kidneys. Of all the acids lemon juice is perhaps the best which can be used. Many years since Mr. Witt made the following analyses of lemon juice for me (see *Quarterly Journal of Chemical Society*, vol. vii., p. 44):—One ounce (480 grs.) of lemon juice contains only 1·728 grs. of inorganic constituents; of which potash, sulphuric and carbonic acids constitute three-fourths; phosphoric acid, soda, and lime, with traces of silica, and iron and magnesia, constitute the other fourth. Hence water and citric acid constitute by far the largest part of the lemon juice, the citric acid being, on an average, about 40 grs. to the ounce of juice.

It is highly probable that citric acid and other vegetable acids have an anti-inflammatory action (lessening the oxidation that is going on) wherever they are carried, and they not only pass to the kidneys, but probably diffuse into every part of the mucous membrane of the bladder; to a small degree lessening the alkalescence of the textures in which the peroxidation is going on.

The citric acid must not be taken in such quantity that it irritates the stomach and bowels, nor should it set free uric acid in the urine. So that the highest limit can be easily recognised by the bowel symptoms. The lowest limit is so much as will just make the urine acid. This cannot always be reached. Three, four, five, ten lemons or more daily will not neutralise the alkali in the urine, and will not so stop oxidation and nutrition that the body will become feeble and wasted. Before this effect is produced some other way of removing the ammonia must be tried. Taking away the alkaline urine by the catheter so frequently that a smaller quantity of lemon-juice will keep the water acid is easy when the passage of the catheter does not cause mechanical irritation to take the place of the chemical irritant. The catheter must be used more or less frequently, according to the reaction of the urine. If drawing off the water at night whilst taking lemon-juice or other acid keeps the urine feebly acid, this is all the mechanical means required; if not, then, twice, thrice, four times daily the water must be drawn off; and even, in extreme cases, the catheter must be kept in the bladder, so as to free the urine continually without the irritation of the passage of the instrument; but the presence of the foreign body in the bladder, except when perfect rest is observed, often causes so much irritation that it is an aggravation of the disease. Moreover, by washing the bladder with small quantities of hydrochloric or acetic acid and water, after the urine is drawn off with the catheter, the ammonia may be easily neutralised, and a very small quantity of feebly acid fluid may be left in the bladder to counteract the decomposition of the urea, and to make the surface of the bladder itself less foul. How frequently the washing should be repeated, and what the strength of the acid injected should be, ought to be determined by the reaction of test-paper or the smell of the urine. Whatever you do, remember that the object is to get rid of a chemical irritant, and that if by rough handling of the catheter, by its too frequent use, or by too strong an injection you mechanically or chemically irritate the bladder more than it is irritated chemically by the ammoniacal urine, no good will come from your treatment.

When you have removed or can prevent the ammonia of the urine, then balsamic remedies, as in bronchitis, are often useful. These pass from the kidneys and also directly from the blood to the mucous membrane. Buchu, cubebs, copaibæ, turpentine, eau de goudron (purified tar water), all these may be useful; remembering here, also, that if the stimulant be too great, harm may be done by setting up fresh action. Astringents, as any preparation of gallic acid, tannic acid, uva ursi, rhatany, catechu, matico, alum, lessen the secretion of pus and mucus by contracting the textures.

Tonics also often are useful when the acute symptoms subside—as quinine, biberine, pereira brava, and other bitters.

### *On Fevers; or Qualitative and Quantitative Errors of Oxidation.*

The term zymotic disease, which implies a chemical action, is now, thanks to Dr. Farr, in ordinary use. This term means that different vegetable or animal ferments, living or dead, albuminoid substances in certain states of chemical change, can be formed within or can pass from without into the body, and, taking part in the actions going on there, can produce different diseases. Usually fermentation may be considered as a peculiar oxidation in which carbonic acid and water and heat are produced; but instead of the dual action of oxygen on organic substance, fermentation consists in the natural action of three substances—namely, oxygen, the organic matter, and the ferment. These third substances interfere not only in the chemical actions of oxygen, but also in those of nutrition; so that a long list of substances might be formed, beginning with the spermatozoon and passing through torulæ, until we come to pepsine, which are capable in health or in disease of so increasing or altering the chemical actions of oxidation and nutrition in the body that quantitative or qualitative results are obtained which would not have been reached by the ordinary actions without the intervention of the third substance.

It will only be possible for me in this lecture shortly to bring before you one or two of these diseases of fermentation; and on account of the intensity of the ordinary action which occurs I shall class them together as diseases of modified peroxidation. Among these I place small-pox, scarlet fever, measles, typhus fever, as the most striking examples; typhoid fever, yellow fever, ague, are lower in the same class; whilst syphilis and cancer are highest in the class in which there is modified chemistry of nutrition, but no distinct evidence as yet of increased oxidation.

Of all the modified peroxidations that can occur in the body, small-pox is the most definite, because the poison can be got apart, and the quantity necessary for producing the action can be fixed, and through the most glorious discovery of vaccination it can be set in action whenever we please. We can almost see it passing from the cellular tissue into the blood, and from the blood into every particle of every texture, rendering it incapable of undergoing the same action again.

Let us look a little closer at this action of small-pox poison. If the minutest particle of substance, a little dried albuminoid substance, in a peculiar chemical state of action, on a lancet, or in the dust of the air, is put into the cellular tissue or is inhaled into the lungs, it passes on to the blood, and through it into every texture. In a few days the chemical actions of oxidation and nutrition throughout the body are altered, and the particle of matter has reproduced itself immeasurably. The violently increased chemical action, the peroxidation, is shown by the increased heat of the body, the violent fever. The altered nutrition is evident not only in the eruption of pustules in the cellular tissue under the skin, but in the altered condition of the blood and in all the textures of the body; each particle of substance being rendered incapable of undergoing the same process again, and by assimilation every future particle that takes the place of every modified particle is also generally incapable of being modified again.

Throughout the course of the general peroxidation, and more especially at the end of the fermentation, local peroxidations frequently come on in any part of the body. Inflammations of the eyes, the ears, the mucous membranes, the joints, the serous membranes, the parenchymatous tissues, anywhere an unmodified peroxidation is ready to begin, and this easily gives rise to suppuration or causes obstructions which the feeble circulation cannot overcome.

The most striking facts concerning this small-pox ferment are, first, the very small quantity of substance that produces so much effect; secondly, the immeasurable increase of the poison in the body, each pustule having the same property as the original ferment; thirdly, the period of incubation during which the poison must at first slowly increase in every texture, and there give rise to the modified peroxidation and altered nutrition which constitute the attack.

The poisons of scarlet fever, of measles, and of typhus, though less tangible, are not less substantial than the small-pox ferment. Like it, they can most probably be dried and carried from place to place and pass into the mouth with the dust which we each moment inhale or swallow. In chemical composition scarlet fever, measles, and typhus ferments most probably resemble albumen in complexity, and, like albumen, they may be altered in composition and action by heat, alcohol, arsenic, tar acids, and many metallic salts. As soon as they reach any spot where they can oxidise, they set up an oxidation and reproduction in each contiguous particle of albuminous substance. From the cellular tissue, the air passages, or the stomach or bowels, the contact action spreads into the blood, and there it multiplies, whilst it is carried into all the capillaries, and through them into every texture of the body; then the increased oxidation and formation of ferment becomes most violent, and fever to a greater or less degree is present. Long after the strongest action is reached, a slower action continues, and at any time or in any part or texture of the body, whilst the specific chemistry is going on, an ordinary local peroxidation may be lit up, and a more or less acute inflammation may be added to or follow the fever which the ferment had produced.

During the height of the fermentation in typhus fever, the heat may rise to 5, 6, or even 10° Fah. above the ordinary temperature; and when the fermentation is ended, the albuminous textures of the body are so changed that they are incapable of going through the same process again. Between these two results there are innumerable other products of chemical change, varying with the kind and degree of fermentation. In typhus fever it is said that urea is increased and carbonic acid diminished. To these and a multitude of other chemical questions regarding fermentation chemistry will give definite answers; but above all questions, one of the most difficult to answer and yet one of the most important, is the amount of oxygen that is consumed in the different kinds and degrees of peroxidation which can take place within us.

In each organ, according to the intensity of the action set up by the ferment, altered functions may arise, and these may be still more altered when an ordinary peroxidation at the same time takes place. Thus the brain, heart, lungs, kidneys, liver, or any texture composing these organs may show by more or less wrong mechanical results the effect of the ordinary or modified peroxidation; and the effects of the fever and of the inflammation may be so mixed that neither during life nor after death may any accurate separation be possible.

Closely related in chemical composition to these violent ferments are the less active ferments of ague and typhoid fever. There is so little difference in the chemical composition of animal and vegetable substances, that the distinction between animal and vegetable poisons is no longer possible. Vegetable albuminous matter undergoing change may produce almost, if not quite, exactly the same poison as animal albuminous matter. Hence, probably, the resemblance between ague poison and typhoid fever poison, and the possibility that sometimes one and sometimes the other of these poisons may be formed from the same changing matter under different circumstances.

Ague ferment is probably a highly complex nitrogenous substance, capable of being dried and carried by the wind far from the place where it was produced. It enters by the mouth with the dust, and, like animal or vegetable alkaloids, it passes from the blood into every texture of the body, and acts on each much or little according to its chemical properties. Probably it acts most strongly on the nerves that regulate oxidation, causing for a time contraction of the arterial vessels and consequent suboxidation everywhere. The increased obstruction of the small arteries reacts on the tension of the blood, and this produces increased contraction of the heart, which continues to increase until the obstruction yields and a state of peroxidation is set up by which the poison is partially destroyed. During the remission, probably the poison is reproduced until sufficient, in from one day to three days, is formed to go through the same action again.

This theory of ague admits of a reasonable explanation of the action of quinine and arsenic in stopping the paroxysms of the complaint. On the ague poison itself quinine and arsenic may have no action, but they pass into every texture from the blood, and, combining with the nervous substance on which the ague poison acts, they form a compound on which the ague poison is incapable of producing an effect before it is oxidised and destroyed.

The ague poison, unlike the small-pox or typhus fever ferment, instead of protecting the body by making it incapable of undergoing the same action again, makes the nerves more ready on the slightest renewal of the poison to undergo the same action again; so that it has been said that the ague poison may lie dormant for years. It is far more probable that a much smaller quantity of the poison can produce the return of the symptoms than that the original ferment should retain its properties for months, or even for years, after its first action had passed by. In this respect, and in some others, the action of ague poison proves that it is a very peculiar ferment, and hence, though I have placed it near to the typhoid ferment because of its origin, I must shortly point out to you the different effect which the true typhoid ferment produces.

The typhoid ferment is probably formed out of vegetable or animal albuminous substance. In sewers, in drains, in ditches, possibly even in the drains of the human body, a substance may be formed which is not volatile in itself, but by foul gases or currents of air can be carried into the mouth, and in some period between a few hours and fourteen days it sets up a modified peroxidation. More slowly absorbed and less rapidly reproduced and changed than typhus ferment, it passes into the blood, and from it into each texture; whilst some of the poison has a local action on the glands of the small intestine, and produces increased action, effusion, obstruction, and retrograde action, causing ulceration, sloughing, and even perforation, by which mechanically the contents of the bowel may escape and an uncontrollable simple peroxidation may be set up. The poison that has passed into the tissues acts on each organ more slowly than the typhus poison; still, like it everywhere, it gives rise to altered functions, and everywhere local peroxidations are ready to occur; bronchitis, pneumonia, peritonitis, tubular nephritis, cystitis—any of these and many other inflammations may be set up at any time during the course of the fever. Probably the substances produced by the increased chemical action in typhus and typhoid fever will be found to be very similar. There may be the same amount of heat, the same excess of urea, the same excess of antecedent substances from which the urea is formed; possibly the same consumption of oxygen when the same temperature in each fever occurs; but in the properties of the ferment formed in the body a distinct difference of diffusibility must exist, the typhus poison passing with greater ease into neighbouring bodies; whilst the typhoid poison rarely, if ever, is communicated by infection.

### *On the Mechanical Disorders that arise out of the Chemical Errors in Fevers.*

In all fevers the loss of mechanical power is quite as remarkable as the increase of chemical action. The chief amount of energy liberated by the action of oxygen in the body seems expended in the production of heat, so that far less than the ordinary amount of power remains to be employed in the production of mechanical motion. The muscles may be considered as machines made for the conversion of chemical force into mechanical motion. How this is done cannot be explained in the present state of our knowledge of the mechanical, chemical, or electrical actions in the muscle; but that the muscular force arises from some equivalent force, and sooner or later must come from the chemical force in oxygen, hydrogen, and carbon, opens an immense field for investigation, and is easier of belief than that force should be each moment created and destroyed. The amount of sugar and fat present in any muscle would soon be used up if in the working of the muscle itself fresh fuel was not produced. The action of oxygen on the syntonin in the muscle may be direct, and may give rise to the force required; but it is more probable that the syntonin splits into substances of two classes, one ending in urea, which is incapable almost of combustion, the other in inosit, which would immediately give water and carbonic acid.

In fever the poisonous ferment in the muscle probably determines a different chemical action from that which takes place in the muscle in health. The increased heat and increased urea mark the increased action, but loss of motor-power in the muscles shows that the conversion of chemical into mechanical force does not take place.

This mechanical disorder becomes by its action on the muscles of respiration or circulation the source of complications and dangers in fever to which I must shortly allude. Gradually in the course of fevers the sounds of the heart may be found to become more and more feeble, and the respiration without any wrong in the lung, becomes shallow and weak from the diminished power in the muscular tissue. The diminished tension in the arteries has a direct effect upon the circulation through the capillaries, and the motion in the veins is more or less stopped; hence congestion of blood in the venous system occurs, hæmorrhages, effusions, and coagulations in the veins may take place anywhere. The imperfect action of the muscles of respiration produces the same mechanical effects in the circulation through the lungs; imperfect oxygenation takes place in the lungs from the stoppage of blood in the pulmonary veins; without any inflammation, œdema of the lungs, hypostatic consolidation may occur. The circulation through the lung is so feeble that even the force of gravity acting on the blood in the lungs cannot be counteracted and accumulation takes place in the most dependent parts.

The muscles of the bladder are also so weakened that the urine accumulates, and frequently external muscular pressure is required after the catheter has been passed to cause the urine to flow.

In another large class of zymotic diseases the qualitative and quantitative errors of oxidation are scarcely detectable, whilst the qualitative and quantitative errors of nutrition chiefly mark the action of the poison.

Of these diseases true syphilis may be taken as the type.

It can scarcely now be doubted that the actions of two poisons have been included under the term syphilis. The first, like impetigo, is capable of being communicated, and often repeated because it exists only locally or passes up to the nearest lymphatic glands; whilst in the true syphilis the poison from the local sore enters the blood and passes from it into each texture, where it multiplies and produces changes of nutrition, and partly unchanged, and partly changed in composition passes out perhaps in each secretion.

This true syphilitic ferment resembles very closely the small-pox ferment in the universal diffusion of the poison, and in the consequent protection it gives from another attack by rendering a second similar change in each texture impossible. The protective power of the alteration is to a slighter degree extended to the progeny through the germ and spermatozoon; so that a race partly protected by inheritance may suffer less from these diseases than a purer race, whose textures are free to undergo the full change which constitutes the disease. Both persons give rise to increased cell growths, effusions, oxidations, congestions, and ulcerations; and these may take place in any part of the body, for the poison exists everywhere.

True syphilis differs, however, altogether from small-pox in its definiteness of course as to time. Syphilis produces no fever to terminate the fermentation in a definite period, and it may consequently remain active or dormant in the textures for years.

It is vain now to ask what circumstances at the end of the fifteenth century produced the first modified albuminoid matter which gave rise to the first true syphilitic poison. In cancer, which bears a distant resemblance to syphilis, although the spontaneous generation of the first cancer cell is daily occurring in some predisposed texture, yet we are as yet quite unable to say what produces the first modified particle of matter which multiplies and communicates its composition to adjacent predisposed textures by contact, and is carried by lymphatics and blood vessels to every part of the body, and affects the nutrition of each part with which it comes in contact, provided the textures are in a condition to propagate the cancer cells.

Another instance of spontaneous generation of a poisonous ferment is presented to us in rabies; and with this poison also unless a peculiar condition of system exists the ferment when inserted has no action; and here also our knowledge is at present unable to say what circumstances determine the formation of the first particle of poisonous saliva; except by its effects, the peculiar change in the albuminoid matter of the saliva in the present state of chemical knowledge could not be recognised.

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**Bethlem Hospital.**—Dr. Williams was duly elected the Resident Physician to the above institution on Tuesday last in the vacancy created by the decease of Dr. Phipps.

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## ORIGINAL COMMUNICATIONS.

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# FURTHER NOTES ON THE NEW METHOD OF PRODUCING LOCAL ANÆSTHESIA.

By BENJ. W. RICHARDSON, M.A., M.D., F.R.C.P.,
Senior Physician to the Royal Infirmary for Diseases of the Chest.

## THE PRACTICE.

In effecting local anæsthesia by my process the Surgeon, according to the nature of the case, may either produce entire blanching of the surface to be operated on, or may stop short of that extreme result, and only induce a superficial anæsthesia. In my first experiments, made with the ordinary ether of the shops, I employed the second form of anæsthesia alone, and even now when a mere puncture through the skin or mucous membrane is required, I still resort to this method, reserving the extreme action for cases where deep-seated parts have to be divided.

For producing the deep anæsthesia with superficial whiteness it is necessary to use absolute ether, and to direct the spray in brisk current at a distance of about an inch from the part. To induce the less determinate condition the ether may be diluted. This may be done by mixing alcohol with the ether, or better still chloroform. Two mixtures of this kind are very useful; one contains six parts of ether and two of chloroform, the other seven of ether and one of chloroform. In using pure ether, or the mixture, differences of time are required. To cause insensibility with the simple fluid—ether—from fifteen to fifty seconds only are necessary. To produce insensibility by the mixture of ether and alcohol, or of ether and chloroform, from four to five minutes are demanded. The sensation felt by the patient also differs. When pure ether is used little if anything is felt until the moment when the part becomes white: then there is a sharp, pricking, burning sensation. When the compound or mixture is used, the sensation, very prolonged by comparison, is that of numbness and aching. On the whole, I have found patients generally prefer the more rapid procedure.

The nature of the operation will, to a large extent, determine the method to be resorted to. For opening an abscess, for incising a small carbuncle, for tying a nævus, for removing very small tumours, for applying nitric acid, and for operations of a similar kind, the mixture of ether and alcohol, or of ether and chloroform, answers every requirement. I should myself also use the mixture in an operation for hernia, because the tissues would not be rendered hard, and the dissections could be carried on with delicacy. But for deeper operations, such as removal of the nail, of portions of bone, of fingers, and the like, the complete action of the anæsthesia requires to be brought into play. For teeth extraction the pure ether also answers best—it acts rapidly and deeply, and there is no great accumulation of fluid in the mouth. By practice, the two degrees of action I have named may be obtained by the employment of ether alone: I mean, the degree of anæsthesia from the spray of absolute ether can be determined by the distance from the part at which the spray is directed: by removing the jet three inches from the part, a moderate effect is produced, nearly equivalent to the dilution of seven parts of ether with one of chloroform. The condition of the patient generally ought likewise to be considered. Aged and weak people become anæsthetic very readily, and for them the milder process is most applicable.

I had intended this week to supply the particulars of experiments on a large number of fluids, simple and compound, which I have tested; but the inquiry is not so exhaustive as I could wish. The substances experimented with are numerous, and the analysis of their respective qualities is a task demanding judicial care. I reserve the subject, therefore, for my next chapter.

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**The Cholera Conference.—Constantinople, March 7.**—A proposal made by the French representative at the Cholera Conference to stop the sea communication between Hedjaz and Egypt; in the event of another epidemic, has been adopted. The Porte, however, will not accept or enforce the measure, fearing an insurrection among the pilgrims. Reinforcements have been sent to Schumla pending the decision of the Conference now being held at Paris.

## WHEAT PHOSPHATES.

By TILBURY FOX, M.D. Lond.

Several years ago I became aware that Dr. Hake had suggested to Messrs. Bullock and Reynolds the production of a preparation containing the organised chemical products residing in the outer layers of the wheat grain, believing that they probably would be found to possess peculiar nutritive qualities. In the year 1862, in a paper read before the Obstetrical Society of London, I drew particular attention to the good effects observed to follow from its use. During the last few years I have continued to prescribe the *wheat phosphates*, as the preparation is named, with great success, and feel so confident of its virtues that I strongly recommend it to the Profession in general.

Whilst the subject of infants' food has, on account of prolific inventions and suggestions, become rather a bore, the tendency of refinement has been in the wrong direction, and very nice looking products, pleasing to the eye, but useless for nutrition, have been obtained. The various forms of infants' food are in the great majority of instances simply and purely starch, the central portions of the cereals consisting entirely of the latter product; these foods do not deserve the name of, and *are not, flours;* to call them flours is nothing more or less than *fraud*. Now, inasmuch as the starchy element is not the assimilative nor the flesh forming, but the heat and fat producing principle, all our past efforts in securing a nice white flour have been antagonistic to the possession of nutritive material, and actually the very desirable part of the grain contained in the bran—viz., the organised phosphates and other principles, have been deliberately rejected. Seconds flour makes a much more wholesome bread than that of the first quality.

The importance of a due supply of phosphates in health and disease has been fully recognised at the present day, and as a result we now possess various pyro-, super-, and hypophosphates and phites.

My experience teaches me that there is something essentially special in the organised phosphates—those, in fact, *which have been formed by passing through a living organism* (in Nature's own laboratory)—as compared with artificially-prepared phosphates. It is not the amount, but the kind exhibited that produces the good result. No simple mixture is in any way a substitute. It is not at all unlikely that the cerealin, of which little is known, but which is associated with the phosphates in the bran, and has an action similar to pepsin, may conduce to the beneficial result. A similar kind of action is observed in those cases where quinine fails, but decoction of bark instantly succeeds. The organised phosphates I speak of aid the assimilative function, and I find that ordinary foods are digested, and even medicines—for example, iron when given in combination—act most efficiently after they have previously failed alone. The same is the case with ordinary food in weak digestions. Many of the "foods" recommended are really animal in character—such are the extracts of meat. Nature distinctly points to the agent now under notice as a preferable aid, in virtue of its vegetable origin. The wheat phosphates, too, contain the desirable properties of brown bread without the objectionable ones—viz., the cuticle and husk.

The mode of preparation is simply to make a decoction of well-selected bran, carefully evaporate in a water bath, mix the residue with sugar, and reduce to powder. It may be used in the place of sugar, a teaspoonful or less being added two or three times a-day to the child's food. The cases in which its use is chiefly indicated are those amongst the young, in whom the assimilative function is at fault. I can speak very strongly in cases which belong to my own particular specialty—diseases of the skin. Eruptive diseases of the scalp in infants are most frequently associated with faulty assimilation. Here the wheat phosphates act marvellously well. But in rickets, in marasmus, chronic diarrhœa, and impaired nutrition of all kinds, I believe them to be most invaluable adjuncts. Pallid children pick up tone, colour, and flesh; worms disappear; intestinal irritation subsides; the secretions become healthy; and disease goes. I lay great stress on the phosphates under notice in their character as *organised products* as greatly helping assimilation of food and medicinal agents, and believe them to be the most preferable form of phosphates, especially for the young.

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## ON SOME FORMS OF DYSPHAGIA (a),

### WITH SPECIAL REFERENCE TO NEW METHODS OF TREATMENT.

By MORELL MACKENZIE, M.D. Lond., M.R.C.P.,
Physician to the Hospital for Diseases of the Throat.

(Concluded from page 222.)

The paralytic forms of pharyngeal dysphagia may be due, 1st, to disease of the brain; 2nd, to disease of the spinal cord; 3rd, to disease of the nerves of the part.

1. In the first form, the dysphagia is associated with hemiplegia, and the difficulty of swallowing affects only one side of the food tract. Such cases are very rare, but I had lately a hemiplegia patient under my care who could only swallow whilst lying on his healthy side. Romberg has called attention to this form of dysphagia, and to the fact that the patient can generally swallow whilst lying on the healthy side.

2. That form of pharyngeal dysphagia dependent on disease of the spinal cord cannot be combated locally. It is quickly followed by spasm of the diaphragm.

3. Local weakness of the nerves and muscles is by no means an uncommon source of pharyngeal paralysis.

It is due to many remote causes, hysteria, nervous irritability, anæmia, chlorosis, &c. In these cases I have found the local application of electricity most serviceable; one pole(b) should be applied internally to the mucous membrane of the pharynx, the other to the neck externally; the internal pole must be applied higher or lower according as the paralysis appears to be situated in the upper or lower part of the throat. In these cases there is probably some impairment of the muscular structure of the pharynx as well as the nerve force.

I have had several very severe cases under my care. In one the loss of power was of fourteen years' duration; in two others the impaired power of deglutition had lasted five years.

The lady whose case was of the longest duration—fourteen years—recovered her power of swallowing entirely under a course of treatment of three or four months' duration. In her case the pharyngeal dysphagia was complicated by a slightly impaired action of one side of the epiglottis, and the advance and elevation of the larynx was very slowly performed, probably from loss of power of the elevators of the hyoid bone. The following is the account of the symptoms as described by the lady's husband:—

"In the spring of 1848, about three or four months subsequently to our marriage, Mrs. L. began to complain of constant uneasiness in the throat, the description she gave of it being that it felt as if it were lined sometimes with stiff muslin, and at other times with wet sponge. The sensation was for some months one rather of severe inconvenience than of pain, and no difficulty was experienced in either eating or drinking. The only explanation that ever occurred to us of the origin of this state of things is, that the time referred to we were living in a very damp house, and my wife was in a feeble state of health. Shortly after the appearance of this symptom Mrs. L. suffered from a somewhat serious attack of tendency of blood to the head, and during six months was under constant medical treatment. The first instance of pain and difficulty in swallowing occurred in the winter of 1849, when as she was suckling her infant her Medical adviser had directed her to drink stout. Upon one occasion while so doing she was seized with an apparent spasm in the throat, followed by symptoms of choking so violent that the nurse thought she was in a fit. Previously to this, Mrs. L. had rarely drank anything but tea or coffee and cold water. Since that time until within the last few weeks—a period of fourteen years—she has suffered excruciating distress in consequence of her inability to swallow any liquids naturally. During the greater portion of this time she has been only able to sip drop by drop, and this has been done with great dread of the process, her horror of liquids amounting almost to the descriptions I have read of hydrophobia. The depression of spirits she has suffered has been intense, and at times alarming. During the whole of these fourteen years Mrs. L. never but once has taken a mouthful of liquid at one time, this exception occurring in 1855, when, in the pains of parturition, she drank one cup of tea naturally. All sorts of expedients were adopted, both externally and internally, but without the slightest mitigation of the evil. Change of air was repeatedly tried, but the only benefit was exceedingly slight and transient. At the first, Mrs. L. suffered nothing while eating, but subsequently to the birth of the infant in 1855 she became so weak in the throat that solid food caused her very great trouble. So much was this the case that from mere insufficiency of food she wasted to a shadow. Under the advice of her Doctor, she now resorted to the use of stimulants before taking food, and until the time of consulting you the ability to swallow has only been maintained by carefully drinking, drop by drop, a glass of wine or a small quantity of spirits and water. By half an hour or three-quarters of an hour thus spent she would be prepared to eat dinner or supper. The effort to take anything early in the morning has been so great that she has quite as frequently dispensed with breakfast altogether as she has adopted the alternative of swallowing a spoonful or two of tea drop by drop. The advice of several Physicians has been obtained, and most of them have dismissed the case as one of nervous delusion, stating that there was nothing the matter with the throat; others assigned it to hysterical causes; but the treatment in every instance was a painful failure, throwing the poor patient back into the agonies of protracted martyrdom. Upon my return home after a month's absence, in August last, I found Mrs. L. in a most deplorable state of both mind and body. She described the throat as closing, and had abandoned all hope of relief short of the grave, and longed for that relief." This patient, after a course of direct galvanism, was able to drink with almost as much facility as other people. She told me she often voluntarily took a drink of water, a thing that she had never done before for fourteen years. I should mention that, though of a decidedly nervous temperament, the lady is a remarkable sensible and intelligent person, perfectly free from fanciful delusions.

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(a) This paper was originally read before the Medical Society of London.

(b) For applying electricity in these cases I have had an "Œsophageal galvaniser" constructed on the principle of my laryngeal galvaniser, though thicker and longer than that instrument. The electric current does not pass beyond the handle of the instrument until the point reaches the desired spot, when a spring is touched and the shock given.

In other cases of this form of dysphagia the cure has been most rapidly, and perhaps most completely, effected; but then the disease was not of such long duration. In some cases the paralysis of the constrictor is followed by dilatation of the tube, and then the character of the symptoms alters. A case of this sort is related by Dr. Watson.(c)

Dysphagia, whether caused by the swallowing of boiling water or corrosive poisons, is seldom due to direct injury of the pharynx. In the former case it is generally caused by inflammatory tumefaction of the epiglottis; in the latter by ulceration of the mucous membrane of the œsophagus.

3. *Diseases of the Larynx and Trachea.*—The diseases of the larynx which give rise to dysphagia may be morbid conditions of the epiglottis of the arytænoid cartilages (or the mucous membrane adjoining them) of the cricoid cartilage or of the interior of the larynx. Indeed, almost all long-continued or severe diseases of the larynx give rise to this symptom. This form of dysphagia may generally be recognised by those not using the laryngoscope by two symptoms:—1st, there are laryngeal symptoms such as hoarseness and cough; 2ndly, there is great pain on attempted deglutition, coughing often takes place during the act, and the food is violently ejected through the nares. Inflammation, œdema, thickening or ulceration of the epiglottis are very common causes of dysphagia. In these cases the patient can generally swallow thick liquids, whilst those of thinner consistence, by getting in beneath the edge of the epiglottis, generally give rise to extreme irritation. In almost all cases of laryngeal dysphagia, the proper treatment consists in feeding the patient with a stomach-tube, whilst the particular local affection giving rise to the symptom is combated by suitable local remedies applied with the aid of the laryngoscope. In a case which I recently saw in consultation with Mr. Kershawe, of Surbiton, the dysphagia was associated with, or dependent on, paralysis of one of the vocal cords. Approximation of the vocal cords being one of the elements in deglutition, paralysis of either one of them seems to disturb the other laryngeal movements which take place in deglutition. Thus, the imperfect closure of the glottis causes the co-ordinate action of the epiglottis to be impaired. At least this is the only way I can account for the passage of food into the larynx in these cases. In the case I referred to just now, there was some slight thickening of the mucous membrane over the cricoid cartilage, but not enough to cause any difficulty in passing a tube into the stomach. The patient was kept alive for several days by the introduction of food in this way.

Tracheal dysphagia is a term employed by Dr. Hyde Salter to describe a form of difficulty of swallowing to which he was the first to call attention. The interesting paper which he recently brought before the Medical Society must be fresh in the recollection of all; it is, therefore, unnecessary for me to enter into details with regard to this particular variety of dysphagia. It is sufficient to remark that Dr. Salter considers that the excruciating pain which is present is due to the stretching of the trachea which takes place in deglutition. I have never seen any cases where the pain was of the severe character described by Dr. Salter, but I have seen many where slight dysphagia seemed to be caused by tenderness of the trachea. In cases like that described by Dr. Salter, I should think that the stomach-tube would be useful. Perforating ulcers of the trachea gives rise to a very distressing and invariably fatal form of dysphagia, in which, as in cases of laryngeal dysphagia, the food is violently ejected through the nares.

Diseases of the hyoid bone, and of its connexions with the larynx, are amongst the rarer causes of this symptom.

4. *Diseases of the Œsophagus.*—Spasm and paralysis, inflammation, ulceration, and cancer are the principal causes of dysphagia here. All that has been said with regard to the two first conditions as occurring in the pharynx applies equally to the œsophagus, and the observations already made are applicable here. Œsophagitis, except that form caused by the contact of corrosive poisons, is an exceedingly rare disease, and few Physicians have met with, or described accurately, its symptoms. Abernethy and Graves have each recorded one case. Burning pain between the shoulders and great agony in swallowing are the most characteristic features. Abstaining from all kinds of food—that is, giving the œsophagus perfect rest, is the proper treatment. The patient should be sustained by nutritious enemata.

Organic stricture of the œsophagus is of two kinds, traumatic and idiopathic. The traumatic variety is caused by the accidental or suicidal swallowing of corrosive poisons; the idiopathic form is due to two causes—first, simple ulceration, and secondly, to that chronic change of structure by most pathologists supposed to be characteristic of cancer.

In cases where corrosive poisons have been swallowed, if the œsophagus recovers from the primary inflammation and ulceration, gradual closing of the canal almost invariably takes place at a later period. In most cases the fatal termination occurs within three or four months, but sometimes, where the irritant has not been very powerful, the obstruction may be effected very gradually. Dr. Watson records(d) the case of a man who suffered from gradual closing up of the œsophagus five years after having swallowed a tablespoonful of a solution of the impure carbonate of potass; and the same authority quotes a case from Sir Charles Bell, in which starvation took place twenty years after some soap-lees had been swallowed. Annular stricture, a term derived from the examination of the pathological specimens in Hospital museums, where the clinical history has been lost, is always caused by the action of corrosive poisons.

Chronic thickening of the mucous membrane, and consequent closure of the œsophagus from a traumatic cause, is generally confined to a limited portion of the canal. Such cases should be treated with the stomach-tube, with bougies, and with solid caustic or solutions of nitrate of silver applied by means of an instrument to be presently described. The advantage of the use of the former agents is well shown in a case recorded by Dr. Basham, (e) in which a patient was rescued from starvation by these means. As soon as the treatment was discontinued the case relapsed, but under the use of bougies dilatation was soon effected. The patient, a young woman, died rather more than two years after the accident, but the fatal termination was brought about entirely by her neglecting to attend at the Hospital. The use of bougies is entirely palliative, but the application of caustics might perhaps be curative. If, however, experience should prove that this method does not answer, the establishment of a gastric fistula at an early period of the disease would, I believe, be the most rational treatment.

Simple idiopathic ulceration of the œsophagus is an exceedingly rare disease, though the tube is sometimes opened by the ulcerative process extending from the trachea. The treatment should be the same as that indicated in the traumatic form. The importance of establishing a gastric fistula in these cases has been strongly insisted on by Dr. Habershon in his valuable work on "Diseases of the Abdomen," page 36.

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(c) "Principles and Practice of Physic," third edition, vol. ii., p. 371.

(d) *Op. Cit.*, vol. ii., p. 370.

(e) Med.-Chir. *Tran.* Vol. xxxiii., p. 99. 1850.

As regards the treatment of malignant stricture of the œsophagus, Dr. Watson observes, "When the symptoms of stricture come on in these cases, physic can do almost nothing. Surgeons pass bougies into the gullet, and attempt to dilate the strictured portion, or to prevent any further narrowing. But this expedient is usually of temporary benefit only, and the patient dies at last of inanition. His miserable existence may, perhaps, be protracted a little by injecting nutritive enemata into the rectum. For maladies like these medicine has no cure, opiates may give comfort, and promote the euthanasia, and this is all."

The application of caustics to the seat of stricture was recommended by Sir Everard Home(f), and several interesting cases have been published by Horace Green(g) in which this plan of treatment greatly prolonged life. Nevertheless, this method of treatment has not met with general approval. Many Practitioners think that even the use of simple bougies is very injurious, and that the diseased part should be left entirely to itself. There is no denying, I think, that simple epithelial growths sometimes take on a cancerous nature from repeated applications of irritant substances. But it must be borne in mind that we have not merely to treat a case of cancer here, but to effect the patency of a canal of the first importance to life. It is not alone the nature of a disease, but its situation also, which must influence the mode of treating it. Hence it is perfectly philosophical to treat a case of cancer of the œsophagus by a mode which we should not think of adopting if the lip or tongue were the part affected, —just as an aneurism of the arch of the aorta must be treated in a very different way to popliteal aneurism. For applying caustic to the œsophagus in cases of stricture, I have had an instrument made on the principle of Lallemand's urethral *porte caustic*. Though I have used this instrument in some cases with decided benefit, I cannot say that my experience has been sufficiently extensive or that sufficient time has elapsed to enable me to speak conclusively on the subject. Cases of stricture that come under a Practitioner's care at a very advanced stage, that is, when the œsophageal canal is entirely blocked up, may be treated by the forcible passage of a fine catheter or tube with a rigid wire in its interior. Of course there is some danger in using an instrument like this. It may be pushed into the posterior mediastinum, and food injected there; in the worst case, however, it can only shorten life by a few hours; on the other hand, it may prolong it for many days. Where a tube is thus forcibly introduced, it should not be withdrawn, but should be allowed to remain in the stricture. How far the establishment of a gastric fistula would be desirable in these cases, and at what period it should be made, are questions requiring more detailed investigation than the limits of this paper would allow.

In cases of stricture of the œsophagus complicated with ulcerative opening into the trachea, the importance of the use of the stomach tube cannot be overestimated. Where the stricture will allow the passage of a small tube, the food can be thus carried beyond the opening in the trachea.

The life of a patient recently under my care was prolonged for many weeks in this way. He was unable to swallow a particle of food or even a drop of fluid, as everything passed into the trachea; but with the stomach tube he could be fed with ease. After death, a large mass of cancerous deposit was found in the œosophagus, and an opening between that tube and the trachea.

5. *Diseases of the Parts Contiguous to the Food Tract.*—Tumours, whether simple or malignant, and aneurism of the arch of the aorta are the most common contiguous causes of dysphagia. The importance of these diseases, as giving rise to this symptom, was well shown in a valuable communication on Mediastinal Tumours which Dr. Symes Thompson recently brought before the Medical Society.(h) In cases of aneurism, no instruments should ever be introduced into the œsophagus. The cause of the dysphagia can alone be treated, and that only by feeble and indirect means. In the case of other tumours pressing on the lower part of the œsophagus, there is nothing to be done. The sudden enlargement of the cervical glands where children are the subjects sometimes gives rise to dysphagia, and I have even heard of cases where complete inanition has taken place. In these cases the stomach tube would be of the first importance.

In this brief and imperfect paper I have endeavoured to give prominence to the stomach tube as a means of prolonging life. The use of this agent does not appear to me to be appreciated as it deserves by the bulk of Practitioners. In the case of acute and chronic enlargement of the tonsils, new methods of treatment have been suggested, as likewise in cases of dysphagia dependent on neurotic causes. For the treatment of malignant diseases of the œsophagus, attention has been called to a plan which, though long ago brought forward, has never come into vogue. The limits of this commuuication preclude the possibility of discussing at length some rare conditions (such as œsophageal cellulitis and œsophageal pouches, or of investigating the various reflex causes of dysphagia (such as diseases of the heart and lungs) which occasionally give rise to difficulty of swallowing.

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## CASE OF ABSCESS OF THE BRAIN.

By T. B. MORIARTY, A.B., M.D., etc.

THE subject of this case was a young man of strong plethoric constitution, who was attacked by assassins on December 30. He received two wounds—one a lacerated, two inches in length over the occiput, which laid bare the bone and bled profusely. The other an incised wound—the subject of these remarks—was inflicted over that part of the left frontal bone known as the "temple," in length two inches, with a deep depression in the centre which led to a depressed fracture. Compression later on ensued in consequence of the formation of an abscess between the dura mater and the bone. The wound in the back of the head got well rapidly, and as the depression did not interfere with the mental faculties an attempt was made to produce as much union as possible by the first intention. A bone abscess manifested itself, and the matter, which soon became offensive, ceased to discharge almost entirely after a fortnight's time. The early part of the treatment consisted of counter-irritation, purgatives, and calomel, with a diaphoretic mixture. From the outset there existed a slight incoherency in speaking without the occurrence of any epileptic fit.

On January 19 this man felt well enough to write three business letters.

On the 20th he appeared so much improved as to be allowed to use chicken broth.

On the 21st it is said he vomited a quantity of greenish fluid; and on the night of the 24th he was again seen by me, when his condition was the following:—Lying quite insensible; pupils contracted; pulse 51. Neither asking for anything nor making known his wants in any way. There was no excess of urine in the bladder. These symptoms, as well as my previous acquaintance with the case, led me to conclude that there was an abscess lying beneath the frontal wound. On this account I demanded the assistance of another Doctor. Calomel was given in small doses every two hours.

The following day two pieces of bone came away, and on the ensuing day some two pieces more of bone were extracted. It was then proposed to trephine, as the attempts to raise the depressed bone were ineffectual.

On the 27th I enlarged the wounds longitudinally and laterally by a crucial incision. Another effort was then made to raise the bone by means of the elevator; while doing so, the matter, which was very offensive, got exit, and in a few minutes our patient opened his eyes, and said, "Doctor, you are hurting me." He soon began to recognise those around him.

The following day the depressed bone was broken off, so as to leave no source of irritation; a quantity of sanious matter exuded, which was succeeded by a copious discharge of pent-up pus. As soon as the opening was cleaned the pulsations of the brain became quite visible. Mercury, with chalk, had been administered until salivation was effected, so as to guard against any tendency to meningitis.

February 1.—There has been a copious discharge from the wound, which is filling up with fibrous tissue. Patient going on very favourably; pulse 80; there is no relaxation of the sphincters.

24th.—Is now quite recovered.

Limerick.

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(f) "Practical Observations on Strictures in the Urethra and the Œsophagus." London. 1803. Pages 407, 409, 410.

(g) "Diseases of the Air Passages." New York. 1852. Page 139.

(h) This paper was afterwards published in the *Medical Mirror*

# REPORTS OF HOSPITAL PRACTICE
# IN
# MEDICINE AND SURGERY.

◆

## SPECIAL REPORT
## ON THE TREATMENT OF FRACTURES IN THE LONDON HOSPITALS.

### FRACTURES OF THE UPPER EXTREMITY.

IN the following paper we lay before our readers the ordinary methods we have seen adopted in the various Hospitals we have visited. It will be observed that the simplest possible forms are in most general use, the complicated apparatuses described in the special works on this subject we have not seen employed in any instance; and those that we here describe are such as might be applied at any moment and with the most ordinary materials.

Compound fractures we have not entered upon, the general principles in the treatment of these cases we shall reserve for a subsequent paper.

We are compelled to omit a notice of the treatment of fractures of the scapula, as in collecting materials for this report we have not met with any instances of fractures of this bone. We shall be careful, however, to supply this omission whenever opportunities offer.

### FRACTURES OF THE CLAVICLE.

The methods of treating fractures of this bone that have come under our observation are, without exception, of the simplest possible form, and their principles almost identical. First, there is the simplest of all, viz., that of placing a pad of tow or cotton wool in the axilla, and a figure of 8 bandage taken round the shoulders and back, a few turns of which bandage are used to bind the elbow to the side, whilst the forearm is slung up.

A second method, similar to the latter, but rather more complicated in its mode of application, is in very general use. A stout wedge-shaped pad, made of horsehair or webbing stuffed, should be secured firmly in the axilla by stitching a piece of bandage to it, and fastening it round the opposite shoulder; next, a turn or two of a bandage should be taken round the middle of the humerus of the affected side, and passed round the back of the patient, and then round the chest, a sufficient number of turns being made to thoroughly keep it to the side, and slightly back; the forearm should then be laid with the palm of the hand flat across the chest and towards the opposite shoulders, and should be enclosed or bound to the chest by a series of turns round the body, the elbow being supported by a few passed under it and over the opposite shoulder. This apparatus is best kept firm and in its place by stitching together the turns of the bandages in places where the amount of pressure is greatest, and where there is most chance of its slipping.

The simple figure of 8, whether applied by a series of bandages or by an apparatus made of leather passing under the axilla and buckled together in the back, we have not seen in use, being generally objected to by Surgeons, on the ground that by it the inner end of the distal fragment being pressed upon, is pushed behind and below the other, and great distortion produced.

A method is sometimes adopted of merely allowing the patient to recline in bed on his back without any bandages or appliances of any sort, the recumbent position being sufficient to keep the fractured extremities of the bones in apposition, with the best results.

In cases of fracture of the clavicle in children, Mr. Wood merely uses a sling.

The above described arrangement of bandages may be strengthened by applying dextrine, starch, or plaster of Paris, as a means of keeping the fragments more thoroughly in apposition.

A good rough and ready way of keeping the fragments in apposition until suitable appliances can be used may be put in practice as follows, viz., to take two pocket handkerchiefs, and, tying them round each axilla, with the ends left long, these ends being subsequently tied together crosswise behind the back, and so forming a sort of figure of 8. A third handkerchief may be used as a sling. This acts very well as a temporary support.

### FRACTURES OF THE HUMERUS.

*Fractures of the Neck of the Humerus.*—The principle of treatment is much the same in all the cases we have seen. Some Surgeons place a pad in the axilla to keep the upper end of the fragment in position, with a long splint on the outside of the arm, and bandage the elbow to the side. Or an apparatus is employed consisting of a rectangular iron splint with a crutch fitting tightly into the axilla, to which it can be more perfectly adapted, and extension procured by a screw. In this instance care should be taken that the splint does not press too tightly into the axilla and produce œdema. Sometimes splints are not used at all, but a gutta-percha cap is moulded to the shoulder and continued for some way down the arm, a pad being placed in the axilla, and the gutta-percha mould bandaged carefully to the thorax, and the arm carried slung up.

Mr. Erichsen recommends a plan of bending a strip of gutta-percha or sole leather—about two feet long by six inches broad—upon itself, and placing it between the inner side of the humerus and the thorax, with the part formed by the bend pushed well up into the axilla and adapted to its shape. When the fracture is above the insertion of the latissimus dorsi, Mr. Wood uses a stout wedge-shaped pad with the base in the axilla, and a long outside-splint reaching from the acromion to the outer condyle; when below the insertion of this muscle, the apex of the wedge is placed in the axilla. The splint is kept in its place and the arm bandaged to the side and slung up by a figure of 8 bandage. The reasons for applying the pad differently in these two cases is sufficiently obvious from the form of displacement.

*Fractures of the Shaft.*—These are treated by first bringing the fragments into apposition; next the forearm and hand should be carefully bandaged to prevent œdema; then a well-padded, hollow splint, extending from the axilla to the inner condyle, should be adapted to the side of the arm, a similar one being applied to the outer side from the acromion to the outer condyle, whilst the fragments may be kept in still closer apposition by shorter splints before and behind; these are carefully kept in their places by buckled fillets, bandage, or gum and starch bandages.

In all cases of fracture of the shaft of the humerus, Mr. Partridge recommends the splints applied to the upper arm to be continued to the forearm, on the ground that the humerus the most frequently of all bones is the seat of ununited fracture, this being due to the repeated attempt at pronation and supination during the process of union. We have recently seen two cases of ununited fracture of the shaft of the humerus, under the care of Sir William Fergusson at King's College. In each instance the ends of the bone were bevelled with a saw, and wires passed through and brought round the shaft, firmly locking them together. Perfect union was obtained in each case.

### FRACTURES OF THE LOWER EXTREMITY.

These are treated most generally by inside rectangular splints, made either of wood or metal, and well padded; they should be jointed at the bend of the elbow, and be capable of being fixed in any position by means of a screw.

Pasteboard or gutta-percha splints are in frequent use. In all instances care should be taken to leave the joint sufficiently exposed for the application of fomentations—leeches, etc., in cases where great inflammatory action may come on. In very severe cases the arm is best laid on a pillow and treated with evaporating lotions, or merely resting on the splint without being bandaged to it.

Passive motion should be commenced in about three weeks or a month.

A method of slinging fractures of the upper extremity, similar to that adopted in fractures of the leg, we have seen in very general use in Mr. Paget's wards at St. Bartholomew's Hospital. It appears to afford the same advantages that are obtained from slinging the lower extremity. This method of treatment, we may say, in passing, is employed in all severe affections of the arm and forearm; as, for instance, phlegmonious erysipelas, extensive suppuration, bad compound fractures, and in cases of excision both of the elbow and wrist joint. The limb is very easily slung, as it lies on the ordinary angular splint, by means of lengths of bandage, or of webbing, which are passed either over a horizontal bar projecting from the wall above the patient or over some portion of the framework of the bed.

### FRACTURES OF THE FOREARM.

*Fracture of the Olecranon.*—Extension by a well-padded splint applied to the front of the forearm, or by a gutta-percha splint extending from the middle of the arm to the wrist.

*Fracture of Both Bones.*—The bones are placed midway between pronation and supination, and two light, well-padded splints placed on the back and front of the arm, and either bandaged or kept on by strapping. Some Surgeons continue the splint on to the tips of the fingers, whilst others leave the fingers at liberty by applying the splint only as low as the wrist or web of the fingers. This latter plan of treatment appears to be a point of very considerable practical importance, especially in the case of those engaged in manual pursuits. When the hand is kept in rigid extension for the necessary period of union of the fracture, it becomes so stiffened and weakened that its functions are impaired for many weeks. On the other hand, when the splint is so arranged (that is, coming as far forward only as the web of the hand) the normal movements—flexion and extension—can be resumed as soon as the first feeling of soreness caused by the accident has subsided; and so it happens that persons whose fractures have been thus treated are enabled, upon the removal of the splint, to resume their ordinary occupation very shortly. We have lately seen several instances of fractures treated by the shorter splint, in which, on the removal of the apparatus, the patients were enabled to return to their ordinary occupation without further loss of time; while after the use of the long splint we believe it not to be unusual that several weeks or even months may elapse before perfect strength and movement is recovered. These splints may have a ridge along their middle to adapt itself to the interosseous spaces, and so prevent the bones from being pressed together.

*Fracture of Lower End of Radius (Colles's).*—The hand is adducted by a bent or pistol splint, which some Surgeons apply to the palmar, whilst others prefer the dorsal surface; or the pistol splint may be applied to the dorsal and a straight splint extending into the middle of the palm on the front surface. We have seen this form of fracture treated very successfully by applying a broad splint to the front of the forearm and extending only to the web of the fingers, which are bound carefully over the end of it, no adduction being used at all. In fracture of the forearm it is very convenient to fix the splints to the limb, independently of one another, so that in the course of treatment that on the dorsal aspect may be removed for the examination of the fracture, while that on the palmar remains as a support. The upper extremity of the palmar splint should not be placed so as to press upon the internal condyle, as, if it does so, this sharp prominence of bone is liable to be rendered tender, and be a source of discomfort to the patient.

(To be continued.)

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Medical Times and Gazette.

SATURDAY, MARCH 17.

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## A SAD TALE OF MISMANAGEMENT.

**We have adverted more than once to the late disastrous sickness and loss of life among our troops at Hong-Kong. Now that we are fresh from a perusal of a Parliamentary return of all the correspondence on that subject, we make no apologies for laying the matter before our readers.**

A feeling of indignation becomes so paramount in the mind at first that it requires a little time before one can look calmly and impartially into the question. One word—retrenchment—supplies the key to the whole, and lays bare the primary cause of these lamentable occurrences. The War Office was determined to make a reduction in the China command in order to save the Indian allowances, and it resisted from first to last every attempt on the part of the officials in China to alter that determination. As those officials were interested in maintaining those allowances, it was not to be supposed that their opinions and judgment could be untainted with sordid motives!

We are accustomed to stories about "fever nests" at home, but the selfishness, if not the humanity, of our opulent classes puts a limit upon the spread of causes which may obviously involve their own lives. It is only in the public services that we can expect to see preventible diseases on such a grand scale as the present.

The documentary evidence about these occurrences at China does not lack any element of interest. It unfolds a very mournful tale; it gives a peculiar insight into circumlocution; at every turn which the red tape makes in its slow unwinding from off the official reel at home disease is advancing with a giant stride abroad. It brings before us in a very forcible way the old truth that when men bid defiance to sanitary precautions they will pay very surely and very dearly for their rashness. This return shows us the marvellous rapidity with which disease increases in hot climates; how the very little cloud of to-day becomes the ominous large one of to-morrow, and attains on the third day an awful magnitude.

As in most stories, so in this, there is something of the heroic—a ring of the true metal in it. Amid all the sickness, sorrow, and trial under which the unfortunate soldiers, their wives, and little children were suffering, from May to October, there was no one more deserving of our sympathy and pity than Surgeon Saunders, of the 9th Regiment. When power and responsibility go hand in hand, the trial may prove a severe one; but in this instance a man was overwhelmed with his responsibilities, and *powerless!* He must be a good man, in more senses than one, who is found tenaciously adhering to his post and working with indomitable energy under such circumstances. Surgeon Saunders' letters are terse, manly productions, abounding in good sense and sagacity. When he found that a month would elapse before the transport he demanded for the invalids was secured, he lost no time in characterising "the delay as a solemn responsibility; many of these men will have perished whose lives might be otherwise saved." He concludes a forcible letter by adding, "You will, I trust, bear with me in making these remarks, as I am solely moved by a deep sense of duty and the cause of humanity." This Hong-Kong affair naturally suggests three questions, and the return enables us to answer two of them. 1. Why were the troops sent at all, and who is to blame for this? 2. Why were the arrangements for their accommodation so defective? 3. How comes it that the Medical Staff were absent at Japan during a time of unusual pressure?

To the first we may answer—*On the War Office unquestionably rests the whole blame;* and here is the proof. Major-General Guy repeatedly and earnestly called attention to the absence of all accommodation for a second European regiment in China. The proceedings of a Medical Board, held at Hong Kong on November 26, 1864, were forwarded to the home authorities, in which the Medical Officers strongly deprecated the further occupation of a place called Kowloon, and supported their opinion by a reference to the late experience of the 99th and 20th Regiments. A corroborative Medical certificate from a civilian Physician was attached to the proceedings of that Board. A letter, dated January 27, 1865, was forwarded to the Director-General of the Army Medical Department by Dr. Dick, calling his particular attention to the very urgent reasons which existed against sending another European regiment to China at all, pointing out the utter want of proper accommodation, the baneful effect of the climate on the healthiest British soldiers, even when that accommodation was ample and with the aid of every practicable sanitary precaution, and begging the Director-General "to exercise his influence with the military authorities to delay, if possible, the despatch of a second English regiment to Hong Kong." This letter was forwarded by Sir James Gibson, who expressed his concurrence with the views contained in it. Again, on March 29, 1865, Dr. Dick forwarded the results of a laborious investigation into the comparative efficiency of white and black troops in China; and his sanitary statistics proved incontestably the marked superiority in point of health and efficiency of the latter troops.

"The facts indicated by the above figures," he says, "at the present time, when China is about to be garrisoned wholly by white troops, afford matter for very serious reflection, both in a financial and sanitary point of view. It is not within my province to discuss the first. But as regards the other point, there can be no question that little more than ten years would be required to expend (if I may use the word) a force of white troops, and that twenty-five years would be required to expend a similar force of black troops by deaths and invaliding. Then as regards the difference between the daily averages of sick, among the white and black troops, it results, supposing the men to have six nights in bed (and no soldier in this colony ought to have less), that there have been twenty-six more men available daily for garrison duty per 1000 men among the black than among the white troops, or, in other words, that a force of 1000 black troops has really represented a force of 1156 white troops for all purposes of garrison duty, independent altogether of the protection they have afforded the white soldier, by rendering his exposure to solar influence during the hot season unnecessary, and the absence of which will no doubt contribute materially to the increase of disease."

It is only due to the major-general commanding to say that he backed up these protests with all the weight of his authority. We have heard, further, that Dr. Dick did not rest here. When he found expostulations useless, he tried to induce the local authorities to exert their power, and delay the second regiment at Singapore.

The War Office was obdurate: unlike the unjust judge, continued complaint did not weary them into acquiescence. The regiment was sent. Major-General Guy was empowered to reduce the number of troops at Kowloon to the lowest possible amount, by removing to Japan such troops as he was unable to provide for at Hong-Kong. "Lord de Grey was not prepared to sanction the substitution of native for European troops, as suggested." "His Lordship relies with confidence on the efficacy of the measures which have been authorised for improving the sanitary condition of the British soldier in China;" "and there should be no relaxation of your efforts, as there will be none on the part of Her Majesty's Government in this direction." The terse writing of the concluding sentence is manifestly the official way of telling the major-general and his Doctors to hold their tongues and obey. As "to the efficacy of the measures for improving the sanitary condition of the British soldier in China," it is a piece of supercilious nonsense. Of what avail could such sanitary measures be in the face of such difficulties as—no barracks, bad water, worse air, and a still worse locality—such as Kowloon? This is making bricks without straw with a vengeance!

Now, the Major-General had two courses open to him. 1st. To forward the incoming regiment, or the major part of it, to Japan. Had he done this, the amount of garrison duties, as he pointed out, was such that the force left at China could not discharge them. In a military point of view, these duties were paramount in his eyes, of course. As the soldiers would simply have been killed outright by fatigue, the General naturally preferred to adopt that course for which the home authorities had made themselves responsible—viz. (2), to retain the regiment, and poison the men by overcrowding. As it proved, Chinese watchmen and police had eventually to be employed to discharge the duties of the British soldier; for these duties at last pressed so heavily on the remnant of healthy soldiers that they were enjoying only two consecutive nights in bed. Of course, it appears to the non-military reader that it would have been far better to have diminished the military duties at once to the utmost extent, and so husbanded the strength of the soldiers; but, even so, we doubt whether the mortality would have been sensibly affected owing to the presence of the other evils.

2ndly. The 11th Regiment arrived at Hong-Kong a month earlier than was anticipated. It embarked at the Cape at the end of the summer, had a very hot passage, arrived in time for another summer in China, and it was stationed during the worst season of the year in the most unhealthy locality, for want of any other mode of accommodation. Still, no unnecessary delay appears to have taken place in making the best practicable arrangements. The official instructions, notifying the decision of the War Office to send the 11th Regiment to Hong-Kong, were received at the end of February. A Board was held within a week. The greatest difficulty was experienced in securing anything like proper buildings; for it must be remembered there were no such buildings to be had at the station for love or money. Some were finally secured in March; but nearly four months were still required to make such alterations as were indispensably necessary for the accommodation of troops. In the meantime the 11th Regiment arrived. Nothing was ready, of course. Dirt, excessive overcrowding, abominable buildings, a bad position in a malarious neighbourhood, at once came into full play; insufficient rest and laborious military duties followed in due course, and in an increasing ratio as the sick became more and more in number. The end we know, as far as the effects of such gross mismanagement can be said to have an end. Out of 2000 human beings 196 died and 290 were invalided in eight months, and a large number of those invalided died either on the passage or at the Cape. The 9th and 11th Regiments both became ineffective; the latter regiment utterly so: and the retrenchment scheme of the War Office miserably failed after all. The Hospital expenses for the quarter amounted to nearly £2000, and the quinine alone cost £385 10s. Of course, there are the expenses of transport, those attending the landing of the sick at the Cape, *the transport for removal of the survivors of the 11th Regiment, and its relief by a black corps after all,* and the pensions of all the invalided soldiers,—not to say anything of the enormous cost incurred by the loss of old soldiers, at a time when recruits are so scarce that a Royal Commission has been appointed to devise means to obtain them.

3rd. To the last question the Parliamentary return affords no answer. By the end of the year the War Office officials commenced to feel very considerable alarm. They yet held one court card in their hand, on the adroit playing of which much depended—the reported absence of the Medical staff at Japan! This has been eagerly seized upon as the only chance of shunting the responsibility from the War Office, and this court card was therefore played with desperate vigour. Earl de Grey "desires to be furnished, after a searching inquiry, with a full explanation of the circumstances under which, at a time of such severe sickness, this extraordinary and unfortunate absence of the principal Medical officers of the command took place." It is very much to be lamented indeed, because it is the only blot that we can find in the case. We await the explanation with anxiety, for with that single exception our Profession has thoroughly performed its duty to the nation.

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WE hear that a proposal has been made by a Society of Sisters of Mercy to undertake the management of the nursing in St. George's Hospital, which proposal was to be taken into consideration by a meeting of the Governors on Thursday last.

## DR. FARR ON THE PROGRESS OF EPIDEMICS.

The history of Medicine furnishes plenty of evidence in proof of the fact that epidemics have swept at different periods over a greater or less area of the inhabited world, in waves or surges of varying extent; now limited, now extensive; whilst the comparative fatality of the same disease has varied with different visitations considerably. The explanation of the fact, however, still remains uncertain, for little has been ascertained in regard to the laws by which these differences of behaviour have been governed. Recently Dr. Farr has called attention to some points in the history of Rinderpest which deserve special attention, and illustrate in a remarkable manner certain constant features in the rise and fall of epidemics in general.

Mr. Lowe expressed the belief, perhaps, of the majority of people when in the House of Commons, a little time since, he remarked that "if we do not get the disease (Rinderpest) under by the middle of April, prepare yourself for a calamity beyond all calculation." This opinion was based upon the supposition "that there is no reason why the terrible law of increase which has prevailed hitherto should not prevail henceforth." Dr. Farr took exception in one of the papers to Mr. Lowe's statements, and observed "that it admits of mathematical demonstration, that the law of increase which has hitherto prevailed," correctly interpreted, leads to an exactly opposite conclusion, and justifies us in assuming that the Rinderpest will actually speedily diminish in severity and extent. Dr. Farr, calculating the number of attacks for several weeks, found that the ratio of increase was proportionately less from week to week, as will be seen from the following figures:—

| 1865. | Attacks. | New cases in four weeks. |
|---|---|---|
| October 7 | 11,300 | —— |
| November 4 | 20,897 | 9,597 |
| December 2 | 39,714 | 18,819 |
| December 30 | 73,549 | 33,835 |
| January 27, 1866 | 120,740 | 47,191 |

Dr. Farr, moreover, drew the inference that "the rate of increase goes on rapidly decreasing until the ratio itself is decreasing," and affirmed that the Rinderpest would attain its height about the beginning of March, and then speedily decline in frequency. So it has turned out.

This course of the epidemic may be represented by lines of different altitudes corresponding to the several numbers representing attacks, and forming together a curve, such as that represented on the opposite page, for which we are indebted to Dr. Farr. It is merely intended to be an approximation to the truth.

The following table shows the exact number, in figures, of probable attacks calculated up to July 28, 1866:—

RINDERPEST.

| Week ending | | Actual attacks reported in each week. | Calculated series of weekly attacks. |
|---|---|---|---|
| October | 28 | 1,611 | 1,437 |
| November | 4 | 1,765 | 1,849 |
| " | 11 | 2,580 | 2,338 |
| " | 18 | 2,669 | 2,906 |
| " | 25 | 3,610 | 3,551 |
| December | 2 | 3,828 | 4,265 |
| " | 9 | 5,356 | 5,036 |
| " | 16 | 6,054 | 5,844 |
| " | 23 | 6,256 | 6,668 |
| " | 30 | 7,693 | 7,478 |
| January | 6 | 7,106 | 8,244 |
| " | 13 | 9,243 | 8,935 |
| " | 20 | 10,041 | 9,518 |
| " | 27 | 11,745 | 9,967 |
| February | 3 | 9,153 | 10,260 |
| " | 10 | 11,590 | 10,382 |
| " | 17 | 13,001 | 10,327 |
| " | 24 | 10,167 | 10,098 |
| March | 3 | 7,310 | 9,706 |
| " | 10 | .. | 9,171 |
| " | 17 | .. | 8,518 |
| March | 24 | .. | 7,777 |
| " | 31 | .. | 6,980 |
| April | 7 | .. | 6,158 |
| " | 14 | .. | 5,340 |
| " | 21 | .. | 4,552 |
| " | 28 | .. | 3,815 |
| May | 5 | .. | 3,143 |
| " | 12 | .. | 2,545 |
| " | 19 | .. | 2,026 |
| " | 26 | .. | 1,585 |
| June | 2 | .. | 1,219 |
| " | 9 | .. | 922 |
| " | 16 | .. | 685 |
| " | 23 | .. | 501 |
| " | 30 | .. | 360 |
| July | 7 | .. | 254 |
| " | 14 | .. | 176 |
| " | 21 | .. | 120 |
| " | 28 | .. | 81 |

The total death rate up to March 3 appears to be 81·8, the recoveries 18·2 per cent. This is shown below, and differs from the totals given by the Privy Council.

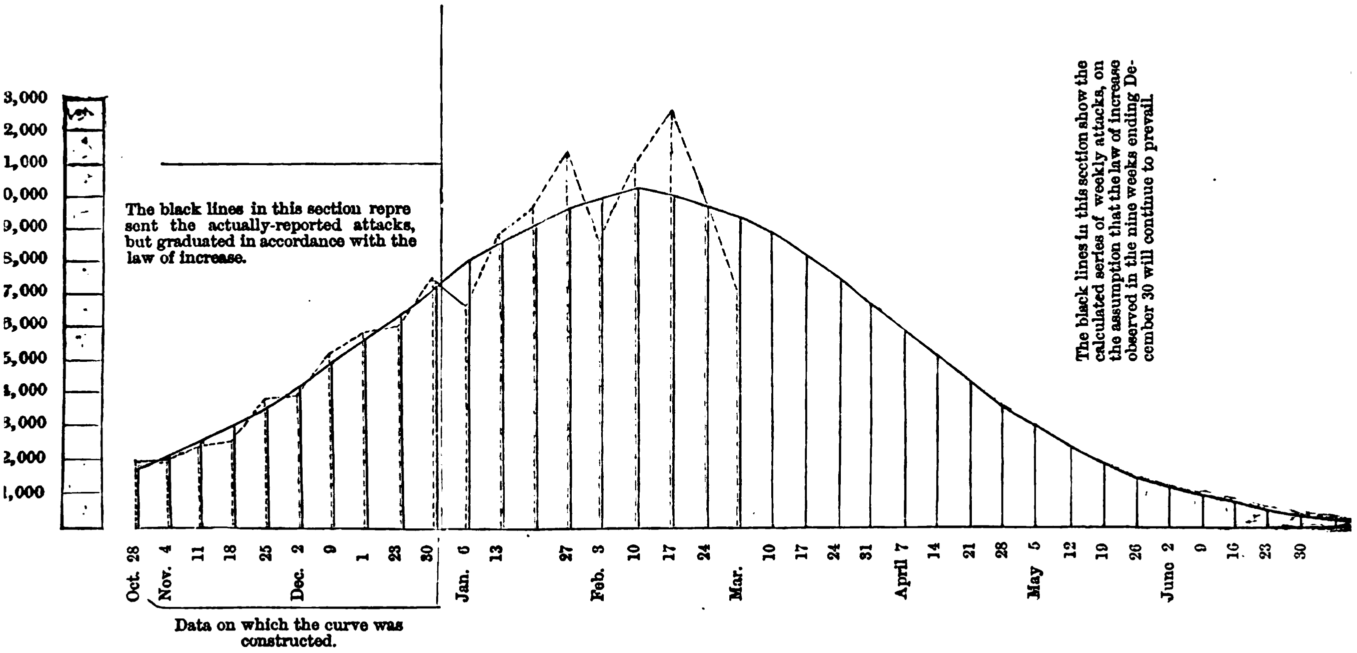
| | From the commencement of the disease to March 3. | True per-centage. |
|---|---|---|
| Died | 117,664 | 81·8 deaths |
| Recovered | 26,106 | 18·2 recoveries |
| Total cases terminated naturally | 143,770 | 100·0 |

The difference between the totals of the "calculated" series of Dr. Farr and those of the Veterinary Department is explained by the peculiar way in which the latter are made up. The returns for the week are often received at a late period, and are then included in those of the subsequent weeks. Dr. Farr purposely took the *reported* cases, as being on the whole more trustworthy, without the admission of the element of "back cases." In some weeks, no doubt, the large number of "back cases" are due to a vigorous use of the official whip. An addition of about *one-fourth* to the reported weekly attacks would quite cover all the back cases. The diagram of the curve shows on January 27 and February 17 a rise above, and, on the other hand, on February 3 and March 3 a fall below the calculated number. This difference is explained by the fact mentioned. It is necessary to add that if certain additional circumstances which have recently arisen, in reference to the spread of cattle plague, such as stamping-out measures, were considered, and a series of calculations deduced from the actual observations, embodying the latest data, that the new corresponding curve would exhibit a much more marked fall than that represented in the diagram.

Now, how are we to explain this mode of progress of Rinderpest, and to what is the subsidence of all epidemics due? Dr. Farr observes "*that diminished activity of the zymotic matter and augmented power of resistance in the survivors are the facts to which the subsidence of epidemics of small-pox, cholera, measles, scarlatina, and typhus, are in themselves referable.*" The diminution in the virulence of poisons is supposed to be specially due to transmission through several animals of the same kind; but, in addition, season must have some influence, possibly depending upon the character of the atmosphere, the amount of ozone or antozone; the degree of temperature, humidity, and the like.

The increased resistant power of those attacked at a later period *in the same region* is due to the varying degree of predisposition to attack, and certain local peculiarities, such as bad hygiene or bad food. It is hardly fair to apply arguments taken from the case of Steppe cattle in this matter to that of cattle in our own country, because of the effect of acclimatisation in the former instance. There are also some unusual agencies that may come into play and modify the progress of an epidemic—viz., the stoppage or increased facilities in the transmission of poison, the greater or less diffusion of the latter by winds, moist clouds, and such like. But making due

CURVE REPRESENTING THE PROGRESS OF RINDERPEST, ACCORDING TO THE LAW RULING IN THE FIRST NINE WEEKS.



The black lines in this section represent the actually-reported attacks, but graduated in accordance with the law of increase.

The black lines in this section show the calculated series of weekly attacks, on the assumption that the law of increase observed in the nine weeks ending December 30 will continue to prevail.

Data on which the curve was constructed.

The *dotted lines* represent the reported *weekly* attacks of Rinderpest.
The *black lines* are all calculated from the numbers returned in the nine last weeks of 1865, and agree closely with the dotted lines.

All that the curve proves is, that, if the attacks *increase according to the same law* as ruled from Oct. 28 to Dec. 30, the disease will soon attain its maximum. The same kind of law regulates cholera, diphtheria, scarlatina epidemics, where slaughter is out of the question.

Date of first construction—January.

allowance, the fact remains that all poisons of zymotic nature tend to exhaust themselves in the progress of the diseases with which they are associated, and Dr. Farr bases this conclusion upon observation taken with regard to diseases in general.

Now, the same epidemic in different visitations does not preserve the same curve, simply because the concomitants, the quality of the poison, the state of the health of communities, and the obstacles offered to progress of disease, etc., vary very considerably at different times. It is possible, however, to calculate from accurate returns of attacks made during the first few weeks, the probable duration, extent, and even character of any epidemic, and to construct a wave or curve in accordance therewith.

It is only fair to notice some objections which have been made against the law of epidemics by Dr. Farr. Professor Gamgee declares to us that the poison of Rinderpest will, if it can reach them, kill all animals, less ten per cent. recoveries; the reduction in fatality is rapid, because the progressive increase between the distance of infected and healthy beasts offers a difficulty in communication—that is to say, the same number of beasts scattered will not infect so freely as when collected together. Suppose we take Dr. Farr's figures again. On November 7, there were 11,300 beasts diseased; on November 4, 20,897. Now, it may be asserted that the 20,897 were more *scattered* than the 11,300, and could not in the aggregate produce so great an increase of attacks as the 11,300, collected together into the focus in a more circumscribed space. This we scarcely think true. If we examine the map of England, and mark out the spots where the plague exists, we shall be compelled to conclude, calculating as carefully as we may be able, that the sources or centres of poison diffusion, as they now stand, afford a much greater liability to infection than has existed during the earlier progress of the Rinderpest, and the facts of all human zymoses are entirely confirmatory. Professor Gamgee points to the case of Egypt, where the Rinderpest did not stop till it had killed every animal in the country; but Egypt is in a very exceptional condition. We must remember that in that country the circumstances favourable to intercommunication and intertransmission are most fully developed. A large number of cattle comes from the lower parts by way of Nubia; the tracts of cultivated land are narrow, and the cattle stations at different points are so many halting spots at which infection is easily accomplished; in fact, speaking from personal observation, and a knowledge of the close contact of men and beasts, we are not surprised at the result. In addition, it is worth mentioning that dead carcases of beasts are never removed away from the habitations of the people, but are allowed to putrify and dry up, giving off pestilential effluvia, which are probably easily conveyed to the adjoining healthy beasts during the humid nights that always prevail. It is an *accidental* circumstance that becomes in Egypt a factor of great power. Professor Gamgee, then, does not think that the virus of Rinderpest (save in Steppe beasts) loses any of its force by transmission through several animals. That it has, however, lost some of its virulence is certain.

If we take Dr. Farr's figures, and calculate the number of those animals in whom one can trace the natural course from the commencement to the termination of the disease, we shall find that the percentage of deaths to attacks is lessening. The Privy Council returns include the five classes—attacked, recovered, died, killed, and unaccounted for; but to arrive at a just result it is necessary to leave out of consideration the killed and unaccounted for. The deaths and recoveries of these two latter classes could probably be estimated, but to include the latter would be like including in the death rate of a Hospital the patients that remain in the wards at the time of calculation; therefore, Dr. Farr has only taken into consideration those cases which can be followed to their termination without any interference. The result is, in the total up to March 3, 18·2 per cent. of recoveries. But more than this; the returns up to January show that only 15 per cent. of recoveries took place, the returns up to the present time 23 per cent.; showing a decided diminution in the fatality of Rinderpest. The Privy Council returns do not calculate in the percentage of recovery the proportion of recoveries that would be observed in the killed and unaccounted for; this is manifestly an error. Now this favourable augury is not due to the fact that the Rinderpest has carried off the animals most predisposed, and is now attacking those less liable, to its ravages. This might hold good if the Rinderpest were limited in its spread to the same locality. It attacks, however, new neighbourhoods and beasts that have not been exposed to infection before; in other words, such as are placed under conditions exactly identical with those originally attacked by the disease.

We conclude, then, that the quality of the virus is not so malignant in character as it was; that the epidemic is rapidly losing its hold upon the country; and this fact is an argument against the adoption of the "stamping out" system, especially as we are led to believe that there will be at once a rapid fall in the curve, as represented by the course of Rinderpest. The Continental authorities having adopted the "stamping out" system, are unable to appreciate, from want of facts, the law which obtains in reference to the rise and fall of Rinderpest epidemic.

It may be still allowed that the stamping out system in the early onset of Rinderpest would afford a check to its spread; but it is a question whether if adopted now it would not probably do more destruction than the further progress of the epidemic itself—whether the remedy would not be worse than the disease. In the summary of weekly returns for 1865 these words occur:—"The Rinderpest has created an alarm which could never have arisen in England if people knew the amount of stock and its mortality in ordinary times as well as the laws which govern epizootics precisely as they govern epidemics." A good deal has been said against statistics; they often, no doubt, lead to fallacious results, but rather from the manner of being handled than any other cause. It is necessary to eliminate various valueless factors, and when they are used judiciously and by such an authority as Dr. Farr, we see to what important results they lead. The very important law thus enunciated by Dr. Farr is of the greatest interest to our Profession, and we can only hope that, from the enormous mass of valuable material which is in his possession, Dr. Farr will give us further information and data in reference to the spread of zymotic diseases, individually and collectively.

## SMOKE SEWERS.

It appears from official returns that about 5,300,000 tons of coal were brought into London in 1865. It is notorious that a large quantity of this is wasted in the form of *visible* smoke—that is to say, of the common products of combustion, rendered visible by that unburnt carbon which clouds the sky, lessens our daylight and warmth, lessens the actinic power of the sun's rays, both in producing photographic pictures and in tinting the blood of a rich red colour, suffocates our trees and shrubs, dirties our linen and books, befouls and hardens our rainwater, injures our pictures and furniture, and causes our back windows to be shut and our back chimneys to be stopped up, for fear of return smoke and blacks. All this is due to the wasteful and barbarous construction of furnaces and stoves, whereby our coal is slowly roasted or distilled before it is burned, and much of the most valuable part of the fuel, and especially that which forms the bright and cheerful flame, is allowed to escape unburned in the form of smoke. What the amount of waste is we cannot say; but we believe there is no exaggeration in describing one-tenth as a fair estimate.

The first and most obvious remedy is an improved form of stove, so as to secure the entire combustion of the smoke, so that the coals may be put on at the bottom, and so the smoke pass through the fire and be burned, and that nothing may go up the chimney but the heated air charged with carbonic acid, sulphate of ammonia, and other entirely oxidised products, along with just so much light ash as is necessarily carried up by the draught.

But even then the air, though very slightly clouded, would be contaminated with sulphuric acid and ammonia compounds, so that though brighter, or quite bright, it would be more or less in the condition of used-up air. The carbon of one ton of coal requires for its combustion as much oxygen as do the lungs of 2240 human beings for one day.

Obviously the right thing to do is to have no smoke;—not to allow air so vitiated to enter the breathing air of a town, any more than we allow sewage to enter the drinking water from a river. Years ago the notion of abolishing cesspools, and of conveying all the liquid refuse of houses away, even from the river down to near the sea, would have appeared as "frightfully visionary" as we dare say even now our proposition may seem, to stop up air chimneys and convey the smoke in tunnels underground. And what shall be done with it then? Why, let it be washed, and let all the sulphate of ammonium go to enrich the Essex sewage, whilst nothing but cool air escapes from tall shafts at certain distances.

There is nothing new and nothing impossible in this scheme. Years ago the eminent architect, Mr. B. Ferrey, and the late Mr. Cubitt prepared a scheme for erecting houses in blocks, which should all have descending flues, leading by underground pipes to a common shaft. Besides, the thing has been carried out by a country gentleman at Osmaston Hall, near Derby. All the smoke is conveyed by a downward shaft from every room to a distant chimney shaft. The draught is quite good, and there is no dust.

There is no sanitary improvement which would pay better. The wasted coal would be a something in hand, and the comfort and cleanliness would satisfy all but washerwomen, charwomen, and grumblers. We might have roses at every window—unless, indeed, we preferred small salad. Certainly the atmosphere of London in hot days in summer is unbearable when there is a reflux and deficient buoyancy of smoke, owing to a temporary chop of the wind to the east. One Sunday morning last June we could scarcely see across Welbeck-street. This state of things materially abridges the residence of delicate persons in London; and there is no one whose tenants would be more benefited by the proposed reform than the Marquis of Westminster, whose operations for rebuilding a princely suburb in Belgravia afford the most desirable opportunity for an experiment.

At last Parliament seems likely to do something towards abating this nuisance. Thirteen years ago we pointed out how easily and effectually it might be completely suppressed; and over and over again have we and other scientific journals tried to impress our views upon architects and builders and their *employés*, and not all in vain. We may soon recur to the subject; in the meantime, we direct attention to an article referring to our own articles in 1833, that appeared two years ago in the *Social Science Review*. This article will be read with interest at the present moment. It will be found at page 296.

## BURIAL ALIVE.

There must be some truth in the stories told of persons apparently dead who have been rescued from the grave. Now what has happened will surely happen again; therefore, it is worth while to direct the attention of the Profession to the matter at the present time, when we are on the look out for a cholera epidemic, for it is just in the haste and terror of such a visitation that poor wretches, cold and pulseless, are likely to be dealt with as if dead. Luckily the time which passes between death and burial in this climate, under ordinary circumstances, is enough to insure either resuscitation or absolute death. But little as the risk may be with us of burial alive, it is not pleasant to think that lives may be lost from time to time through treating the vital spark as hopelessly extinct, whereas with a little care it might have blown into a vigorous flame.

In discussing this question, we may ask first whether it is consistent with common experience that persons can be, as it were, dead—speechless, motionless, and looking dead to undertakers and others accustomed to deal with the dead, and yet be in the possession both of entire consciousness, and sight and hearing? There can be no doubt of it. Officers who have recovered from cholera in India have told the writer that for a time they lay apparently dead, but quite conscious, and in full possession of the perceptive functions, so that they could hear their attendants talking of their death. After that came a period in which sight and hearing were cut off, and the patient lay perfectly conscious of his own existence and state, but of nothing else. To this succeeded a period of perfect unconsciousness, which seemed a blank when the patients were recalled to life. Some years ago the writer went to see a patient in the country who was dying of phthisis. "Oh, sir," was the greeting of the servant, "we all thought master was gone this morning." The poor sufferer told us of his sensations during a prolonged faint, in which those about him thought him dead. He, too, thought that he had really died; he had no sense of anything but his own consciousness, and was expecting every instant to be ushered into the presence of his Judge, and great was his disappointment when on recovering the sense of any existence save that of his own *ego*, his weary eyes encountered the too familiar furniture of his sick room.

Cases such as these prove the main fact, viz., the existence of consciousness, for a certain time, in persons supposed to be dead, and of supposed death followed by recovery. Of course, careful Medical examination would detect the flickering spark of life; but careful examination is not always Medical, and Medical not always careful. With these remarks we commend the following narrative to our readers:—

> "High authorities have said that it is physiologically impossible for a human being to remain more than a few hours in such a state of asphyxia as not to betray signs by which a Medical observer can at once recognise the existence of vitality. But what *are* these signs? Respiration, we have on the best authority, has been quite suspended for a considerable time, and when we consider that under such circumstances there can be little or no waste of tissue, that we see similar things occur in some of the lower animals, and above all, that we have the evidence of truth-telling persons that they have witnessed the resuscitation, or return to life, of those apparently dead; it seems unreasonable to make such an assertion as the one we have quoted. It would be almost as just to say that because it frequently happens that after tying a main artery the limb lies numb and cold, without sensation, and then putrefies, that other limbs never lie numb and cold, and without sensation, and yet get warm and active and useful again—an event we believe because we have seen it, but as difficult for us to explain—and, a hundred years ago, as hard for many 'Medical observers' to believe—as any of the strange tales in Bruhier's treatise.(a) Then is the contraction and dilatation of the pupil a sign of life? I trust not; for in cold weather I have repeatedly seen the pupils of subjects being prepared for dissection contract on raising the lid, and dilate when you shaded the light from them. In temperate climates, such as England, except when the people are terror-stricken by some epidemic or contagious disease, funerals are generally managed quietly and without undue haste; but still if the temperature had much influence *per se* in causing premature interments, we should expect to find that the cases on record which have occurred in France and Italy would have been in the summer, which is not the case; on the contrary, it is specially noted in several that the weather was very cold. Howard, who was no exaggerator, says he saw persons restored to life, when supposed to be dead of gaol fever, by douching them with cold water. The daughter of Henry Lawrens, first President of the American Congress, seemed to die from small-pox; was laid out, and the windows opened to ventilate her room; she recovered, and her father left orders that if he appeared to die, they should burn him before interment. Cases of sudden syncope may be mistaken for sudden death, and the body placed in circumstances unfavourable for recovery. It is well known that some fall into lethargies, as the lawyer of Vesoul (Bruhier), and the maid-servant, who was thrice on her way to the grave, and whom, when she was really dead, they kept a preposterous length of time. Mr. Tritton, the deservedly popular Medical Librarian to King's College, tells me that when coming from India, the wife of one of the passengers, an officer in the Army, died apparently. They were about to bury her in the usual manner afloat; but her husband was very anxious to carry her body to England. Making a coffin suitable for the long voyage home took several days. In the meanwhile she lay in her berth, her body swathed ready for interment. When the coffin was ready, her husband went to take his last farewell, and remove her wedding ring, which was very tight. When he was endeavouring to do so, she recovered, and arrived in England well. She said she had heard everything that had passed. Persons who get into this lethargic condition seem to *sleep the fit out*, and to retain vitality in unfavourable circumstances longer than those who have felt the agonies of suffocation and impending death; whereas the person who falls into trance, or whose animation is suspended, seems to require some powerful physical or mental *stimulus*. The physical stimulus used to be practised commonly enough, generally by the application of a hot iron to the heel; and the woman who was accidentally burnt, the woman whose finger was cut, and many others mentioned by Bruhier and others, show that it is frequently effective, and may be worth trying in doubtful cases. But the sudden stimulus of associated ideas so forcibly alluded to by the Cardinal Archbishop of Bordeaux seems even more powerful. Of this class is the case of the man who was aroused in his coffin by the wailings of his wife, and the following, which was told me by Dr. Campbell, of Jamaica, of the late Dr. Barry, whom he attended Professionally when the latter resided in Jamaica. He took the story from Dr. Barry's own lips. After a severe attack of yellow fever, Dr. B. was lying one morning quite conscious, but unable even to wink an eyelid. He heard his Assistant-Surgeon come in, and the brown nurse ask him if Dr. B. wasn't dead yet. 'Of course he is,' was the answer, 'and the sooner the old fool is underground the better.' He heard a coffin brought, into which he was lifted, and the lid nailed down. The rudely-adapted sun-warped planks of the hastily-made tropical coffin let in a tolerable supply of air, while through the chinks he could see the glitter of his accoutrements laid upon the lid. He felt the coffin lifted up and borne along; he could recognise the voices of his brother officers and the various turnings of the road, and appreciate the gradual shortening of the distance to its dreadful end. At last the procession stopped, and he felt himself lowered into his living grave. Still he could not move; but at last the chaplain came to the words 'earth to earth, ashes to ashes,' and as the hot sand clattered on his coffin it gave him the required stimulus, and he struggled so as to attract the attention of those looking down into the grave, and they lifted the coffin out. As is well known, this singular person died in London only a few months ago. Dr. Campbell also informed me that during the last epidemic of cholera in Jamaica there was considerable difficulty in conducting the funerals with anything like regularity, as most of the poor had a great horror of the malady, and he instanced the following as what he feared was not, except in one respect, such an exceptional case as it should have been:—A labouring man in Kingston died, and notice was sent to the undertaker who conducted that class of funeral. He sent a man with a coffin and cart to take the body away to the place of interment, where clergymen attended to read the service. The man put the corpse into the coffin, nailed it down, and there being some time to spare, sat upon the coffin and taking out some yam and salt fish, proceeded to take his breakfast, he spoke and sung to himself, as negroes always do; in a little while he felt a movement in the coffin, which was repeated; he removed the lid, and out stepped the recently deceased nigger untrammelled by a shroud, his dignity much hurt, but sufficiently recovered to sit down on his own coffin and share the breakfast of his preserver. During the same epidemic a Physician in constant attendance upon all classes was seized with the cholera; his wife, who nursed him, was also attacked, and apparently died. Her husband was too ill to be told, but her brother, an experienced Medical man,

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(a) "L'Incertitude des Signes de la Mort," par Bruhier. Paris. 1745. *Passim.*

gave the necessary directions; her coffin was brought, and she was prepared for the grave in the usual manner. There were very many funerals taking place, and there was some delay, during which those changes which usually commence immediately after death in the tropics did not appear. The funeral was, however, to take place as soon as possible, but she recovered, and is now well. With regard to the tolerance of a person in stupor of absence of air compared to others, I will mention one instance which came under my own notice. Captain ——, a stout, sanguineous man, called upon me one very hot Sunday afternoon to ask whether sea-bathing would cure a giddiness he was troubled with. I endeavoured to dissuade him, especially as he proposed bathing where I knew the water was too shallow for complete immersion. Next day he was seen by a passer-by wading out. Shortly after this man missed him; but it was an unusual hour for bathers, and he concluded that the bather had entered one of the machines on the sands. Some time after this a boy plashing about in the shallow tumbled over a dead body, in water just enough to cover it. It was taken to the deadhouse, and the persons there, well used to such things, thought it idle to attempt resuscitation, and left, locking the door behind them. A gentleman who happened to be passing asked to be allowed to see the drowned man. He recognised his brother officer, and sent for a Doctor, who resuscitated Captain ——, and I attended him for the next fortnight for congestion of the brain. In the days when they hung for larceny, and before the humane adoption of the patent drop, before Professor Haughton had elaborated a mathematical formula for the exactest method of hanging, recoveries after apparent deaths by strangulation were not uncommon. The Edinburgh apple woman to be seen in the High-street not many years ago, Half-hangit Maggie, was a notable example. Inspector-General ——, now living, told me that his father was apprenticed to a Medical man in the City of London, eminent in his time as a teacher. On the night of his arrival, tired with the long journey from Scotland, Mr. — went soon to bed. He was roused in the night by terrific shrieks, and, opening his door, saw members of the family, of both sexes, running past his room to the end of the passage. He followed them, half asleep, and found himself in a room bare of furniture, except a table and a sink, there was a naked man kneeling on the floor roaring for mercy. The Surgeon pacified the poor man, and put him into a bed. He had been hung that morning, and for *value* received by *him* his body had been handed over to Mr. ——'s new master. After a prudent delay he was sent away, and about a year afterwards the Surgeon received another note from him, saying he was to be hung again the next day, and offering himself for sale, but this former purchaser would not bid.

'Le gibet ne perd jamais ses droits.'"

A. M. E.

## THE WEEK.

### THE CHOLERA.

**Cholera** has already re-appeared on the shores of the Mediterranean and in several parts of Europe. A telegram from Malta, dated March 12, states that official information has been received that the disease has broken out at Alexandria. Prompt measures have been taken by the Government, and all arrivals from Alexandria have been placed in thirty days' quarantine. The Berlin correspondent of the *Times* writes that cholera has broken out with great virulence in some swampy villages of the Grand Duchy of Luxembourg and the adjacent district of Rhineland. The coast of Brittany also appears to be suffering severely. At L'Orient, for some days, ten or twelve persons were dying daily (*Gaz. Hebd.*, February 23). At Brest, up to February 12, there had been received into the Civil Hospital, under M. le Dr. Th. Caradec, 109 women, of whom 37 died, and 97 men, of whom 45 died. In the Marine Hospital, out of about 100 male patients, one-half had died (*L'Union Méd.*, February 27 and March 6). We hear of it also at Quimper, and at Bringolo, about ten miles from Guingamp, at Plouaret, and at Coetmieux, a little commune three miles west of Lamballe (Côtes du Nord). In all these little Breton villages the history is the same. Some person comes from an infected place, and is seized with the disease, which then spreads or not, according to the care taken to stamp it out, or the reverse. M. Pellarin, writing from Guingamp on the 25th February, says,—"The cholera was brought to Bringolo, 12 kilometres hence, by a workman who came from Brest. He was the first to fall a victim, then his wife and two children; afterwards 23 others, out of a population of 800. The disease has not spread in the neighbourhood; and although a relative of the first victim, who went to his funeral at Bringolo, brought it to Plouaret, it has not spread there. The sick at Bringolo were treated with the utmost care by Dr. Benoist, and he, having formerly been an anti-contagionist through reason, is now become contagionist through experience. He must, he says, yield to facts. At Coetmieux a sailor came home to his father's house, was taken ill in an hour, and died next day. His mother and another inmate soon followed."—*L'Union Méd.*

The Channel Islands and the ports of Southampton and Weymouth had better look out. The enemy is only about twelve hours' distance by steam. If it should come, we hope that no pains will be spared to stamp it out promptly.

### LOCAL ANÆSTHESIA IN OVARIOTOMY.

**This** week Dr. Richardson's great improvement has proved very successful in ovariotomy. Mr. Spencer Wells operated on Wednesday in the Samaritan Hospital upon a woman who had an ovarian tumour so large that the heart and liver were pushed up to a level with the nipples, and the uterus (with the inverted vagina and part of bladder and rectum) down between her thighs. Thinking that chloroform might be dangerous in this state of heart and lungs, Mr. Wells rendered the integument insensible by the ether spray before making his first incision. Not the slightest pain was felt. A very large cyst was tapped and emptied. Some extensive adhesions then required to be separated, and a little chloroform was given, the operation being completed under its influence. If there had been no adhesions, the local anæsthesia would have been quite sufficient to render this great operation painless. No more severe test of the value of Dr. Richardson's plan could be imagined, for the immense cyst removed held sixty-four pounds of fluid and itself weighed nearly five pounds.

### WORKHOUSE NURSES.

**It** will be observed from our notice of the subject last week that in his effective speech in support of the scheme proposed by the Association for the Improvement of the Infirmaries of Metropolitan Workhouses the Archbishop of York stated to the effect that there were no paid nurses for the sick in those establishments. Bearing in mind the large amounts which the poor rates annually abstract from the pockets of London rate-payers, it seemed not improbable that the right reverend Prelate had not assured himself of the complete accuracy of his sources of information. From careful inquiries upon the subject we learn that in the parishes and unions of the Metropolis there is expended a sum exceeding £2500 per annum for the salaries of nurses for the sick and imbecile. This amount represents rather less than half the total cost of these officers, as to their salaries, must be added the cost of their maintenance, making a total sum of at least £5000 laid out in nursing for the sick and imbecile in those workhouses in which the system of nursing is said to be "merely nominal."

### FROM ABROAD.—DISTRIBUTION OF PRIZES AT THE ACADÉMIE DES SCIENCES.

**The** Académie des Sciences has just announced its decisions respecting its prizes for 1866. 1. The Montyon Statistical Prize has been decreed without hesitation to M. Chenu for his remarkable work on the Crimean War of 700 pages in 4to., entitled "Rapport au Conseil de Santé des Armées sur les Résultats du Service Medico-Chirurgical dans les Ambulances de Crimée, etc., pendant la Campagne d'Orient." This is justly entitled a monument of laborious industry and sagacious deduction. The terrible mortality in the French and Russian armies are there set forth, and the superior sanitary arrangements made for the English troops, and the satisfactory results which ensued are duly acknowledged. This work is published, and well worthy of the notice of those of our readers who are engaged in this class of inquiries. Honourable mentions are also decreed to M. Poulet for a Statistical Account of the prevalence of Goître at Plancher-les-Mines; and to M. Sistach for his Statistics of Varices and Varicocele, as grounds of exemption from serving in the French Army. 2. M. Montyon's Prize for Experimental Physiology has been given to M. Bert for his elaborate researches on animal transplantation, or, as he terms it, "Greffe Animale"—the tail of the rat, transplanted into the subcutaneous cellular tissue and the cavity of the peritoneum, having been the subject of a series of elaborate experiments, directed so as to exhibit the effects of various modifying influences. The Academy also notices with approval a work by the late M. Reveil on the "Action of Poisons on Plants." 3. For the Montyon Prize for Medicine and Surgery, three prizes and three honourable mentions are decreed. A prize of 2500 fr. is adjudged to Professor Vanzetti, of Padua, formerly of Charkov, in Russia, for his researches on Digital Compression in Aneurism. A prize of the same amount is also given to MM. Chauveau, Viennois, and Meynet. These gentlemen, at the instigation of the Lyons Medical Society, undertook an elaborate experimental investigation into the Relations existing between Vaccinia and Variola. "By establishing," M. Longet, the Reporter of the Committee of the Academy, observes, "that vaccinia and variola, notwithstanding the points of resemblance between them both in man and animals, are none the less totally independent of each other; that their virus form two distinct individualities; that the two affections thus constitute two different, unalterable species, incapable of transformation into each other; and that consequently endeavouring to produce vaccinia by means of variola would be to pursue a dangerous chimera, capable of reviving all the perils of the old inoculations—in establishing, we repeat, facts of so great an importance, the experiments conducted by M. Chauveau have rendered indubitable advantages to Medical science and practice." The third prize, also of 2500 francs, is given to M. Luys for the pathological portion of his work "Researches on the Structural Functions and Diseases of the Cerebro-spinal Nervous System," the anatomical and physiological portions of this work having been the subject of a former prize. After complimenting M. Luys upon the originality of many of his researches and the importance of the deductions he derives from them, the Reporter goes on to observe "that he has happily availed himself of his anatomical and physiological facts as arguments, and often powerful ones, for invalidating or confirming the opinions of pathologists on the semiological value of the various disturbances of nervous action. Moreover, a large number of cases, disseminated, and, as it were, lost among authors, are brought together and analysed in this work with a degree of vigour which it is very desirable should be oftener found in works on pathology in general, and especially in those treating of diseases of the nervous system—diseases which will yet long offer to the investigations of Physicians a field of vast extent, whose effectual exploration constitutes one of the most difficult tasks. For it must be ever borne in mind that cerebral pathology is so rich in facts that it lends itself to any system. All that is wished to be there seen may be there found; all that is asked of it is given; and, according to the manner in which it is interrogated, it leads to truth or error." An "honourable mention," with 1500 frs., are given to M. Sucquet for his work, published in 1861, "On a Derivative Circulation in the Limbs and Head in Man." In this essay M. Sucquet seeks to demonstrate that, besides the ordinary capillary circulation, there are direct anastomoses between the arteries and veins sufficient to constitute a derivative circulation, brought only occasionally into operation, as contrasted with the ordinary, regular, and nutritive circulation. A similar recompense is adjudged to M. Legrand du Saulle for his essay "Insanity in a Court of Justice," in which the various problems raised by legal Medicine in relation to lunatics are considered. M. Desormeaux receives the same mark of distinction for his invention of the endoscope and the useful applications he has made of this instrument in the diagnosis and treatment of the affections of the urethra and bladder. It may be also employed for the exploration of the nasal fossæ, the cavity of the uterus, the upper portion of the rectum, etc. Others have only succeeded in obtaining "favourable citations"—which seems to be a new mark of approval of a lower rank than the "honourable mention"—viz., MM. Stœben and Tourdes for their "Topography and Medical History of Strasbourg;" and M. Moura for a new instrument for tying polypi of the larynx. 4. The Breant Prize of 100,000 francs for the discovery of the cause and cure of cholera is, of course, still without a claimant. The Reporter of the Committee, M. Serres, observes that "the authors who have sent in their memoirs for several years past have not sufficiently studied the action of cholera on the human economy; and yet if this terrible disease is mysterious in its essence, it is not so in its immediate effects on the organism nor in its symptoms." Among the latter he especially calls attention to the dejections, and the various investigations which have been made into the composition of these, and to the frequency with which cholera may be produced by emanations from them. The investigations concerning the poison so generated made by M. Thiersch, of Munich, are especially referred to, but a definite opinion concerning them is postponed until the ensuing year. In the meantime, the testator having especially indicated in his programme the importance of investigating how far animalcules may be one of the causes of cholera, the Academy has, believing it, we suppose, to be, at all events, a step in that direction, decreed a prize of 2500 francs to M. Davaine for his investigations proving that carbuncular disease in animals and malignant pustule in man may be the result of inoculation with a species of vibrionia, which he terms *bactérides*, which, if not the actual agent of transmission of the disease, are an indispensable accompaniment. To M. Grimaud de Caux, moreover, has been awarded an "indemnity of 4000 francs for the act of spontaneous devotion which he accomplished by proceeding to Marseilles for the purpose of studying the cholera at the height of the epidemic. In according to him this encouragement, the Academy signalises and recompenses, as far as in it lies, the reflecting courage and scientific spirit under the influence of which he has accomplished his labours." 5. The Godard Prize of 1000 francs is adjudged to Professor Héliè, of Nantes, for his laborious work on the Muscular Fibres of the Uterus. M. Brouardel also receives an honourable mention for his work on the Tubercular Affections of the Female Genital Organs. 6. The Barbier Prize of 2000 francs has been divided between MM. Baillet and Filhol for their essay on Intoxicating Darnel (ivraie); and MM. Vée and Leven for their essay on the Alcaloid Extract of the Calabar Bean.

### PARLIAMENTARY.—THE CATTLE PLAGUE BILL—ARMY ESTIMATES—PROTECTION OF THE WORKING CLASSES FROM THE RAILWAY COMPANIES—THE SMOKE NUISANCE—FLOGGING AND BRANDING IN THE ARMY—RINDERPEST AMONG SHEEP—CONTAGIOUS DISEASES BILL—THE DWELLINGS OF THE LABOURING CLASSES—IRISH COUNTY INFIRMARIES—WITHDRAWAL OF MR. HUNT'S CATTLE PLAGUE BILL.

On Thursday, March 8, in the House of Lords,

The House went into committee upon the Cattle Plague Bill.

Considerable discussion took place upon various clauses, and several amendments were introduced, but the principal debate arose upon a clause giving to the Privy Council a discretionary power to discontinue the compulsory slaughter of cattle after the passing of the Act.

The bill was finally read a third time and passed.

The House of Commons went into committee of Supply on the Army Estimates; £246,500 were voted for the Hospital establishment.

On Friday, March 9,

Mr. Hughes moved a string of additions to the Standing Orders applicable to Railway Bills, for the protection of the working classes against the incursion of the railway companies on their dwellings, which were opposed by Colonel Wilson-Patten, who recommended the appointment of a Select Committee to inquire into the whole subject, by Mr. Milner Gibson, and by Lord Stanley; and after a short discussion they were withdrawn.

Sir R. Peel called attention to the nuisances arising from the smoke of furnaces in towns and country districts. After referring to the increased consumption and export of coal, and the importance of economising our supplies, he drew an alarming picture of the deleterious effect of the poisoned atmosphere of large manufacturing towns on the health and comfort of the labouring classes. He showed that great saving might be effected by manufacturers by the use of efficient smoke-consuming apparatus, and that legislation by private Bills for particular towns had for the most part failed, and he asked Sir G. Grey whether he intended to bring in a general Bill on the subject this session.

Mr. Henderson made some remarks on the injurious effects of coke-burning and iron furnaces.

Mr. Hanbury mentioned that his firm saved 2000*l.* a year by the use of an efficient smoke-consuming apparatus.

After some observations from Mr. A. Egerton and Sir M. Peto,

Sir G. Grey expressed his readiness to concur in any general measure for putting down this nuisance, but pointed out that the Local Government Act, which had been adopted in hundreds of towns, contained powers quite adequate for the purpose, and that the real difficulty was to get the local authorities to put the law into execution. He mentioned that the success of Lord Palmerston's Act for the metropolis was owing to active supervision of the police under the directions of the Home Secretary, and suggested that if the local authorities would give the same instructions to the police the existing law would be found equally effective.

In Committee on the Mutiny Bill, Mr. Taylor renewed his attempt to strike out the clauses relating to flogging and branding, but was again defeated by divisions of 56 to 17 and 53 to 15.

On Monday, March 12,

Sir A. Agnew asked the Vice-President of the Committee of Privy Council on Education whether he could give any information as to whether the disease said to have broken out among sheep in some parts of Scotland had in any instance been reported by competent authority to be identical with Rinderpest.

Mr. Bruce said that no official information had been received as to the existence of Rinderpest among sheep in Scotland, but he was sorry to say that other information had reached the Government which left little doubt of the existence of the disease in Forfarshire and the county of Fife. As to England, he regretted to say there could be no doubt. An inspection of sheep said to have died by Rinderpest had been made by Professors Simonds and Brown on behalf of the Veterinary Department. The result was to establish in their minds beyond all doubt that the Rinderpest had existed in ten different cases among sheep in England, and that it was accompanied with serious loss. He was informed by Professor Simonds that in every case where he had traced the loss of sheep to its source, the animals had been in contact with cattle suffering from the disease.

Lord C. Paget gave notice that he would on Thursday move for leave to bring in a Bill for the better prevention of contagious diseases in certain military and naval stations.

The Labouring Classes' Dwellings Bill was read a second time, and the Artisans and Labourers' Dwellings Bill passed through the same stage *pro formâ*, on the understanding that the subject would be referred to a Select Committee.

On Tuesday, March 13,

In answer to a question by Mr. Long in reference to the alleged transmission of Rinderpest to sheep, Mr. Bruce said that during the last six months the attention of the Veterinary Department of the Privy Council had been directed to this subject, and during that time twenty-six different phases of the outbreak of what was supposed to be the Rinderpest had been reported in eleven counties, as many as seven occurring in the county of Norfolk. The conclusion at which the Veterinary Surgeons of the Privy Council had arrived was that the disease was identical with the Rinderpest among cattle. The soundness of this conclusion was greatly doubted in various parts of the country, but especially in Scotland. He would, therefore briefly state the grounds upon which the Veterinary Surgeons had arrived at their conclusion. The first experiment made was upon a sheep confined in a pen in which a cow had died of the Rinderpest, and the sheep was attacked by the disease and died. The next experiment was more conclusive. At the Veterinary College some sheep were inoculated with a quantity of Rinderpest *virus*, when they were invariably attacked, and all, excepting two, died, of what appeared to be the Rinderpest. The two surviving sheep were then inoculated with smallpox *virus*, but that disease immediately seized them, and from this fact it was clear that the malady which attacked them in the first instance was not smallpox. The local inspectors consequently had been directed to deal with diseased sheep in the same way as with cattle attacked by the Rinderpest. He might add that the disease did not appear to spread from sheep to sheep as readily as it did among cattle. In Scotland some attempts had been made to convey the Rinderpest to sheep by exposure under circumstances calculated to induce it, but unsuccessfully, and hence arose the peculiar disbelief in that country that the disease now afflicting the sheep was the Rinderpest.

In reply to Mr. Dent,

Mr. Bruce said the experiments had been made by Professor Simonds and Professor Brown.

In the House of Commons on March 14

Mr. Pollard Urquhart, in moving the second reading of the County Infirmaries (Ireland) Bill, said that as the law stood at present an annual subscription of three guineas was required to constitute a governor, and one of twenty guineas to constitute a life governor of a county infirmary. The obvious effect of this provision was to limit the number of subscribers, and the Bill therefore proposed that a subscription of a guinea a year should constitute a governor, and one of ten guineas a life governor. He had, however, inserted a clause securing to those who gave the higher subscriptions a proportionate degree of influence in the elections of Medical officers, etc.

After a conversation, in which the Attorney-General for Ireland, Mr. Bagwell, Sir H. Bruce, and Mr. Synan took part, the second reading was negatived without a division.

On the consideration of the Lords' Amendments to the Cattle Plague Bill, after a long conversation,

Mr. T. G. Baring announced that if Mr. Hunt would withdraw the Bill, the Government would undertake to strengthen the Privy Council Office, and would issue orders for the isolation of infected districts, the protection of disinfected districts, the regulation of fairs and markets, the cleansing of railway trucks, and other matters, on principles which he explained.

Mr. Hunt acceded to this proposal, and, on the motion of Sir G. Grey, the Lords' amendments were ordered to be taken into consideration that day six months.

**International Ophthalmic Congress.**—The next meeting of the Congress will take place at Vienna on August 25. Professors F. Jäger, Arlt, and Gulz constitute the committee.

**Heavy Railway Damages.—Russell *v.* the Great Western Railway Company.**—This was an action tried on the Oxford Circuit to recover compensation for damages received in a collision on the defendants' line of railway between the train in which the plaintiff was travelling and a goods train at Norton Junction, between Birmingham and Tewkesbury, in November, 1864. The plaintiff was a farmer and miller, and occupied 182 acres, at an estimated profit £1 per acre, and the profits of his mill averaged £261, his threshing machine £85, and pigs £32 per annum. Before the accident he was a strong healthy man, with good prospects. He now had pains in his head, his eyesight and hearing were affected, and one eye twisted; and he suffered from coldness in the right hand and leg. The Medical gentlemen called said that he had received an injury to the brain and spine from which he would probably never recover. His appearance and examination were such as to call for an expression of opinion from the jury that the case was a genuine one. The jury, after considerable deliberation, found a verdict for the plaintiff—Damages, £5775.

## REVIEWS.

*A Practical Treatise on Urinary and Renal Diseases, including Urinary Deposits.* Illustrated by numerous Cases and Engravings. By William Roberts, M.D., F.R.C.P.L., Physician to the Manchester Royal Infirmary, etc. London: Walton and Maberly. 1865. Pp. 517.

We have read this book with much satisfaction. It will take its place beside the best treatises in our language upon urinary pathology and therapeutics. Not the least of its merits is that the author, unlike some other book makers, is contented to withhold much that he is well qualified to discuss, in order to impart to his volume such a strictly practical character as cannot fail to render it popular among British readers.

The work is divided into three parts, in the first of which Dr. Roberts necessarily enters upon a consideration of the properties of the urine in health and disease, so far as such information is essential to the correct appreciation of their semeiological indications, and to the avoidance of inconvenient digressions in the progress of the book. Dr. Roberts has examined anew the relation between the reaction of the urine and the digestion of food, first pointed out by Dr. Bence Jones, but upon which doubt had been thrown by Vogel, Beneke, and others. The result has been to confirm to the fullest extent the original observations of our countryman. Dr. Roberts finds that the alkalinity of the urine passed after food is due to fixed alkali, not to ammonia, a remote effect of a meal being to maintain and even increase the acidity, and he finds that the remote effect is greater with animal than with vegetable food. Dr. Bence Jones, it will be recollected, explained the alkalinity as dependent upon the withdrawal of acid from the blood into the stomach for the purposes of digestion; Dr. Roberts, however, refers it to a different cause, namely, the entrance of newly-digested food into the blood, basing his opinion partly upon the fact that, while acid is poured into the stomach immediately after a meal, the acidity of the urine does not suffer depression for an hour or two later. Dr. Roberts is indisposed to follow Prout and Bird in placing an important significance upon the appearance of oxalate of lime deposits in the urine. In this, we think, he is quite borne out by general experience. The train of symptoms referred to oxaluria by the writers mentioned may be present in all its completeness without the appearance of oxalate of lime deposits, and on the other hand may be wanting throughout where oxaluria is present in such intensity as to lead to the formation of mulberry calculus. Another moot question among urinary pathologists is the existence of a peculiar morbid state pointed out many years ago by Dr. Prout, to which Dr. Willis gave the name of Azoturia, and which has been said to be characterised by an absolute and relative increase in the excretion of urea unaccompanied by pyrexia. Our author, while stating that there is a deficiency of precise facts in support of Prout's view, nevertheless, does not regard the description given of the disease by Dr. Prout as altogether fanciful. After quoting a case from Dr. Parkes, where a feeble, but a pyretic patient passed a daily quantity of 1130 grs. of urea, the urine reaching 96 oz. in daily quantity, he describes an observation of his own, the patient being a man about 50 years of age. In this case, however, the daily excretion of urea did not exceed 565 grs., being 4·6 grs. on an average for each pound of the man's weight. In Dr. Parkes's case the mean was 10·36 grs. per pound of body weight, the ordinary daily rate of excretion for a healthy man being estimated at about 3½ grs. In both these cases a small quantity of sugar was temporarily present in the urine. Dr. Roberts disposes very briefly of the kiestine, about which so much has been written, as characteristic of the urine of pregnant women. He believes it to be nothing more nor less than the mould fungus which is apt to grow luxuriantly in urines containing organic matters. The urine of pregnant women, from the large amount of epithelial *débris* that it is apt to contain, is a fitting nidus for this fungus. Rough-and-ready methods of testing urine for albumen and sugar find no favour with our author. Nor do they deserve it, inasmuch as a chemical qualitative analysis should always be performed with due regard to the teachings of chemical philosophy, and with that amount of care which the diagnostic importance of the facts which it is sought to elicit must ever demand imperatively from the clinical observer. "In practice, the best method of proceeding is as follows:—When the urine is cloudy from urates, use heat alone; when the urine is clear (or in any case if alkaline), add nitric acid in the way above described; if no turbidity appears above the layer of acid the urine may be with certainty pronounced free from albumen; if a turbid zone is produced, apply heat thereto; if it be not dissipated, albumen is certainly present."—P. 119. The mode of applying nitric acid referred to is filling a test-tube to about the depth of an inch, and then, after inclining the tube, pouring in strong nitric acid in such a manner that it may trickle down the side to the bottom, and form a layer of about a quarter of an inch thick below the urine. The method of testing for sugar which our author prefers is Fehling's modification of Trommer's reduction test. It may not, perhaps, be out of place to copy the formula for the test solution, which should be prepared beforehand. It consists of sulphate of copper, 90½ grs.; neutral tartrate of potash, 364 grs.; solution of caustic soda, sp. gr. 1·12, four fluid ounces, the whole being made up to six ounces with water. "Having prepared the test fluid, it is employed in the following manner:—Fill a test tube to the depth of three-quarters of an inch or so with the copper solution, heat until it begins to boil, and then add *a drop or two* of the suspected urine. If it be ordinary diabetic urine the mixture after an interval of a few seconds will turn *suddenly* of an intense opaque yellow colour, and in a short time an abundant yellow or red sediment falls to the bottom. If, however, the quantity of sugar present be small, the suspected urine is added more freely, *but not beyond a volume equal to that of the test employed.* In the latter case it is necessary to raise the mixture once more to the boiling point. It is then allowed to cool slowly. If no suboxide has been thrown down when it has become cold, then the urine may with certainty be pronounced sugar free."—P. 132. For the quantitative estimation of the sugar the differential density test (fermenting one of two samples of the urine) is that which Dr. Roberts prefers, as combining more perfectly than any other method ease with accuracy.

The second part is devoted to the consideration of urinary diseases—diseases of which the chief characteristic is an alteration of the urine. The diseases described are diabetes insipidus and mellitus, gravel and calculus, and chylous urine. The chapter upon Diabetes Insipidus has been prepared with remarkable care—not that this is an unusual feature in the volume, but we mention it because of the manifest effort which the author has made to put into something like scientific order the mass of facts and opinions which confuse the minds of Practitioners who are disposed to study this condition. Dr. Roberts has collected sixty-nine cases of insipid diabetes, and adding three cases observed by himself, has drawn up his account from an analysis of the seventy-two. One remarkable etiological feature is the dependence of the disease in sixteen out of thirty cases, where any exciting cause at all could be assigned, to serious disturbance of the nervous system. In six cases it was referred to blows on the head, falls, etc.; in five to cerebral disease; and in five to intemperance. We quote at length the views held by Dr. Roberts as to the nature and pathology of the disease, as we think the quotation is fully warranted by the interest which attaches to a malady so little comprehended." It may be regarded as probable that the *immediate* anatomical cause of polyuria is a dilatation of the renal capillaries whereby their walls are thinned and rendered favourable to increased transudation of watery fluid from the blood. But how is this brought about? It is now generally believed that the minute blood-vessels possess in their circular and longitudinal muscular coats a provision for an active expansion, as well as an active constriction of their calibre. This provision is under the control of the sympathetic branches of nerves (nervi vasi-motores) and serves to maintain the aqueousness of the blood within certain limits of health. When the tissues and blood are overcharged with water, the renal vessels expand and permit a copious transudation of an aqueous urine; when, on the other hand, the system is undercharged with water, they contract, and thereby restrict the urinary transudation. In diabetes insipidus this endowment seems greatly impaired; the renal capillaries appear to resemble the iris in glaucoma, which remains in a motionless, semidilated state, and neither contracts with light nor dilates with belladonna. In polyuric subjects, the contractile power of the renal vessels is apparently paralysed, and the power of regulating the urinary flow consequently lost. If a healthy person imbibe an excessive amount of water, he rapidly gets rid of the overplus by a sudden and copious diuresis, and then the secretion falls quickly to its ordinary rate; but a polyuric subject under similar conditions shows very little *immediate* increase of urine, but a steady, persistent, though less intense augmentation, lasting many hours, and which is not succeeded by a fall to the ordinary standard. On the other hand, if a healthy person imbibes a lessened quantity of water, the discharge of urine falls in proportion; whereas the polyuric, under the same circumstances, shows no such adaptation; he still continues to discharge an undue amount of urine, which necessitates constant imbibition of new supplies of water to prevent dehydration of the tissues. On this view, the primary cause of diabetis insipidus must be looked for in some other parts than the kidneys—namely, in some part of the chain of sympathetic nerves which controls the action of the contractile tissues of the renal vessels. This chain extends from the kidneys to the abdominal ganglia, thence to the spinal cord and the floor of the fourth ventricle, where the sympathetic system seems to have its centre. From above, this centre receives impressions from the encephalon. This theory seems conformable both to experiments and to chemical facts."—P. 158. And the author refers to Bernard's well-known experiment of puncturing the floor of the fourth ventricle, and the origin of a large proportion of the cases in injuries of the nervous centres, disease of the brain, injury to the sympathetic, as where cold fluids have been drunk when heated, from alcoholic excesses, etc.

We cannot give much space to the chapter upon Diabetes Mellitus. Suffice it to say, that Dr. Roberts shrinks from the attempt to frame a comprehensive theory of this disease. All he is disposed to say, after giving an excellent summary of the modern physiological researches of Schiff, Pavy, McConnell, etc., is that "it would seem highly probable that diabetes consists proximately in some disturbance of the destiny and function of the amyloid substance of the liver. But this disturbance may be due originally to disease far away from the liver itself, in some part of the sympathetic chain which controls this function. Occasionally, as in traumatic cases, it is possible to place the finger on the primary lesion; but in the immense majority of cases we are left in a sea of conjecture."—P. 185.

Dr. Roberts has bestowed a good deal of labour in clearing up some disputed questions in regard to the solvent efficacy of alkalies upon renal and vesical calculi. He has found by his experiments that while carbonate of potash possesses solvent powers superior to those of carbonate of soda, that its solvent powers over uric calculi were greatest when in the proportion of 40 to 60 grs. to the imperial pint; above this strength the solution was impeded by the formation of a white crust of alkaline bi-urate upon the surface of the calculus. The most convenient way of alkalising the urine he finds to consist in giving frequent repeated doses of the acetate or citrate of potash, using 40 or 50 grs. dissolved in 3 or 4 oz. of water, every three hours. When in any case an ammoniacal state is developed, the solvent power of the alkalised urine is nullified by the deposition of the mixed phosphates on the surface of the calculus. The following are briefly the limitations within which the author holds the solvent material applicable:—1. It is inapplicable to all cases in which the urine is alkaline. 2. When the urine is acid the case may be regarded *primâ facie* as suitable; but then even, with an acid urine, all those cases are excluded in which it is known or strongly suspected that the stone is composed of oxalate of lime. When the stone is known to be a large one the solvent treatment should not be attempted; the cases especially suitable are those in which it is known or strongly suspected that the concretion consists of uric acid, and has not yet attained any great size. In carrying out the solvent treatment it is of primary importance that the urine should not only be kept continuously alkaline, but kept alkaline to a certain degree. The treatment must be suspended at any time when the urine becomes ammoniacal.

We must be much more brief in our account of the third part of Dr. Roberts's book, in which he treats of the organic disease of the kidneys. Bright's disease of course occupies a large number of pages. We have marked a good many of these pages, but must confine ourselves to noticing the section which relates to uræmia. A very good and succinct account is given of the views held by various renal writers upon this condition. The author then sums them all up. "None of these theories, considered exclusively, explain satisfactorily the protean phenomena of uræmic intoxication. The subjects of Bright's disease suffer under a deep abnormality in the composition of the blood and tissues. The blood is unnaturally watery and poor in albumen; the blood and tissues are unnaturally charged with the primary hystolytic products (creatine, extractives, etc.), and with excrementitious urinary compounds (urea and uric acid), perhaps also with the products of the decomposition of some of these. This state appears to induce in the nervous centres a proneness to sudden disorder and loss of equilibrium. A crisis may at any moment be brought about by an exaltation of one or several of the disturbing elements, as by a supervention of some new and different cause of irritation (hysteria, menstruation). A similar hyper-sensitive state of the nervous system prevails naturally in early life; and an irritation which would be of no moment in an adult (teething, worms, embarrassed digestion, cutaneous irritation, etc.), suffices, in an infant, to awaken convulsive and comatose phenomena, closely resembling those of uræmia."—P. 361. With regard to the treatment of uræmic coma by venesection, which has recently found a new advocate on theoretical grounds in Dr. Richardson, our author very properly observes that a distinction should be drawn as the case is acute or chronic, and according to the strength and general condition of the patient. He considers that a free and repeated venesection is decidedly and urgently demanded in the uræmic coma of acute Bright's disease and in certain classes of puerperal eclampsia, the blood not being as yet materially impoverished, but that the matter stands differently when the renal mischief is chronic and incurable, since in these cases the attacks are not so imminently dangerous, and the loss of blood, already thin and poor, is more likely to shorten than to lengthen life. Throughout the work there is to be observed the same cautious acceptance of theoretical views as in the several special instances we have referred to. Throughout the author gives full credit to all his predecessors in labour in the same field as himself, placing at the head of each chapter the names of the authors and works which he has consulted, and from whom additional information may be derived upon points that he himself may not have regarded as of sufficient or immediate practical bearing to be discussed in this book. The book is enriched also with the detail of a large number of cases, many of them original, and with some very creditable woodcuts.

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*Peking and the Pekingese During the First Year of the British Embassy at Peking.* By D. F. Rennie, M.D., Staff-Surgeon on special service under the Government of India. Author of the "British Arms in North China and Japan." 2 vols., p. 332. Murray, 1865.

This is a most pleasant book; it is quite impossible to convey any idea of the mass of varied information contained in it by quoting occasional passages. In vol. II. p. 38, there is a mention of a young Chinese Doctor who was well known a few years ago in Edinburgh. Dr. Wang-fung, who "was a pupil of one of the Protestant missionary schools at Hong-Kong, and in consequence of the ability he displayed, he was sent to Edinburgh, and maintained there through the kindness and liberality of some of the English merchants at Hong-Kong. He became one of the most distinguished students of his period, took several prizes and received his diploma and degree in a manner reflecting the highest credit on himself. After this he was sent out by the London Missionary Society as Medical missionary at Canton, which appointment he held until nominated Dr. Ainslie's successor at Hong-Kong. Dr. Wang-fung has acquired a thorough knowledge of the English language, and writes it with fluency and accuracy."

We may take this opportunity of commending likewise to our readers, Dr. Rennie's last volume, entitled "Story of the Bhotean War." Like his former volumes, it is the work of a man who is always alive, and always has his eyes open, and who has the knack of bringing what he describes vividly before his readers' minds. The work is full of facts, political and ethnological, and if we mention one, viz., the speedily fatal effect of chloroform on snakes, we feel that we may give some comfort to persons who are obliged to travel in snake-infested countries.

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Bones of the Dodo.—Mr. Stevens, of King-street, sold by auction, on Tuesday last, nine lots of various bones of the above extraordinary and extinct bird. The principal purchasers were the College of Surgeons and the Universities of Oxford and Dublin; the first lot fetched 15*l*., and the last 3*l*. 10s. The nine lots realised only 83*l*. Professor Owen read a paper at the Zoological Society on the 9th of January last, giving a full account of the discovery, and describing in detail these bones then submitted to him.

## PROVINCIAL CORRESPONDENCE.

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### NEWCASTLE-UPON-TYNE AND SUNDERLAND.

*(From our own Correspondent.)*

March 10.

The Northumberland and Durham Medical Society held its last meeting for the Session 1865-66 on Thursday evening last at the Newcastle Infirmary. There was a large attendance of members, and the papers read were of considerable interest, especially those of Dr. Brown on "Degeneration of the Mucous Membranes in Idiots," and of Mr. Dodd on a series of cases occurring at Donkin's Houses. Dr. William Murray, the active and energetic Secretary of the Society, was warmly congratulated on his recovery from an attack of typhus fever, which has made such ravages in Newcastle, two members of the Profession, Messrs. Watson and Hawthorn, having fallen victims to the disease. The subject of fever naturally gave rise to discussion, and from the remarks made by Dr. Humble, Physician to the Fever Hospital, it would seem that the epidemic is almost as virulent as ever, notwithstanding the active measures taken by the Corporation and Board of Guardians to improve the sanitary condition of the lanes and alleys where the fever abounds. Dr. Humble stated that for the ten years previous to 1866 the average number of patients admitted into the Hospital in the month of February of those years was nine, whereas during the same month in this year sixty cases had been admitted. This epidemic of typhus is attacking most of the large towns in the North of England with more or less virulence, and Sunderland in particular is suffering from it, so much so that there is no accommodation for the cases either at the Infirmary or Workhouse Hospital; consequently the Guardians are at present engaged in erecting a temporary Hospital for fever cases. It is to be regretted that this step was not taken sooner, so that the cases occurring in the closely-packed parts of the town might have been removed at once, and not left at their own homes to propagate the disease. The question as to the causes of fever is engaging the attention of the local authorities, and the Sanitary Committee of the Corporation have appointed Mr. Dixon, J.P., Mr. Paull, and Dr. Yeld to investigate the subject, and make such suggestions as they think will tend to abate the virulence of the epidemic; and no doubt the suggestions made by these gentlemen will be carried out with promptitude and energy. In speaking of Sunderland, I may mention that the Medico-Chirurgical Society, established about two years ago, is in a flourishing condition. Its meetings are held monthly, and several interesting papers have been read during the present session. The new Infirmary, also, which has been talked about for so long a time, has at last been commenced, the worthy Rector of Bishopwearmouth having cut the first sod a week or two ago; and before many months have elapsed it is expected that Sunderland will be able to boast of having one of the best provincial Hospitals in the kingdom. It is to be constructed to hold 100 beds, and, therefore, will be a great improvement upon the present Infirmary, which does not contain above thirty-six beds, and in every other respect is sadly deficient. The new Hospital is to be erected at the outskirts of the town, and it is proposed to separate the Dispensary, which has hitherto been attached to the Infirmary, and place it in the centre of the borough, with a new staff of Physicians and Surgeons. This is a move in the right direction, and will give to the junior members of the Profession an opportunity of obtaining appointments, the occupancy of which always carries a certain amount of weight with the public. At a future day I hope to be able to give you full particulars of the new Hospital and Dispensary, with a few remarks on the other charitable institutions of the North.

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A Gem from the "Times."—"To Invalids.—A gentleman, who can refer to patients in high social position, who have been cured by him, has room for one Patient in his house, in a healthy, suburban district, and one patient to be attended at own residence. He has saved limbs condemned to amputation, cured ovarium disease, and various disorders, both structural and of nervous system. His treatment is rational, and is neither painful nor disagreeable. Apply for address, by letter, to Veritas, post-office, King-street, Covent-garden."

## GENERAL CORRESPONDENCE.

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### DR. ALDERSON ON THE SPREAD OF RINDERPEST.

Letter from Dr. C. R. Bree.

[To the Editor of the Medical Times and Gazette.]

Sir,—I read in your report of the annual meeting of the Medico-Chirurgical Society that Dr. Alderson, its President, made the following remarks about the Rinderpest:—"All these fallacious views seem to blind the Legislature as well as the public to facts which are clearly established. These facts are, that the cattle disease, like cholera, follows a certain course, which is undeviating in its direction, though the visitation skips over some localities; that the disease also, like cholera or any other epidemic, abides only for a certain period in each locality, and that it is most virulent and unmanageable at the beginning of each outbreak, and becomes amenable to simple treatment, or any treatment not positively injurious, towards the end of its presence in each place, whilst the ultimate cause of the disease and the law of its progress are unknown to us. All these facts display the fallacy of pretending to stop or exterminate—that is, in the presumptuous phraseology of the day, 'to stamp out' the disease by means of preventing contact; and the same facts testify to the sad want of judgment in sacrificing stock and adding inconvenience to the farmers' loss, in order to obtain an end which, according to the knowledge which we possess, is obviously impossible. None will, of course, deny that there is a certain amount of power to communicate the disease by what is termed contagion or infection, and that moderate precautions to avoid needless contact are wise and good; but it is plain that when the best is done in this direction the laws of transmission and duration will defy all Orders in Council and all Parliamentary enactments either to obtain immunity or to effect 'stamping out.'"

These opinions are directly opposed to those advocated by Dr. Watson, the President of the College of Physicians, and by the Medical men, Dr. B. Jones, Dr. Parkes, and Dr. Quain, who are members of the Royal Commission. They are opposed, I believe, to the opinions of men most experienced in epizootic diseases, such as Mr. Gangee, and I believe they are opposed to every observed *fact* in the history of this fatal disease. If so, let me ask, are they not calculated to do a great deal more harm than good? Ought not such strong opinions, opposed to the imperial regulations for exterminating this disease, to have been supported by arguments and facts? And are not statements of this kind, clashing as they do with other Medical utterances from high quarters, rather calculated to make those in authority regard Medical opinions with distrust, and bring into contempt the value of our evidence upon anything?

I will relate one or two facts which will, I think, conclusively prove the contagious, as opposed to Dr. Alderson's epidemic theory. Mr. A., a farmer, living two miles south of Colchester, bought some sheep infected with rinderpest. This was three or four months ago. The disease spread to his cattle, and he lost the best part of his herd. B., living only two fields off that wherein the infected sheep were grazing, had a splendid dairy of 14 cows or thereabouts. They were attacked with genuine Rinderpest, and he lost thirteen. The veterinary Surgeon accounts for the conveyance of infection by the hares running over the excreta of the sheep, and carrying it on to the turnips from which the cows fed. Now, mark, since that time none of the cattle of the neighbouring farmers have become affected. Again, C., living north of Colchester, had stock on two farms. He introduced the disease by a purchased animal into one herd, which was decimated, while by great precautions the other remained free. One more. D., living six miles eastward of Colchester, had Rinderpest among his cattle, which were decimated, and a flock of sheep grazing in the contiguous field were also attacked, and many died of the disease. This flock was visited by Professor Symonds and Mr. Ceely. In no instance has the disease occurred in this neighbourhood, that I am aware of, in which direct contagion could not be traced. We are, and have been, comparatively free from it round the immediate neighbourhood of Colchester, and have never, in fact, had it as an epidemic at all.

It is, I think, unphilosophical to argue that a disease which can be distinctly traced in its introduction and diffusion in this country to contagion alone cannot be "stamped out" by rigorous and determined action. At the same time the task is ten times more difficult now than it would have been when first recommended by the Royal Commission.

Dr. Alderson must remember that Dr. Budd, of Bristol, than whom, I believe, no living English observer knows more of epizootic infectious diseases, has distinctly proved that the *materies morbi* of small-pox usually conveyed by the touch may be carried by the wind from one flock of sheep to another at the distance of a mile. It will not be denied, however, that if these sheep were killed and buried that such infection would be prevented. I have the greatest respect for Dr. Alderson, and have made the above remarks in a scientific spirit only. I am, &c.,

C. R. Bree, M.D.,
J.P. County of Essex and Suffolk.

Colchester, March 12, 1866.

P.S.—I hope in this important matter you will admit this letter next week. As a county magistrate, I am actively engaged in "stamping out" this disease; as a "beef-eater," I should be glad to find that any means but slaughter could be arrived at.

## THE TREATMENT OF CHOLERA IN INDIA.

### Letter from Dr. George Johnson.

[To the Editor of the Medical Times and Gazette.]

Sir,—I find to my great surprise that in a letter published in your paper of to-day I am accused by Dr. Montgomery of having made an "attack upon the Professional abilities of the Indian Medical Service as regards the treatment of cholera." The passage from my paper in the *British Medical Journal*, on which this startling accusation is founded, is reprinted entire in Dr. Montgomery's letter, and I am content to leave to the judgment of yourself, Sir, and your readers the question whether I have there said anything to call for or to justify the personal attack which Dr. Montgomery has made upon me.

The statistics which I quoted are not my own; I am not responsible for their accuracy, neither have I any reason to doubt it. The inference which I drew from those statistics, assuming them to be accurate, I am prepared to defend upon all suitable occasions. I think that I have sufficiently shown my respect for the Indian Medical Service by the very frequent reference which I have made to their writings. If, however, in discussing such a subject as the nature and treatment of cholera we cannot express dissent from the opinions and practice of our Professional brethren without subjecting ourselves to the accusation of imputing to those from whom we differ "incompetence, ignorance, and obstinacy," there must soon be an end of all discussion, and, for my part, I should say the sooner the better.

Dr. Montgomery tells you that I am the author of "a very remarkable," and, in his opinion, "a very erroneous theory," as to the pathology of cholera. If the theory in question be erroneous, it is likely to work much mischief; for it has already made many converts, some of them being men in very high and influential positions in the Profession. I venture, therefore, to suggest to Dr. Montgomery that by pointing out wherein consists the error of that theory he may be doing more to promote the cause of truth and the interests of humanity, and he will certainly afford a more convincing proof that the gentlemen whose representative he assumes to be are my "superiors in good taste," than by making a personal attack upon the author of the theory in question.

I am, &c.

11, Savile-row, March 10. George Johnson.

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**Prize Question.**—The Madrid Academy of Medicine and Surgery offer a honorary diploma and a prize of 250 francs for the best memoir on the following question:—"The Advantages and Inconveniences of Iridectomy as an Auxiliary Means in the Extraction of Uncomplicated Cataract." Essays, written in French, Spanish, or Portuguese, to be sent to the President, 13, Capellanes, Madrid, before October 31, 1866.

**Curious Case of Vaccinia after Variola.** — A *sergent d'armes*, 41 years of age, unvaccinated in childhood, but who suffered from an attack of confluent variola in 1834, was vaccinated at Toulon in 1865. Six pustules resulted, producing such excellent lymph that several successful vaccinations have been performed with it.—*Archives de Méd. Navale*, February.

## REPORTS OF SOCIETIES.

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## ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, February 27, 1866.

Dr. Alderson, F.R.S., President.

**Dr. Meryon** read a paper

### ON GRANULAR DEGENERATION OF THE VOLUNTARY MUSCLES.

Since 1851, when Dr. Meryon communicated to the above-named Society an account of this disease, the details of which were published in its *Transactions* in 1852, four more cases have fallen under his observation. In one, which terminated fatally in 1859, the post-mortem examination was carefully conducted by Mr. Savory, who, during a searching microscopical investigation, failed to detect a vestige of disease in any part of the nervous system. The disease appears to consist in a gradual but progressive breaking up of the amorphous membrane which envelopes the primitive muscular fibres, and of a dispersion of the contained granular matter. After these preliminary observations, Dr. Meryon proceeded to describe the case of a gentleman, aged 22, who was present at the meeting, so that the Fellows had an opportunity of examining his present condition. At the age of five years he began to show symptoms of weakness in the loins by a waddling gait; and in the course of two or three years he had difficulty in bending the thighs on the body, as in the act of getting upstairs; next he gradually lost the power of bending the legs on the thighs; and eventually the voluntary motions of the feet and toes were lost also. The morbid action then began to manifest itself in the upper extremities, and the patient has now no longer the power of raising his arms to his head; but he can bend the forearms on the arms, and he still retains a firm grasp with the hands. The tendency of the disease, however, is to extend itself from the proximal to the distal portions of the extremities, and then to attack the muscles of respiration; but in no case are the involuntary muscles or muscles of organic life affected. The history of one case is the history of all; and on the uniformity of the symptoms and the order of their appearance, &c., Dr. Meryon has attempted to distinguish this form of paralysis from all others which are dependent on lesions of the peripheral nerves or nervous centres—1st, by the centrifugal course of the disease, irrespective of the course and distribution of nerves; 2nd, by the entire absence of any symptoms of nervous disturbance during life; and 3rd, by the absence of any trace of lesion in any part of the nervous system after death—at least so far as the most careful investigations have extended up to the present time. There is another difference observed in the muscles thus affected, as compared with paralysed muscles dependent on nervous lesion: it is in the disruption of the sarcolemma and the segregation of the granules which constitute the sarcous matter in the former case; whereas in the latter, the primitive fibres gradually waste, the transverse striæ gradually disappear, and oil-globules by degrees fill the interspaces of the fibres, and occupy the space which the healthy muscular tissue formerly occupied. Dr. Meryon's patient affirms that both he and his sister, who is also a subject of the disease, have retained the condition in which they were when they began to take arsenic. The gentleman has been under the influence of that medicine a little more than a year. In conclusion, Dr. Meryon adverted to the question of priority of description of this peculiar form of disease. He quoted passages from several of the French Medical periodicals in relation to this matter. It is unnecessary to report these, though the following fact may be mentioned—that at the Academy of Medicine M. Cruveilhier referred to Dr. Meryon's plates in illustration of his (M. Cruveilhier's) own diseased muscles, and called the attention of the Academy to a form of paralysis "non encore décrite." Dr. Meryon's paper had been published in *The Lancet* more than a year before, and shortly afterwards appeared also in the Society's *Transactions*.

**Mr. Skey** said that during a period of some fifteen months, in which he had the charge of the young gentleman of fifteen years of age alluded to by the author, he was informed of an example of a similar disease in one family only, residing in a remote part of Dorsetshire; and with regard to treatment, nothing satisfactory had yet been accomplished. The case related in the paper was interesting from the circumstance that the manifestation of a morbid condition of the muscular system was not developed till a late period of childhood, or rather perhaps an early period of boyhood—namely, eight years of age. In all the cases with which he was acquainted the change from health to disease commenced in infancy; for while these children were still in their nurses' arms they showed a want of activity and elasticity of movement peculiar to the disease. Again, he observed another peculiarity in the fact that in the cases quoted by the author the change of structure was not confined to one sex; whereas in the two families under his cognizance the females were entirely exempt, and it was the more remarkable because in the family of —— the daughters were noticeable for their healthy and handsome appearance. Nor was it possible to trace the disease from either parent to their male offspring. In the case reported on by the author the morbid changes were confined to the family of the father by his second marriage, thus exempting him from suspicion of personal taint. Supposing the disease to be hereditary, it seemed reasonable to infer that it was obtained through the maternal channel. The treatment adopted consisted in the resort to tonic agents of various kinds—iron, bark, wine, mineral acids, and animal food; but most especially were all the muscles maintained in active exercise at least twice daily, and persisted in up to the point of fatigue: all, however, as the post-mortem appearances showed, without the least benefit. There was one striking feature in this case which he was inclined to consider common to them all—namely, that the morbid changes in the sarcous elements were confined to the muscles of animal life. In the muscular tissue of organic life (the unstriped fibre) no change had occurred; and this he was prepared to expect from the perfectly healthy condition of all the internal functions during life. It could not, then, be asserted that all the muscular tissues are involved, but only those of animal and external life. This fact throws some doubt on the supposed source of the diseased changes in the muscular tissue itself; because if one system be primarily involved, why not both? The sarcous elements are the same, though differently arranged. Why should the myogenic property be arrested in one case and not in the other? If dependent on a morbid state of the nervous centres, we must look to the spinal cord, and exclude the ganglionic system, which for the most part supplies the muscular fibre of organic life.

Mr. Solly said that though he did not deny the probability of muscular atrophy without disease of the nervous system, he was sure that this view of the pathology of the cases described by Dr. Meryon could not be admitted unless there were more complete proof of the spinal cord being perfectly healthy. He felt confident that, in order to detect disease in the spinal cord, it was necessary to examine thin slices of it under the microscope, prepared according to the process enunciated by Mr. Lockhart Clarke; and that until that had been done, we remained in ignorance of the pathology of the disease.

Mr. G. L. Cooper said it had fallen to his lot to see two such cases, and in both instances the symptoms were slow, insidious, free from pain, and ending in a complete degeneration and atrophy of the muscles. He believed that we may assign this disease to a softening of the brain, accompanied by an accumulation of fluid in the coverings of the spinal cord pressing on the nervous centre. The first case was that of a gentleman, about forty-five years of age, who complained of a weakness in his right shoulder, which was soon accompanied by an inability to raise the joint, with an apparent wasting of the deltoid. The muscles of the arm and forearm after a time became flabby and soft, and soon showed a degeneration and atrophied condition of their structure. The left arm has subsequently wasted, and he (Mr. Cooper) suspected would follow the course of the right. The second case was that of a coachman, aged forty-one. He had drunk freely in his early days, and had been exposed very much to the severity of the weather day and night. He suffered from a bad cough with profuse expectoration for many years, but was able to continue his employment until about three years ago, when he noticed a weakness in the thumb of the right hand, which disabled him from holding the whip. The hand soon wasted, and was followed by the forearm and arm in the same condition, with a total loss of power over their action. The left hand and arm were attacked in a similar manner about a year ago, and continued the same course as the right, ending in complete degeneration and paralysis of the extremity, but with more rapidity in its destructiveness. About six months ago his feet, legs, and thighs were similarly diseased, and followed precisely in the same course, ending in complete atrophy or degeneration, with total paralysis. This wasting was not observable in the muscles of the trunk, and the internal organs exercised their functions with a due regularity.

Mr. Lockhart Clarke said that the interesting case which Dr. Meryon had exhibited was considered by him to be one in which there was no lesion of the nervous centres. This opinion was grounded on the absence of pain in the wasting muscles. Now the absence of pain in wasting muscles was no more a proof that their atrophy is independent of lesions of the nervous centres, than absence of pain was a proof of the same indeqendence in cases of motor paralysis. And as we had muscular paralysis without pain, but dependent on lesions of the nervous system, so he believed we might have muscular atrophy without pain, but dependent on the same cause. But whatever *à priori* opinions might be formed on the subject, the question could be decided only by the evidence of post-mortem examination. A few months back a very decisive case came under his notice; or, rather, he received from Mr. Paget the pons Varolii, medulla oblongata, and part of the spinal cord of a child who had died with muscular atrophy of the upper extremities and of other parts, but who had never, he (Mr. L. Clarke) believed, experienced any pain whatever. In the cervical enlargement a small area was discovered, in which the nerve-tissue of the central grey substance had undergone evident disintegration. The pons was healthy, as was every part of the medulla oblongata, except one, where some granular exudation was found extending through the spinal accessory nucleus from behind, and reaching forward into the nucleus of the hypoglossal nerve. At the same level, the lateral parts of the medulla oblongata had undergone a certain amount of disintegration. As Mr. L. Clarke had not received any detailed history of the case, he wrote to ascertain whether the tongue was not in some way affected, and received an answer informing him that the tongue was the part in which the atrophy had commenced. Here, then, was satisfactory evidence of lesions of nerve-centres in a case of muscular atrophy in which there was no pain. This was the more important because pain was not experienced in more than about one-third of the cases of this malady. But when it did occur it was often very significant. Sometimes it took the course of particular nerves, either before or during the wasting of the muscles. Again, the nervous character of muscular atrophy was occasionally indicated by its beginning with an attack of temporary paralysis. Romberg had related a case which began with hemiplegia of the left side. The leg completely recovered, but the arm remained weak, and its weakness corresponded with the wasting of its muscles. No pain was experienced.

Mr. Holmes Coote, in remarking on the interesting nature of the cases now before the Society, said that they were not so uncommon as some of the members supposed, but were "grouped together" in certain Hospitals or under the care of special Practitioners. He had seen, both in the adult and the infant, many cases of such progressive muscular paralysis—a disease which, in course of time, rendered even the bones light and easily broken. In the infant the functions of the sensorium were sometimes disturbed; sometimes not. So also in the adult. And no one had done better service in this department of pathology than Mr. Lockhart Clarke, who had succeeded in demonstrating morbid changes in the grey matter of the nervous centres. His investigations had paved the way to a better classification of these cases, by assigning to them in their varieties one common primary seat—namely, the grey matter of the nervous centres, from whatever cause such disease might arise.

Dr. Fuller said that it had fallen to his lot within the last few years to meet with seven well-marked examples of the disease, which in their progress and in the mode of evolution of their symptoms, resembled precisely the cases related by Dr. Meryon. The cerebral functions remained unimpaired to the last, and the paralysis, which commenced very gradually, did not follow the course of particular nerves, but fixed upon particular bunches of muscles, first in one part of the body, and then in another, quite irrespectively of their nervous connexions. In some of the cases, pain in the limbs and fibrillary twitching of the affected muscles were prominent symptoms; in others, pain was absent, but fibrillary twitching was well marked; and, in two of them, there was no pain, and only the faintest twitching. In one respect Dr. Fuller's cases differed from those detailed by the author of the paper—they all occurred in adults, and in most of them the symptoms appeared to have originated in nervous exhaustion. In one instance, and in one only, the muscles of organic life appeared to be affected. In that case, which Dr. Fuller saw in consultation witn Dr. C. J. B. Williams, the heart, about two months before the patient's death, became extremely feeble in its action, and the pulse fell to 26 in the minute. Dr. Fuller agreed entirely with Dr. Meryon in regarding this disease as quite distinct from ordinary paralysis; and he regarded it also as distinct from the creeping paralysis of the insane, which he believed to constitute the bulk of the cases referred to by Mr. Holmes Coote. As some confusion exists on the subject, Dr. Fuller thought it very desirable that a special title should be assigned to the disease, for at present the nomenclature is quite unsettled.

Dr. **Barclay** said that previous speakers seemed to him to have lost sight of the distinction which Dr. Meryon had sought to make between muscular degeneration as a cause of paralysis and those other forms which depended on disease of the nervous system. He (Dr. Barclay) believed that several different forms of paralysis had been referred to, and that when the correctness of some of the author's observations was impugned it was because other forms of paralysis presented symptoms different from those traceable in muscular palsy. The presence or absence of the symptoms referred to was the test by which the true character of the affection became known. This was particularly true of the so-called centrifugal direction in which the disease proceeded, in opposition to the ordinary course of gradually extending paralysis dependent on progressive disease of the nervous system.

Mr. **Lockhart Clarke**, in reply to Dr. Barclay, said that he had been asked whether the morbid changes in the nervous centres might not be the consequences of the muscular wasting. He was sure that the changes he had observed were not so; for they were not simple atrophy of the nerve-tissues, but disintegrations, arising either from softening or from morbid exudations. Moreover, he had lately examined the spinal cord (given him by Dr. Dickinson, of St. George's Hospital) of an old pensioner who had lost one of his legs a great many years ago; but he was scarcely able to perceive any difference between the two sides, and there was certainly nothing at all resembling the disintegrations that he had found in cases of muscular atrophy. For an account of these cases, which he had published, he would refer to recent volumes of the *British and Foreign Medico-Chirurgical Review*, and of Beale's *Archives of Medicine*, particularly to No. 13, vol. iv., which contains one of the most important and interesting cases of any disease on record. He did not, however, wish to be understood to mean that there was no such thing as muscular atrophy without lesion of the nervous system. Such a disease might exist, but the question could be determined only by a sufficient number of post-mortem examinations.

Mr. **Skey** fully endorsed the truth of the observations of Dr. Barclay. They were discussing various forms of paralysis. He spoke only on that form described by the author of the paper, which is special, if not specific, and which consists microscopically of a deposit of oil or fat globules in the place of muscular tissue. He still believed the disease a very rare one.

Mr. **Solly** said he thought that Mr. Cooper's case was analogous to the scrivener's palsy, where a nervous centre was exhausted by overwork, and that it might be entitled the driver's palsy, adding another to the list, such as the musician's palsy (of which he had lately had a case under his care), the milker's, the shoemaker's, the nailer's, &c.; but there was no analogy between these cases and those of Dr. Meryon.

Dr. **Barker** referred to a case of muscular atrophy which had been under his care in St. Thomas's Hospital. The patient was a gardener, not over forty years of age. The first symptoms of the disease were a tripping in his walk, and an inability to prune trees. These were followed by general loss of power. When he first came into Hospital he was plump in appearance, but the muscles of the arms, legs, and thighs were wasted. With the exception of complete loss of muscular power, the man was in every respect well.

Mr. **Holmes Coote** assured the last speakers that he had had very many opportunities of seeing such cases, not only in Bethlehem Hospital, but also at the Orthopædic and St. Bartholomew's; and that he was not at all likely to fall into the error assigned to him.

Dr. **Webster** said, in reference to the author's statement regarding a recent speaker at the Paris Academy of Medicine, who had claimed the merit of being the first to notice the malady now under discussion, it should be remembered that French Medical men rarely read English periodicals and seldom speak the language; hence no one ought to feel surprised if Professional questions occupying attention in England do not always become immediately known beyond the Channel. In proof of this, he would mention that at the library of the learned body just named no English Medical journal is accessible for perusal. At least, this was the case not long ago, when he visited the library of the Imperial Academy, where the only English periodical publication shown him by the courteous official of whom he made inquiry was the Registrar-General's Report of Marriages, Births, and Deaths, sent by the British Government. In fact, the tables of that institution are scantily supplied with foreign Medical literature, and very unlike not only this Society, which receives numerous journals of various countries, but likewise dissimilar to several Continental capitals, such as Stockholm, Lisbon, and others, which he might specify from his own personal observation. Therefore Dr. Meryon need not deem it strange whenever any French observer thinks himself an original discoverer, seeing the circumstances above related may perhaps furnish a satisfactory explanation of the assumption narrated.

## A SMOKE-RATE, OR THE SMOKE NUISANCE?

*(From The Social Science Review.)*

This is the age of combination or co-operation. All great things are done by associations. Even in things of the "little-great" order, the same principle of united enterprise is the mainspring of any new undertaking. Our candles come from a joint-stock company of world-wide fame, earning large profits for the general body of shareholders with limited liability for each individual. The company of to-day has entirely put out the tallow-chandler of our early recollections. So with our hotels. Monster edifices are springing up on every side, and the fusty parlour and dingy bedrooms of the old inn are replaced at one-half the cost by the palatial morning room, and the neat, home-like, airy, private apartments of this age of joint-stock. But there is a sad want of originality in the projectors of all these baits thrown out by secretaries and solicitors, and directors, to catch shareholders. One hotel succeeds, and a dozen servile copies instantly appear in the advertising columns of the daily papers. So with banks, water companies, gas companies, omnibus companies, mining, and telegraph companies. One is either a miserable hash, or a highly-seasoned *rechauffé* of some other. There is nothing new in the mind of Young Joint-Stock. He is used up. He has not awakened to the dawn of social science. He does not know how far behind the science of the day is the art of the day. He cannot bring the truths taught by sanitary reformers to the homes of the people. He knows nothing of ventilation, yet the indoor life of the English is a martyrdom. In dining and drawing room—in kitchen and bedroom—at church or in the theatre—in the lecture room or the railway carriage,—carbonic acid reigns supreme, and oxygen is ignominously routed. Our architects and builders are a disgrace to their age and country; they are fifty years behind the knowledge which men of science have been teaching. In the International Exhibition they could show nothing which promised to supply enough air to any living room without exposing the occupants to showers or deluges of cold air. They could show no means of warming our buildings without baking us or setting us all on fire; and they never once thought of freeing our rooms and our streets from the smoke which shuts off our sunlight and etiolates our children—which blackens all our public buildings, hanging like a pall above us, and fouls our skin, our linen, our eyes, and our lungs by an all-pervading nuisance. Our dying plants and withered leaves of neutral-tinted trees, and the pale sallow faces of our smoke-breathing citizens tell more than whole regiments of "blacks" how omnipotent is the evil which science has long denounced, but which art has failed to remove. Years ago it was proved that smoke is unnecessary, and that its consumption is economical; while, thanks to the energy of Lord Palmerston and his contempt of "vested interests," distilleries, breweries, potteries, and steamboats have been compelled to consume their own smoke within certain limits in the metropolis. But the great cloud of London smoke—the dull, heavy, leaden mass which hangs over us, the contribution of the innumerable chimneys of private houses—is as thick as ever. Science has shown that one-half our coal is wasted by the bad construction of our fireplaces, while the production of smoke is doubled. But Art has done nothing to improve upon the teachings of her sister. Nor has anything been done to free our atmosphere from the smoke which must still escape even when fireplaces are well made, and no coal is wasted. Yet here again our science is ten years ahead of our art; and here sanitary science especially has been in advance, and the comfort of daily life and the public health are sacrificed, because the hands which execute are not equal to the minds which devise; in other words, because our Doctors are a generation in advance of our architects and engineers. In this very matter of the smoke nuisance, a well-known London Surgeon, Mr. Spencer Wells, published an article in the *Medical Times and Gazette*, August 20, 1853, containing the following remarkable passage:—"Let us hope that by an improved construction of fireplaces in private houses, the present wasteful consumption of fuel and unnecessary consumption of smoke may be diminished, as competent engineers have proved that it might be, by at least the half. We do not despair of seeing London freed even from the remaining half, its inhabitants breathing as pure and clear an air as those of Paris, Berlin, or Vienna, and its buildings, cleansed from their present funereal coating, standing forth in all the unsullied beauty of their architecture. In this case, a new feature would be added to the architecture, and we should then see a number of beautiful structures, not unlike miniature representations of the gigantic aqueducts of the ancient Romans, replacing our present unsightly chimneys, and carrying all the smoke through closed conduits to central furnaces, where it would be in a great measure consumed, and its remaining portions discharged at a height too great to be injurious or unsightly. A small smoke-rate, giving us pure air, would surely be as cheerfully borne as a sewer-rate, which only purifies our houses by polluting our river."

Now, let us see whether, after ten years' delay, any of our engineers or architects can put this idea of Mr. Wells, freely offered to them, to some useful and profitable practical purpose. Let some one replace our ugly chimneys by pretty arcades, convert our dirty roofs into clean conservatories, give our citizens and their children some bright sunlight, while the smoke is turned to some useful purpose—cooking for the poor, heating public baths, or ventilating rooms—and the statue of this public benefactor shall stand as high as that of Nelson in the "good time coming." Here, too, is an opening for some joint-stock company who can find a secretary with a fair share of brains, or for some M.P. who wishes to earn a solid claim to a nation's gratitude. As a speculation, it would make the fortune of shareholders. As a social blessing, a smoke-rate, or any other rate, would be hailed with acclamation if it only held out a fair prospect of lessening or removing the smoke nuisance.

## OBITUARY.

### THE LATE MR. McWHINNIE.

Andrew Melville McWhinnie was born in the South of England in the year 1808. After having been at school in Yorkshire, he was sent, under the care of Lieutenant Martin Miller, to the Continent, where, remaining three or four years, he acquired an intimate knowledge of the French language. Returning to England and entering the Medical profession, he became a pupil of Mr. Stanley, then Assistant-Surgeon to and Lecturer on Anatomy at St. Bartholomew's Hospital. In 1834 he joined Mr. Wormald, the present President of the Royal College of Surgeons, as Demonstrator of Anatomy in the School, and, in conjunction with this gentleman, published in 1838 and 1843 "A Series of Anatomical Sketches and Diagrams, with Descriptions and References." The drawing of these sketches and diagrams was executed mainly by Mr. McWhinnie from recent dissections made by Mr. Wormald and himself. Previously to the time of which we speak, although elaborate and consequently expensive anatomical plates were contained in the different school libraries, scarcely any attempt had been made to provide the ordinary student with sketches which might be kept always at hand, and serve to illustrate the more complicated dissections of the various regions of the body. The object which the authors of this publication had in view was to meet a want which, as teachers of anatomy and as skilful draughtsmen, they felt to be a real one. The effort has since borne abundant fruit, for the work may be fairly called the progenitor of such admirable ones as Holden's "Osteology," and Ellis's Anatomical Plates, which, if they have not opened for the student a royal road to the acquisition of anatomical knowledge, are yet recognised as affording him indispensable assistance. In 1839 Mr. McWhinnie was elected Lecturer on Comparative Anatomy at St. Bartholomew's in the room of Dr. A. Farre, who had just resigned that office. Soon after the Hospital for Diseases of the Skin was founded, in 1841, he was made Assistant-Surgeon to the Institution, and this appointment he retained till shortly before his death. He became Assistant-Surgeon to St. Bartholomew's in 1854, but sent in his resignation of this office and also of the Lectureship on Comparative Anatomy in 1860. Mr. McWhinnie translated Cloquet's valuable work on Hernia, and published, in concert with Dr. Roupell, "Illustrations of the Effects of Poisons." Besides, he wrote essays on "Irregularities in the Muscular System of the Human Body," "Malformations of the Urinary Bladder," "Tracheotomy," "Transposition of the Thoracic Viscera," "Bronchocele," etc., and within the past few years contributed various papers on practical Surgery to the periodicals of the day. Mr. McWhinnie was possessed of considerable natural ability, and he enjoyed many of those accomplishments which are always important accessories in the pursuits of the Profession of Medicine; he was a very skilful manipulator, both in dissecting and operating, and many valuable anatomical preparations made by him are now in the Museum of St. Bartholomew's. He was an admirable draughtsman, and his being so was of great assistance to him in the dissecting rooms. Kind-hearted, amiable, and always anxious to give assistance or information, he was very popular with his pupils. For the past few years he had been compelled by failing health to relinquish to a great extent his private practice, which had never been very extensive. He died at his house in New Bridge-street after a long and painful illness produced by malignant disease of the large intestine on February 27.

## MEDICAL NEWS.

Apothecaries' Hall.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, March 8, 1866:—

Frederick John Wadd, Priory-road, Kilburn, N.W.; Richard Pugh, Llandovery, South Wales; Frederick Martyn Rickard, Stoke Devonport, Devon; Robert Rugg, Dispensary, Stepney; Richard Hake Bush, York-terrace, Regent's-park.

The following gentleman also on the same day passed his First Examination:—

Benjamin Duke, Guy's Hospital.

### APPOINTMENTS.

⁂ The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Althaus, Julius, M.D., has been appointed Physician to the London Infirmary for Epilepsy and Paralysis, Charles-street, Portman-square.

Butt, William F., M.R.C.S. Eng., has been promoted to Senior Resident Surgeon to the St. Pancras Workhouse and Infirmary.

Dudley, John G., M.D. Cantab., has been appointed an additional Physician to the North London Consumption Hospital.

Grier, W. J., L.R.C.P. Edin., has been elected Medical Officer to the Workhouse and Fever Hospital of the Granard Union, Co. Longford.

Jamieson, W. A., M.B., has been appointed Junior House-Surgeon to the Dispensary, Preston.

Mahony, E., M.R.C.S. Eng., has been elected Resident Junior Surgeon to the St. Pancras Workhouse and Infirmary.

Maurice, Oliver C., M.R.C.S. Eng., has been appointed Assistant-Surgeon to the Royal Berkshire Hospital, Reading.

Meadows, Alfred, M.D. Lond., has been appointed an additional Physician to the Hospital for Women, Soho-square.

Milburn, Frederick L., M.R.C.S. Eng., has been elected Assistant House-Surgeon to the General Hospital, Nottingham.

Nesham, Thomas C., M.D. Edin., has been elected Surgeon to the Newcastle-upon-Tyne Lying-in Hospital.

Smith, William A., M.D. St. And., has been appointed an additional Physician to the North London Consumption Hospital.

Sturges, Octavius, M.D., has been appointed an additional Physician to the North London Consumption Hospital.

White, William L., M.B., has been appointed Assistant Medical Superintendent to the Dundee Royal Infirmary.

Yates, Mr. G. I., has been appointed Assistant Dispenser to the Burlington-street Dispensary, Liverpool.

Yorke, Christopher F., L.R.C.S.I., has been appointed Surgeon to the Constabulary, Granard, Co. Longford.

### BIRTHS.

**Arscott.**—On March 8, at Southernhay, Exeter, the wife of Robert Arscott, M.R.C.S. Eng., of a son.

**Boustead.**—On January 28, at Kurrachee, Scinde, East India, the wife of Dr. Robinson Boustead, H.M. Bombay Army, of a daughter.

**Carter.**—On February 27, at Budleigh Salterton, Devon, the wife of H. I. Carter, Surgeon-Major (retired) H.M. Bombay Army, of a daughter.

**Champneys.**—On March 8, at Battle, Sussex, the wife of Montagu Champneys, F.R.C.S., of a daughter.

**Mackinnon.**—At Campbellpore, East India, the wife of Assistant-Surgeon Charles Mackinnon, 20th Hussars, of a daughter.

**Prall.**—On March 11, at West Malling, Kent, the wife of Samuel Prall, M.D., of a daughter.

**Randell.**—On February 7, at St. Thomas's Mount, Madras, the wife of Assistant-Surgeon Henry L. Randell, R.A., of a daughter.

**Wigmore.**—On March 18, at 21, Inverness-road, W., the wife of William Wigmore, Surgeon, of a daughter.

### MARRIAGES.

**Covey—Hemsted.**—On March 8, at Whitchurch, Hants, Charles E. Covey, Surgeon, to Harriet, second daughter of T. R. Hemsted, Esq.

**Peacocke—Wilkinson.**—On March 7, at All Souls' Church, Langham-place, George Peacocke, M.D, to Rose E. Wilkinson, only daughter of George Smith, Esq.

### DEATHS.

**Goddard, Samuel P.**, M.D. Aberd., at Park Hall, near Longton, Staffs., on March 1.

**Hall, Stephen**, M.D., late of Exeter, on March 5, aged 63.

**Pearson, Henry W.**, M.R.C.S. Eng., at Hastings, on March 6, aged 29.

**Quarrell, William**, M.R.C.S. Eng., at Victoria House, Torquay, on February 10, aged 25.

**Paul, James J.**, M.D. St. And., at Putney, on March 11, formerly Surgeon R.N.

**Tabrum, William**, M.D. Edin., at Upminster, Essex, on March 12, aged 81.

## POOR-LAW MEDICAL SERVICE.

⁂ The area of each district is stated in acres. The population is computed according to the last census.

### RESIGNATIONS.

*Alcester Union.*—Mr. J. P. Dunn has resigned the Feckenham District; area, 6500; population, 3217; salary, £50 per annum.

*Easingwold Union.*—Mr. Henry Skaife has resigned the Coxwold District; area, 13,499; population, 1824; salary, £26 per annum.

*Keynsham Union.*—Mr. J. H. Simpson has resigned the Marksbury District; area, 8895; population, 2050; salary, £40 per annum.

*Newcastle-upon-Tyne Union.*—The First District is vacant; area, 1400; population, 16,350; salary, £50 per annum.

*Sleaford Union.*—Mr. Franks has resigned the Heckington District; area, 31,861; population, 5720; salary, £52 per annum.

*Thirsk Union.*—Mr. Skaife has resigned the Kilburn District; area, 2662; population, 434; salary, £8 per annum.

### APPOINTMENTS.

*Ross Union.*—William H. Plaister, M.R.C.S.E., to the St. Weonards District.

*Wilton Union.*—Frederic J. Flower, M.R.C.S.E., L.S.A., to the Bishopstone District.

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**Honorary Physician to the Queen.**— Tuesday's *Gazette* contains the following announcement under the head of "Army Medical Department:"—Inspector-Gen. of Hospitals George Stewart Beatson, M.D., to be Hon. Physician to Her Majesty, vice Sir John McGregor, K.C.B., M.D., deceased.

**Glasgow Medico-Chirurgical Society.** — At the meeting of this Society, held on Tuesday, March 13, in the Hall of the Faculty of Physicians and Surgeons, the following gentlemen were elected office bearers for the present year: *President:* Dr. Allen Thompson. *Vice-Presidents:* Dr. Robert Paterson; Dr. John Coats. *Council:* Dr. Naismith, Hamilton; Dr. W. T. Gairdner; Dr. Yeaman; Mr. Robertson, Renfrew; Dr. Dewar; Dr. Tindal. *Secretaries:* Dr. James Adams; Dr. Robert Perry. *Treasurer:* Dr. Howatt.

We learn that the operation of ovariotomy has for the first time been undertaken in Portugal by the well-known Surgeon Senhor Antonio Maria Barbosa, of Lisbon. The patient died of peritonitis on the seventh day, under circumstances by no means discouraging to further attempts in the same direction.

**Webber v. Willicombe and Others.**—Mr. Webber, of Tunbridge Wells, has obtained a verdict of £50 damages against two of the ringleaders of the mob who, it will be recollected, broke his windows and burnt him in effigy. It was stated at the trial that the plaintiff had excited ill will by stating his opinion on the state of the sewerage of the town.

**The National Portrait Gallery, Westminster.**—The *Athenæum* says:—" A good old portrait of Sir William Butts, Physician to King Henry the Eighth, which has suffered in some degree by effacing, but escaped restoration, is a valuable historical accession. The head agrees perfectly perfectly with that of Dr. Butts in the great picture of 'The Barber Surgeons receiving their charter.'"

**The Medical Council.**—The parliament of Medicine is summoned to meet in London on May 15, and will probably sit through Whitsun week. The Medical Council is a highly-paid, deliberative body, representing the Colleges of England, Scotland, and Ireland. Each member receives ten guineas a-day during the session. Its deliberations have generally lasted a week, and cost over £1500 in fees. Fortunately for the fund which has to provide the fees (they are drawn from the pockets of the Medical Profession), most of the members are in lucrative practice, and lose by the arrangement; otherwise speeches costing some £25 an hour might be unduly prolonged, and would be open to even more severe criticism than they now receive. There is one service which the Medical Council might render which would be welcome to the public generally as to the Doctors. They would confer a great benefit if they could persuade the Government to introduce such an amendment of the 40th clause of the Medical Act as should really prevent unlawful practice by Medical pretenders, and enable all men readily to distinguish between legal and illegal Practitioners. This the Medical Act now professes, but fails, to do.—*Pall-Mall Gazette.*

**University of Cambridge.**—Mr. Edmund Carver, of St. John's College, M.A., F.R.C.S., has been appointed by Professor Humphry to the recently created office of Demonstrator of Anatomy. Mr. Carver has shown himself well qualified for it by his diligent and efficient superintendence of the students in the dissecting-room during the present winter.

**Odontological Society.**—At the ordinary monthly meeting, held at its rooms, 32, Soho-square, on the 5th inst., Mr. Mummery read a paper "On Certain Forms of Irregularity of the Teeth," exhibiting models of cases where great success had followed his efforts to reduce the deformity.

**Pharmaceutical Society of Great Britain.**—Names of candidates who passed the Examination on March 14, as Pharmaceutical Chemists:—Alfred Barrowclough, Mirfield; William Beckett, Heywood; Robert Keevill, Clifton; James John Owles, Great Yarmouth; William Phillipps, New Cross-road; Joseph Spencer Robinson, Alfreton; Philip Stoneham, London; Samuel John Weston, London.

**Alleged Poisoning by Milk from a Cow Recovering from Rinderpest.**—The *Pall-mall Gazette* states that the wife of Mr. Thomas Woolfe, of Standon Hall, in Staffordshire, was seized with the symptoms of irritant poison after tasting milk obtained from an animal recovering from cattle plague.

**Medical Council Punishments.**—The following are the names of the delinquents who have been struck off the Medical Register, a list of whom has been delivered to all Medical Examining Boards, in order to prevent a re-examination and obtaining other qualifications, viz:—

Abercrombie, Robert, well-known in connection with the notorious Strand Museum.

Barrett, John Carter, having been convicted of felony.

Burton, John, his name erased, "having been fraudulently or incorrectly made."

Broatch, John, for having obtained the entry of his name by a false declaration.

Brown, Hugh, his diploma having been obtained by a false statement of his age.

Cumming, William John, having been convicted of felony.

Dougal, Daniel, his diploma having been obtained by a false statement of his age.

Gourley, Daniel de la Cherris, having been convicted of a misdemeanour.

Jordan, Robert Jacob, of the notorious museum in George-street, Hanover-square.

Jones, David Griffiths, having been convicted of a misdemeanour.

Kearney, John, "for infamous conduct in a Professional respect."

La Mert, Samuel, "for infamous conduct in a Professional respect."

Organ, Richard, for "infamous conduct in a Professional respect."

Protheroe, John Edward, the entry of his name "having been fraudulently obtained."

Thomas, Evan, having been convicted of perjury.

Whalley, Thompson, having been convicted of a misdemeanour.

Wrixan, Robert, having been convicted of perjury.

It is stated that other names will be submitted at the next meeting of the General Medical Council for removal from the Register.

**New Houses in Paris.**—The Préfet of the Seine, in his report for 1864-65, states that a very erroneous belief has arisen that, owing to his demolitions, the number of houses and lodgings had diminished in Paris. So far from this being the case, he says that the contrary is the fact. Thus during 1864-65, there have been constructed 3351 houses, while only 1942 have been demolished—465 through the intervention of juries and 1477 voluntarily—with the view of new and superior constructions. So, too, while 19,924 lodgings or residences have been constructed, only 11,976 have been demolished. Another statement that the tendency has been to create more large apartments at high rents than small and cheap ones, is also erroneous; for according to a recent census it appears that 12,443 houses, containing 71,566 residences, erected between 1860 and 1863 inclusively, may be thus classed:—Rents above 1000 frs., 11,095; between 500 and 1000 frs., 21,369; between 500 and 300 frs., 19,134; below 300 frs., 19,968; total, 71,566. Thus the mean rent of these residences created during these four years is not above 500 frs. for one-half, the rents exceeding 1000 frs. not constituting even one-sixth of the whole number At the present time there exist in Paris 637,369 residences, 17,040 being vacant.

**Rinderpest in Sheep.**—The murrain caused in Scotland by the alleged outbreak of Rinderpest in sheep has been to some extent mitigated by the investigations into the circumstances of the cases. In the Fifeshire cases undoubtedly the testimony of the professional inspectors as to the disease being Rinderpest is distinct and decided, but great reluctance is shown on the part of practical men to accept their opinion without further inquiry. Into the Forfarshire cases a very careful investigation is being made by the Chamber of Agriculture, and an interim report has been issued stating the symptoms and circumstances. In these cases the local inspector was unable to pronounce that the disease was Rinderpest, and, on being questioned by the committee of the Chamber, he acknowledged that he had seen similar symptoms in other diseases. Professor Strangeway, of Edinburgh, has been appointed meantime to go and examine the flock said to be affected, while the head and intestines of a sickly sheep, slaughtered for the purpose of the inquiry, have been already examined by him, and said by him to show much less distinct appearances of Rinderpest than the Fifeshire cases, although the symptoms were such as might indicate an early stage of that disease. Meantime, the Chamber suspend the expression of their own opinion; but, looking to the mortality usual at the lambing season, the severe snowstorms prevailing in Scotland for the last fortnight, the mildew in the turnips, and the change in the diet of the affected flock lately brought from Berwickshire, it seems to be the opinion of those who have examined the circumstances that the disease in the flock may be otherwise accounted for than by ascribing it to Rinderpest.

**Kerosolene.**—In our two last numbers this substance has been referred to. It consists of one or more of the lighter hydro-carburets procured in the distillation of American Petroleum. Being procurable in large quantities, it is comparatively a very cheap article. It begins to boil about 81° Fahrenheit. In our last number Dr. Richardson states that kerosolene is "no anæsthetic *per se*." But several years ago Professor Bigelow, of Boston, and other Physicians in that city, found that it was a powerful anæsthetic, and used it for a time as such. Like the other more powerful general anæsthetics—chloroform and sulphuric ether—it has a partial *local* benumbing effect when its vapour is applied locally; and besides its evaporation, produces speedily, as is the case with sulphuric ether and other bodies boiling at a low temperature, a state of insensibility by coldness and freezing of the part to which it is applied. When purified by re-distillation, the form in which it is employed by Dr. Bigelow and others, kerosolene is to the generality of people not more unpleasant than sulpuric ether, if indeed it be so much so. Dr. Richardson's apparatus for producing freezing by the evaporation of sulphuric ether has, we believe, greater advantages over the means and instruments used some ten years ago by Guérard Velpeau and others for producing the same effect in Surgery upon the same principle and with the same medicinal agent; but in the present renewed investigation of this important practical subject, it is evidently right that the relative values of the different medicinal agents capable of producing the desired effect should be duly examined and tested. We believe that sulphuric ether is, on the whole, the best agent for local anæsthesia that has hitherto been proposed, and Dr. Richardson's method is undoubtedly the best method of using it. We must recollect that it is not the man who first proposes the germ of a discovery, but he that gets it into actual use who is honoured as the real inventor. Local anæsthesia was in a state of torpor before Dr. Richardson set it going again. If it should acquire vogue and celebrity, the credit of it will mainly belong to him.

**We** learn that a new Institution called the London Infirmary for Epilepsy and Paralysis, has been set up at No. 19, Charles-street, Portman-square, W. The president is Lord Wharncliffe. The vice-presidents and committee include some well-known philanthropic names, and the services of Alexander Ure, F.R.C.S., have been secured as Consulting-Surgeon, and of Dr. Julius Althaus, as Physician,—"Confirmed cases of epilepsy and paralysis," says the prospectus, "are excluded on principle from the general Hospitals, as causing a great deal of trouble, and expending in vain the funds of those charities. There is indeed at present only one Institution in the whole of Great Britain specially intended for the relief of such patients; but this is totally unable, single-handed, to cope with the vast mass of misery found to exist. Very many of the helpless and disabled are therefore left to pine away at their homes, under the care of incompetent persons, or without any attendance whatever; while not a few of the epileptic are sent to the workhouses, where they are classed with the insane, and where their condition is truly pitiable. In order to afford the help needed for such patients, the London Infirmary for Epilepsy and Paralysis has been established by a number of ladies and gentlemen desirous of extending the benefit of Medical aid to sufferers from these the direst afflictions to which the human system is liable. The operations of this charity are at present limited to the relief of out-patients, but as soon as the funds will allow, it is intended to open wards for in-patients."

**Decline of the Rinderpest.**—There really seems to be reason to believe that a solid and tangible decline has occurred in the Rinderpest. During the sixteen weeks ending March 3 the whole number of attacks reported to the Veterinary Department of the Privy Council has been as follows:—

| Week ending | Current cases. | Back cases. | Total. |
|---|---|---|---|
| November 18, 1865 | 2669 | 676 | 3345 |
| „ 25 „ | 3610 | 2941 | 6551 |
| December 2 „ | 3828 | 1903 | 5731 |
| „ 9 „ | 5356 | 2129 | 7485 |
| „ 16 „ | 6054 | 2133 | 8187 |
| „ 23 „ | 6256 | 1951 | 8207 |
| „ 30 „ | 7693 | 2263 | 9956 |
| January 6, 1866 | 7106 | 1402 | 8508 |
| „ 13 „ | 9243 | 2956 | 12299 |
| „ 20 „ | 10041 | 2801 | 12842 |
| „ 27 „ | 11745 | 1893 | 13638 |
| February 3 „ | 9153 | 2290 | 11443 |
| „ 10 „ | 11590 | 4305 | 15895 |
| „ 17 „ | 13001 | 5355 | 18356 |
| „ 24 „ | 10167 | 1143 | 11310 |
| March 3 „ | 7310 | 2060 | 9370 |

The public has, perhaps, been led to form erroneous conclusions on the subject, as the abstracts published weekly have taken no account of the "back cases"—that is, the cases not reported in sufficient time to be included in the weekly returns, and carried forward in consequence to the next week. At the same time, the totals referring to these back cases are too considerable to be overlooked. It will be seen that the aggregate number of attacks in the week ending March 3 was less than in any previous seven days since January 6, while comparing the number of attacks in the week ending March 3 with the total for the week ending February 17, we see a decline of nearly 50 per cent. The next two or three weekly returns will be of great importance, as they will show whether the measures recently attempted by the Government have really been attended with the good results which they appear to have produced. Another point of great importance in connexion with this question is that the general proportion of recoveries to attacks at the close of the week ending March 3 was 13·949 per cent., while at the close of the first week of November it was only 5·235 per cent. These figures refer to the general proportion of recoveries to attacks from the commencement of the disease to the dates indicated; but the proportion of recoveries to attacks reported in the seven days ending March 3 had risen to no less than 24·949 per cent. We are thus now saving one out of every four beasts attacked, while the attacks appear to be reduced by one-half.—*Times*, March 14.

THE following are the last week's Cattle Plague Returns·

| Census Divisions. | 1. Attacked. | | | 2. Result of reported Cases from the Commencement of the disease. | | | | |
|---|---|---|---|---|---|---|---|---|
| | Week ending March 3. | Week ending February 24. | Week ending February 17. | Attacked. | Killed. | Died. | Recovered. | Unaccounted for. |
| 1. Metropolitan Police District . . | 12 | 12 | 16 | 7612 | 3211 | 3485 | 333 | 583 |
| 2. South Eastern Co. . | 23 | 16 | 26 | 4989 | 1558 | 2779 | 442 | 210 |
| 3. South Midland Co. | 573 | 711 | 619 | 14512 | 2795 | 9697 | 1422 | 598 |
| 4. Eastern Counties . | 241 | 262 | 162 | 9258 | 3356 | 4656 | 694 | 552 |
| 5. South Western Co. | 41 | 48 | 26 | 1446 | 410 | 757 | 198 | 81 |
| 6. West Midland Co. . | 1007 | 293 | 1431 | 9119 | 1403 | 5905 | 1079 | 732 |
| 7. North Midland Co. | 1032 | 830 | 918 | 9843 | 2356 | 5857 | 937 | 693 |
| 8. North Western Co. | 1544 | 3938 | 4636 | 45200 | 2197 | 32529 | 4213 | 6261 |
| 9. Yorkshire . . | 1193 | 1369 | 1836 | 28656 | 2094 | 17944 | 5512 | 3106 |
| 10. Northern Counties. | 697 | 577 | 691 | 5484 | 1944 | 2469 | 914 | 157 |
| 11. Monmouthshire & Wales . . | 113 | 268 | 395 | 7188 | 126 | 5707 | 999 | 356 |
| 12. Scotland . . | 834 | 1843 | 2225 | 48752 | 4685 | 25879 | 9363 | 3825 |
| | 7310 | 10167 | 13001 | 187059 | 26135 | 117664 | 26106 | 17154 |

*Note a.*—The operation of "The Cattle Diseases Prevention Act," 1866, is indicated by the return this week, showing 5197 cattle as "killed," compared with 1711 last week, and 980 the previous week.

*Note b.*—246 inspectors have not reported this week in time for this return. Of these 22 reported cases last week—viz.:—For the county of Chester 1; Derby, 1; Lancaster, 3; Lincoln, 1; Norfolk, 1; Stafford, 1; East Riding of York, 1; West Riding of York, 2; the Metropolitan Police District, 1; Flint, 2; and for Scotland 8. These inspectors returned 1281 cases last week.

UNFOUNDED CHARGE AGAINST A PARISH SURGEON.—The Brighton papers contain an account of a charge of neglect preferred by one Henry Davis, of Essex Cottage, College-place, against Mr. George Geere, Medical officer for the eastern district of the parish of Brighton. The proceedings were ordered by the Poor Law Board, and were conducted by the Poor Law Inspector for the district. The subject of the inquiry was the death of a woman named Fanny Hutson, who died on Tuesday, Nov. 21 last, at 11, Paradise-street, the property of Mr. Davis, who alleged that she had died in her confinement through the negligence of Mr. Geere. He called witnesses with the view of showing that Mr. Geere had not promptly attended to the case; but their evidence was of a hearsay character only, founded upon statements which were said to have been made by the husband of the deceased, who had died about a fortnight after the wife of typhus fever. Mr. Pocock, one of the District Surgeons of the Dispensary, who attended the deceased woman up to the period of her confinement, informed the Court that she was suffering from typhus fever, and there seemed to be no doubt that the fever produced a premature birth and death. The persons who were with the family before and after the woman died said they heard no complaint made by the husband against Mr. Geere. All that could be construed into negligence was an unsupported statement that he had been sent for three times on the day of her death, and that he did not attend till after she was dead. It appeared that deceased had been attended from Nov. 17 to 20 by Mr. Pocock for fever, but when he was told she was pregnant he, it being against the rules of the Dispensary to attend to cases of parturition, advised her removal to the Workhouse Infirmary, or the obtainment of a parish Surgeon. On Tuesday, November 21, the husband made application to the parish and obtained a Medical order from the assistant-overseer for Mr. Geere to attend to the case. This order was issued at a quarter past twelve o'clock, and, when left at Mr. Geere's surgery, he was not at home. The woman was confined very shortly after the husband got back, assisted by a midwife who had been sent for; and at two o'clock a little girl was sent with a note to Mr. Geere to tell him Mrs. Hutson was put to bed. He was still out, and the girl brought the note back about four o'clock, having gone to a cousin's in the meantime, and at six o'clock Hutson was going again to Mr. Geere when he met him on the road. By the time he arrived the woman was dead. The assistant-overseer explained that, when the order was issued, the man made no reference to the case being urgent; that he never even said his wife was pregnant, or the order would have been endorsed "urgent;" but he merely applied for his wife to be removed to the Infirmary as suffering from fever. Mr. Geere, in reply to the inspector, said, had the order been marked "urgent," his deputy would have attended to the case. It was proved that others of the family had suffered from fever, and the description of the house was horrible. There were only three rooms in it—a bedroom, kitchen, and washhouse; no back yard or back windows, and there was a stench so offensive that Mr. Pocock said he was compelled on one occasion to stand outside the house to talk to the husband. Mr. Barber, one of the parochial visitors, said he asked the eldest daughter from whence this stench arose, and she pointed to a copper in the corner of the washhouse, and said, "That is where the 'matter' runs from the copper across the kitchen." There was a mark where something had been running from the copper, and had dried up; but in the area, close to the door, there was a privy, which was full and very offensive, and the bricks and mortar had fallen down. The daughter told him they could not use the privy, but were obliged to make use of utensils in the house, and she believed that what oozed from the copper came from the back yard of No. 10, next door. In this "house" there lived eight people! Its condition was reported to the Sanitary Committee of the Town Council, and Mr. Davis, who accused Mr. Geere of reporting it, admitted that he made no complaint against Mr. Geere till after the house was reported, and he gave as a reason why the complaint was so long deferred—six weeks after the death—that he could not obtain reliable information. At the conclusion of the inquiry the inspector said he had to make a report to the Poor Law Board, and had no doubt the guardians would receive it shortly, with, which he had no doubt they would like, an expression of opinion upon the case.

WE understand that the prospects of the Grand International Horticultural Exhibition and Botanical Congress, to be held in London in May next, are most encouraging. The ground to be occupied by the show, which is a portion of the site at South Kensington of the Exhibition of 1862, is already under preparation for the erection of the monster tent; and, according to the plans which have been adopted, the interior arrangements will be made most effective. The complimentary banquet to the learned foreigners who are invited to take part in the proceedings, and to attend as delegates from foreign governments, and which, thanks to the City Corporation, is to be held in the Guildhall, is drawing in as subscribers to the fund many who are anxious to do homage to the distinguished personages who will be present; while the Botanical Congress, which is to be under the presidency of M. de Candolle, is assuming from day to day a more practical shape; several eminent botanists, both at home and abroad, have already joined in working it out to a successful issue. The meetings of the Congress are to be held in the Raphael Cartoon Room at South Kensington, by permission of the Committee of Council on Education. This great horticultural movement, it should be remembered, is wholly of an independent character; and it must be a source of great gratification to the friends of scientific horticulture in this country that it has attracted so large an amount of voluntary pecuniary support, without which, indeed, it would not have been attempted. The expenses, however, will be heavy in proportion to the magnitude of the undertaking, and we learn officially that further aid is necessary to secure that the combined Exhibition and Congress be carried out in a spirited manner, which is highly desirable, having reference to their international character.

HOUSE ACCOMMODATION IN SCOTLAND.—

| | |
|---|---|
| Rooms without windows . . . . | 7,964 |
| Houses of one room . . . . | 226,723 |
| ,, two rooms . . . . | 246,601 |
| ,, three rooms . . . . | 75,933 |
| ,, four rooms . . . . | 37,186 |
| ,, five rooms . . . . | 19,910 |
| ,, six rooms . . . . | 15,278 |
| ,, seven and more rooms . . | 37,191 |
| Total houses in Scotland | 666,786 |

From this it would appear that, exclusive of the houses or dens without windows, there are 226,733 houses of only one apartment, or about one-third of the whole houses of Scotland. Any man of the least intelligence may judge what the social state of the people so accommodated must necessarily be. The sick and the whole, the living and the dead, must thus be huddled together without the possibility of separation; and the feelings and moral perceptions of the young must be blunted from their very earliest years. But this—bad as it is—does not represent the full amount of the evil, for 40,703 or these one-roomed houses have each from six to sixteen persons residing in them, as will be seen by the following table:

| | | | |
|---|---|---|---|
| 18,983 | One-roomed houses have | 6 | persons in each room |
| 11,770 | ,, ,, | 7 | ,, |
| 5994 | ,, ,, | 8 | ,, |
| 2538 | ,, ,, | 9 | ,, |
| 936 | ,, ,, | 10 | ,, |
| 295 | ,, ,, | 11 | ,, |
| 123 | ,, ,, | 12 | ,, |
| 40 | ,, ,, | 13 | ,, |
| 11 | ,, ,, | 14 | ,, |
| 9 | ,, ,, | 15 | ,, |
| 4 | ,, ,, | 16 | ,, |
| 40,703 | | | |

—*Working Man.*

## NOTES, QUERIES, AND REPLIES.

◆

He that questioneth much shall learn much.—*Bacon.*

Will B. B. be good enough to address a note to Dr. Hughlings Jackson respecting the report of his case at the Pathological Society?

*Amicus.*—Percival on Medical Ethics.

*Leicester.*—Mr. Marriott's communication is in the printer's hands, and shall appear shortly.

*Pereira's Materia Medica.—Doses of Medicines.*—Dr. Farre's letter has reached us too late for publication this week. It shall appear in our next impression.

*Oldham, Lancashire.*—The proceeding can only be carried out in good faith by the pupil serving our correspondent as his apprentice for a reasonable time.

*Beneficence.*—Mr. W. C. Grove, of Mere, Wiltshire, lately deceased, has bequeathed £200 to the Salisbury Infirmary, £100 to the Brompton Consumption Hospital, and liberal sums to other institutions not Medical.

*Anti-Quackery.*—The names of the delinquents have already been removed from the Register, and at a meeting of the Council of the College of Surgeons on Thursday, those of Whalley and Protheroe were removed from the list of members.

*W. B., M.D.*—It was J. C. Bruner, a Swiss Anatomist, who was born in 1653, who proved that the fluid secreted by the pancreas was not necessary to digestion, and that an animal may live after that viscus is taken out of the body.

*H. S., Kennington.*—It was not Leo's, but Pope Adrian's Physician, who, the night after the decease of his Holiness, had his door decorated with garlands, with the inscription "To the deliverer of his country."

*W. D. S., M.D., Worksop.*—You will find an editorial article on the "Reappearance of Scurvy in Britain and Ireland," in the *Medical Times and Gazette* of November 11, 1848, which will give you the desired information. We shall be glad to hear from you.

*Cattle Plague Legislation.*—As we have said, it is very likely the amendments of the Lords, amounting, as they do, virtually to a new Bill, will not meet with much favour in the House of Commons. When we consider the extent to which the disease prevails, it seems absurd to call upon the Privy Council to declare a particular district infected, and to subject it to exceptionally severe treatment. It would be better, we think, to invert the process, and allow the Privy Council to declare districts such as Wales and the northern counties of Scotland free from infection. We hope, however, that if the Commons see fit to disagree to the Lords' amendments, they will, at any rate, spare the clause which prohibits movement on canals or rivers so long as there is prohibition of movement on railways, and the clause which forbids the holding of fairs and markets for the next three months. The first is a simple act of justice to railway companies, who would be most unfairly used if forbidden to convey cattle when other means of transit were left open, and the second is aimed at the readiest means of spreading infection, and ought to have been inserted in the original Bill. We suppose this bungling and inadequate legislation is all we are likely to get, and that if not contented we must be at least resigned; but it seems hard that so much of the heavy sacrifices the country is called upon to endure in order to avert this disease should be neutralized by the discordant provisions of two Acts of Parliament and some twenty Orders of the Privy Council. Nobody, we suppose, is to blame, but the result seems only too likely to be that we shall endure many evils in order to get rid of the cattle plague, and fail to get rid of it after all.—*Times, Monday, March* 12.

⁂ It will be seen from our Parliamentary report, that Mr. Hunt's Bill, after weathering the storm in both Houses, is now withdrawn, and that it is left to the Privy Council to deal with the matter. The progress of the Bill and the warm discussion to which it has given rise, put one in mind of a modern review, where, after all the marching and counter-marching, the firing, smoke, noise, and dust, the matter is terminated with the order, "As you were."

*Millett* v. *Edmonds.*—We have received a statement from Dr. Frederic Edmonds, the defendant in this case, complaining of the comments made in various quarters on his conduct in the matter of an investigation into the cause of death of his brother. No good purpose would be answered by publishing Dr. Edmonds' letter; but we may say on his behalf that he is quite satisfied that all imputations made against the plaintiff were unfounded; and, secondly, that he himself was made to appear to take the part of prosecutor, when he never intended to do so. Suspicions had been aroused, and rumours were afloat, and Dr. F. Edmonds thinks that he was made a kind of scapegoat or catspaw in being put forward as the promoter of those rumours, and as having been made to appear to set on foot an investigation before the magistrates which was, and ought to have been, made by coroner and magistrates and not by himself He concludes by saying—

"Having resided nearly all my adult life out of England, I was, when this unfortunate case occurred, utterly ignorant of the forms and proceedings of English criminal law procedure. I did not know what constituted a 'prosecution,' nor what constituted constructively or technically a 'prosecutor.' I gave no instructions to prosecute Dr. Millett, and I do not know, and cannot learn, to this day by what particular act of mine, or of my solicitor, the so-called prosecution was commenced and instituted. The legal and Medico-legal proceedings in this matter will enable the Profession to understand the extreme difficulty and risk of utter ruin which may result to one by making any inquiry about the causes of sudden or other deaths occurring in the houses or families of Medical men. This case shows that it is equally as dangerous for Medical men, in whose homes such deaths have taken place, to institute any inquiry as it is for other Medical men to do so."

### The Rinderpest.

The following is an extract from a letter on the treatment of cattle plague, by Mr. W. Nisbet, of Egremont, which appeared in the *Liverpool Mercury* of March 5:—

"The chief object, however, of this letter is to draw more special attention to treatment. In cases of low typhus and other malignant diseases in man, quinine is largely used, and in visiting malarious countries, as Africa, all Europeans prime themselves with it. Then why not Cinchonise cattle? Surely a valuable beast is worth an ounce or two of quinine. If I possessed stock, and Rinderpest near, I would begin with ten grains of quinine (or half an ounce of Jesuits' bark) two, three, or four times a day and increase the dose on seisure to one or two scruples; otherwise, with proper attention to cleanliness, warmth, ventilation, strict isolation of the afflicted, and the moderate use of chloride of lime around, I would be careful to give the accustomed diet, paying great attention to its being sound and sweet, and, instead of cramming with patent potions or powders, a pint or quart of good ale or porter, repeated several times a day, might be desirable. Altogether, assimilating the treatment to that of man in low types of epidemic disease is natural, and well worth a trial; for if the animal can only be supported by stimulants, or by any means, over a few days, recovery is almost certain.

"I have only further to remark, if Dr. Beale's entozoic theory proved correct, I would be disposed to prescribe the powder of bitter quassia, especially where no milk would be tainted, that its Medicinal virtues might circulate in the system, as I have proved it to be as effectual in destroying grubs and caterpillars in plants as the white hellebore. The same idea presents arsenic in suitable doses as well worthy a trial.

"A similar treatment applies to the diphtheric hypothesis; but here I would suggest a more systematic trial of weak nitric acid or tincture of steel, as I have found them most useful in man, when given in frequent small doses—say one third of a drachm of either in a pint of water every four hours, to which a wineglassful of spirits might be added. Powdered charcoal, with or without borax, given in a quart of meal or rice gruel frequently, for a time, also offer a sound analogous practice. In fine, in all cases of cattle plague, good nursing, good air, and good diet, with the administration of tonics, if Medicine is given at all, and the avoiding of undue meddling and all depressing means, especially harsh drenches, should be the rule, and *nil desperandum* the motto cherished by every grazier and farmer in his present time of hard trial.—Yours, &c.,

"Surgeon."

### Naval Surgical Instrument Cases.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—With reference to your very just remarks respecting the instruments which Naval Surgeons are required to provide, let me inform you that these officers have to carry about with them a very cumbrous case containing what is called a "resuscitating apparatus"—that is, a fair-sized pair of bellows, divers tubes, both nasal and laryngeal, and—*horribile dictu!*—an instrument for introducing tobacco smoke into the rectum. It costs three guineas, and takes up much room. Of course no one ever thinks even of opening it; nevertheless, there is no shaking it off; it must be carried about from ship to ship, and certified for periodically. It is good for the Surgical instrument makers; that is all. Why then retain it?

I am, &c., Delta.

### The Report of the Army and Navy Medical Services Commission.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The report of the Commission of the Medical Department of the Army and Navy affords another illustration of "the mountain in labour," and is generally regarded as a lame and impotent conclusion. The pay of the executive ranks is slightly increased, but the retiring allowance after twenty-five years' service remains unimproved. Loud and general would have been the rejoicing had the Commission recommended the abrogation of the practice of promoting Surgeons by selection; but on this subject they have given no deliverance, although it is one which, in the ranks of the Department, is eagerly discussed and vehemently denounced.

I am, &c., R. A.

### Swelling of the Tongue.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Having seen in "Notes, Queries, and Replies," some statements relating to swelling of the tongue, etc., will you allow the following "notes" to be inserted in your valuable journal?

Two ladies of my acquaintance could not eat celery without enormous swelling of the tongue. With regard to other substances I may mention eggs. A friend of mine (a gentleman) cannot eat a duck's egg without experiencing disagreeable effects. Two other cases I may mention—both in females—in which the face turned yellow after eating an egg. Cayenne pepper causes itching of the scalp in a gentleman of my acquaintance, and vinegar causes a sensation of dampness under the lower eyelid in some persons. Apologising for taking up your valuable space,

33, Mornington-road, N.W., March 10. I am, &c.,
**H. L. Maysmor, M.D., F.R.C.S.E**

COMMUNICATIONS have been received from—

Mr. **Frederic Clowes**; Dr. J. Y. **Vinen**; **Apothecaries' Hall**; **The Secretary of the International Horticultural Exhibition**; Dr. **Yeld**; Mr. C. H. **Marriott**; Dr. H. L. **Maysmor**; Mr. **Gaskoin**; **Zeta**; **R. A.**; **Obstetrical Society of London**; Dr. **George Johnson**; Mr. **Lawson Tait**; **Medical Society of London**; Mr. **Armstrong Todd**; Mr. **Frederic Edmonds**; Dr. **John Whitmore**; **Odontological Society**; **Delta**; **Obstetrical Society of London**; Dr. **Fotherby**; Dr. J. C. L. **Carson**; Dr. C. R. **Bree**; **Amicus**; Dr. **Bence Jones**; Mr. **Spencer Wells**; Mr. E. **Bellamy**; Dr. **Hughlings Jackson**; Dr. **Rundle**; Dr. B. W. **Richardson**; Mr. **Marsh**; Mr. J. **Chatto**; **Pharmaceutical Society**; Dr. T. B. **Christie**; **Oldham**; Dr. F. J. **Farre**; Dr. J. **Adams**; Dr. J. **Buckenham**; Dr. **Ballard**.

BOOKS RECEIVED—

Monthly Report of the Health of the Parish of St. Marylebone.—Storer, Upon Removal of the Womb by Abdominal Section.—Supplement to the Returns of the Births, Deaths, and Marriages in Scotland.—Millett versus Edmonds.—Muter, On Alkaline Permanganates.—Bowman's Practical Chemistry. 5th Edition.—Beigel, On Inhalation.—Transactions of the Ethnological Society. New Series. Vol. IV.—Brown, Dr. F. J., Comments on the Recommendations of the Committee appointed to inquire into the Position of the Medical Officers of the Army and Navy.—Scott-Smith, A Few Comments on the Remarks on Homœopathy.—The New York Medical Journal, February, 1866.—Bouchut, du Diagnostie des Maladies du Systeme Nerveux par l' Ophthalmoscope.—Report of the Richmond District Lunatic Asylum, Dublin.—War Department, Surgeon-General's Office, Washington, U.S. Circular No. 6.

## VITAL STATISTICS OF LONDON.

*Week ending Saturday, March* 10, 1866.

### BIRTHS.

Births of Boys, 1157; Girls, 1115; Total, 2272.
Average of 10 corresponding weeks, 1856-65, 1934·5.

### DEATHS.

| | Males. | Females. | Total. |
|---|---|---|---|
| Deaths during the week .. .. .. | 935 | 894 | 1829 |
| Average of the ten years 1856-65 .. .. | 693·7 | 668·5 | 1362·2 |
| Average corrected to increased population.. | .. | .. | 1498 |
| Deaths of people above 90 .. .. .. | 1 | .. | 1 |

### DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

| | Population, 1861. | Small pox. | Measles. | Scarlatina. | Diphtheria. | Whooping-cough. | Typhus. | Diarrhœa. |
|---|---|---|---|---|---|---|---|---|
| West .. | 463,388 | .. | 12 | 5 | 1 | 5 | 8 | 4 |
| North .. | 618,210 | 5 | 14 | 13 | 2 | 5 | 22 | 2 |
| Central .. | 378,058 | .. | 7 | 5 | 1 | 7 | 7 | 2 |
| East .. | 571,158 | 10 | 8 | 26 | 2 | 26 | 9 | 4 |
| South .. | 773,175 | 1 | 12 | 5 | 2 | 23 | 13 | 3 |
| Total .. | 2,803,989 | 16 | 53 | 54 | 8 | 66 | 59 | 15 |

## COMPOSITION AND QUALITY OF THE METROPOLITAN WATERS IN FEBRUARY, 1866.

The following are the Returns of the Metropolitan Association of Medical Officers of Health:—

| | Total Solid Matter per Gallon. | Loss by Ignition.(a) | Oxydisable Organic Matter.(b) | Hardness. | |
|---|---|---|---|---|---|
| | | | | Before Boiling. | After Boiling. |
| *Thames Water Companies.* | Grains. | Grains. | Grains. | Degs. | Degs. |
| Grand Junction . . | 20·99 | 0·94 | 0·56 | 13·9 | 4·1 |
| West Middlesex . . | 20·56 | 1·09 | 0·60 | 13·6 | 3·8 |
| Southwark and Vauxhall. | 22·81 | 1·34 | 0·72 | 13·9 | 4·5 |
| Chelsea . . . . | 20·51 | 1·28 | 0·64 | 13·9 | 4·0 |
| Lambeth . . . . | 21·15 | 1·00 | 0·66 | 14·0 | 4·5 |
| *Other Companies.* | | | | | |
| Kent . . . . . | 20·38 | 1·45 | 0·10 | 18·0 | 8·5 |
| New River . . . | 21·20 | 1·28 | 0·39 | 15·0 | 4·8 |
| East London . . . | 22·20 | 1·00 | 0·49 | 15·5 | 5·0 |

(a) The loss by ignition represents a variety of volatile matters as well as organic matter, as ammoniacal salts, moisture, and the volatile constituents of nitrates and nitrites.

(b) The oxydisable organic matter is determined by a standard solution of permanganate of potash, the available oxygen of which is to the organic matter as 1 is to 8; and the results are controlled by the examination of the colour of the water when seen through a glass tube two feet in length and two inches in diameter.

### BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, March 10, 1866, in the following large Towns:—

| Boroughs, etc. | Estimated Population in middle of the Year 1866. | Persons to an Acre. (1866.) | Births Registered during the week ending Mar. 10. | Deaths. | | Temperature of Air (Fahr.) | | | Rain Fall. | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Corrected Average Weekly Number.* | Registered during the week ending March 10. | Highest during the Week. | Lowest during the Week. | Weekly Mean of the Mean Daily Values. | In Inches. | In Tons per Acre. |
| London (Metropolis) | 3067536 | 39·3 | 2272 | 1400 | 1829 | 47·7 | 27·5 | 36·8 | 0·10 | 10 |
| Bristol (City) . . | 163680 | 34·9 | 126 | 73 | ‡117 | 46·2 | 25·6 | 36·1 | 0·28 | 28 |
| Birmingham (Boro') | 335798 | 42·9 | 252 | 163 | 214 | 44·6 | 29·2 | 35·3 | 0·38 | 38 |
| Liverpool (Borough) | 484337 | 94·8 | 416 | 281 | 515 | 44·0 | 30·5 | 37·3 | 0·03 | 3 |
| Manchester (City) . | 358855 | 80·0 | 256 | 203 | ‡313 | 46·8 | 13·0 | 33·4 | 0·45 | 45 |
| Salford (Borough) . | 112904 | 21·8 | 100 | 57 | 70 | 45·5 | 16·3 | 33·2 | 0·49 | 49 |
| Sheffield (Borough) . | 218257 | 9·6 | 154 | 115 | 150 | 42·6 | 22·7 | 33·7 | 0·32 | 32 |
| Leeds (Borough) . | 228187 | 10·6 | 189 | 116 | 179 | 45·3 | 20·8 | 34·8 | 0·28 | 28 |
| Hull (Borough) . | 105233 | 29·5 | 75 | 49 | 53 | .. | .. | .. | .. | .. |
| Nwcastl-on-Tyne, do. | 122277 | 22·9 | 85 | 65 | 70 | 41·0 | 23·0 | 33·9 | 0·49 | 49 |
| Edinburgh (City) . | 175128 | 39·6 | 120 | 84 | 142 | 43·7 | 21·0 | 33·4 | 0·60 | 61 |
| Glasgow (City) . . | 432265 | 85·4 | 355 | 252 | 291 | 47·0 | 20·8 | 34·3 | 0·16 | 16 |
| Dublin (City and some suburbs) . | 318437 | 32·7 | 186 | †156 | 212 | 49·0 | 21·2 | 34·8 | 0·30 | 30 |
| Total of 13 large Towns . . . . | 6122894 | ·34·4 | 4586 | 3014 | 4155 | 49·0 | 13·0 | 34·8 | 0·32 | 32 |
| | (1863) | | | | Week ending Mar. 3. | Week ending Mar. 3. | | § | | |
| Vienna (City) . . | 560000 | .. | .. | .. | .. | .. | .. | .. | .. | .. |

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·538 in. The barometric pressure fell to 29·02 in. on Wednesday, and rose to 30·23 in. on Saturday.

The general direction of the wind was N.N.E.

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* The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.

† Registration did not commence in Ireland till January 1, 1864; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in that city were the same as the averages of the rates in the other towns.

‡ The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

§ The mean temperature at Greenwich during the same week was 36·8°.

## APPOINTMENTS FOR THE WEEK.

### *March* 17. *Saturday (this day).*

*Operations* at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free Hospital, 1½ p.m.

Royal Institution, 3 p.m. Rev. G. Henslow, "On Structural and Systematic Botany."

### 19. *Monday.*

*Operations* at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.

Medical Society of London, 8 p.m. Clinical Discussion. Cases by the President and others. Mr. De Méric, "On the Use of Mercury in Syphilis."

### 20. *Tuesday.*

*Operations* at Guy's, 1 p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; St. Peter's Hospital for Stone, 3 p.m.

Anthropological Society of London, 8 p.m. Meeting.

Pathological Society, 8 p.m. Meeting.

Royal Institution, 3 p.m. Professor Frankland, F.R.S., "On the Non-metallic Elements."

### 21. *Wednesday.*

*Operations* at University College Hospital, 2 p.m.; St. Mary's, 1¼ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.

Hunterian Society, 8 p.m. Mr. Bader, "On the Impairment of Vision in Albuminuria."

### 22. *Thursday.*

*Operations* at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; West Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.

Royal Institution, 3 p.m. Professor Frankland, F.R.S., "On the Non-metallic Elements."

### 23. *Friday.*

*Operations*, Westminster Ophthalmic, 1½ p.m.

Royal Institution, 8 p.m. H. Bence Jones, M.D., F.R.S., "On the Existence in the Textures of Animals of a Fluorescent Substance closely Resembling Quinine."

## EXPECTED OPERATIONS.

St. Peter's Hospital for Stone and Urinary Diseases—The following Operations will be performed on Tuesday at three o'clock:—
Lithotrity (two cases, men); lithotomy (a child).

# ORIGINAL LECTURES.

◆

NOTES ON

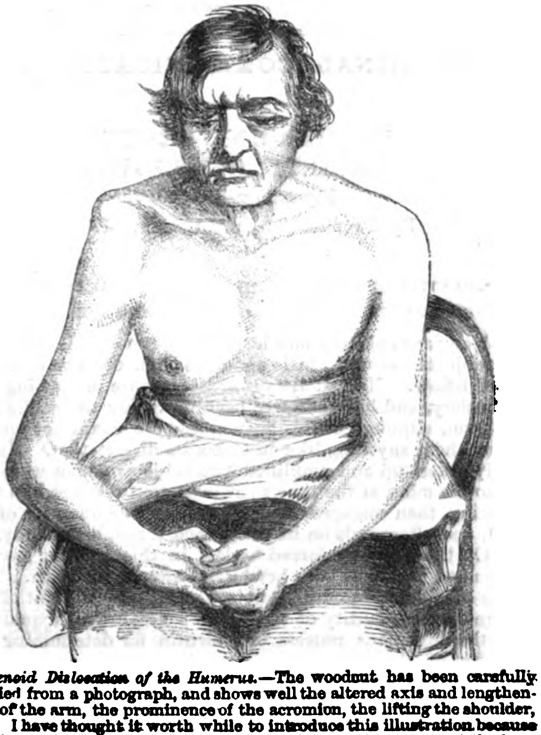
## SOME OF THE MORE RARE FORMS OF FRACTURES AND DISLOCATIONS,

BEING EXTRACTS FROM LECTURES (CLINICAL AND OTHERWISE)
DELIVERED AT
The London Hospital.

By JONATHAN HUTCHINSON, F.R.C.S.,
Surgeon to the Hospital and Lecturer on Surgery.

(Continued from page 248.)

*Fractures of the Neck of the Humerus.*—I have already adverted to the difficulty of distinguishing between a fracture high up and dislocation. You will easily understand that the higher the fracture the more closely do the symptoms approach to those shown by a dislocation. Again let me urge the paramount importance of a correct diagnosis in the first instance. If it is a fracture, crepitus ought to be detected, and if detected, it is conclusive. In most cases other symptoms will be sufficiently definite—the altered axis of the arm, the elbow carried away from the chest, the lengthening of the arm, the limited motion and the very marked sub-acromial hollow, denote the case as one of dislocation. An unusual amount of swelling and ecchymosis, ability to put the elbow close to the side, inability on the part of the patient to make any use whatever of the arm, but tolerably free motion when manipulated by the Surgeon—these all indicate fracture. I speak now, however, not of the common run of cases, in which the diagnosis between fracture and dislocation ought never to be difficult, but of the rare ones, in which either the symptoms are unusual, or, from the patient's extreme obesity, they are difficult of estimation. I show you a stereoscopic portrait of a man with a common dislocation into the axilla, the bone being lodged under the glenoid fossa. It is one in which a mere glance is sufficient for diagnosis.



*Subglenoid Dislocation of the Humerus.*—The woodcut has been carefully copied from a photograph, and shows well the altered axis and lengthening of the arm, the prominence of the acromion, the lifting the shoulder, etc. I have thought it worth while to introduce this illustration because in the one usually given in books (copied from Sir A. Cooper) the bust and arm are so well covered by drapery that the real points are quite concealed. In this instance the dislocation had existed for ten days before the photograph was taken. It was easily reduced.

*Diagnosis of Dislocation in Difficult Cases.*—In contrast with it I may mention one which I well recollect, in which a lady of immense obesity was the supposed subject of a dislocation. She was a little mountain of fat, and as for discovering the prominence of a bone on any part of her person, it was a mere impossibility. Her elbows were habitually propped away from her sides quite as much as in the most marked dislocations, and it was hopeless to attempt to detect hollow under the acromion or prominence in the axilla. We administered chloroform, and I then satisfied myself by the freedom of motion which was permitted, that no dislocation existed. Cases more or less similar are not very unfrequently met with, and when they are, indeed whenever from any cause the diagnosis is obscure, I urge strongly the advantage obtained from the use of chloroform. Do not desist from your first examination until your opinion is quite decided, for you will never afterwards have so good an opportunity. I have but one caution to give as to excess in this direction, and that is as regards elderly and feeble patients. Old people not unfrequently suffer from fracture high up through the tuberosities, just as they are liable to fracture of the neck of the thigh bone and of the cancellous structure at the base of the trochanter. In such cases, if the symptoms of dislocation are simulated, you may, perhaps, be led to make an examination which will be injurious to the patient. A good deal of irritation and constitutional disturbance often follows these accidents in old people. Sometimes it amounts to senile traumatic delirium, and now and then it ends fatally. In such patients prolonged examination is dangerous, and likely to much increase the constitutional irritation. In most of the cases in which I have seen traumatic delirium follow fractures of the neck of the humerus or neck of the femur, uncertainty had been felt in the diagnosis, and prolonged examination had been made. In such, therefore, you must be careful, and having once elicited a decided crepitus, at once desist from further movements of the limb.

I have just remarked that sometimes in dislocation into the axilla the symptoms are ill characterised; more especially is the symptom of projection of the elbow away from the chest liable to mislead. It is not by any means always the case that a patient with a recent dislocation cannot touch his ribs with his elbow. Three months ago I demonstrated this to you in a case of old dislocation (six months) in which with the greatest ease the man's elbow could be put to his side. The next week Mr. Dawson (then one of our House Surgeons) told me that in a case which he had reduced the night before my assertion as to the possibility of this was fully borne out. In a third instance, which occurred last Sunday, a man with a subcoracoid dislocation of the most marked kind, and of a few hours' duration, could bring his elbow close to his side with tolerable ease and without any pain. We find, therefore, that we must take symptoms in group, and not rely too firmly on any single one.

*Subclavicular and Dorsal Dislocations.*—Of the rare forms of dislocation of the humerus we have not recently had any examples with the exception of one of displacement downwards, and to some extent backwards. The head of the bone had not, however, passed fairly on to the infraspinous fossa. It rested just a little behind its edge. I have never seen an instance of dislocation forwards beneath the clavicle and to the inner side of the coracoid process, and agree with those who think that unless the latter process be broken off such a dislocation can scarcely occur. No doubt the majority of what are called dislocations forwards are really subcoracoid displacements. In some of these it is easy to see by the prominence of the head of the bone beneath the pectoral muscle, and by the inclination of the elbow backwards as well as outwards, that the dislocation is not directly downwards, but in a majority the symptoms are not easily distinguished from those of subglenoid dislocation. From the cases which I have examined, I quite agree with those who think subcoracoid a more frequent form of dislocation than subglenoid. The two together make up what are known as dislocations downwards or into the axilla. Even in the best-marked examples of subcoracoid dislocation the humerus does not invariably slant backwards; often it is merely outwards, and now and then even a little forwards.

*Reduction in Recent Cases.*—As regards the reduction of recent dislocations at the shoulder, several different plans are of almost equal efficiency. Sometimes one plan and sometimes another is in favour in our receiving-room. Recently I heard of invariable success with the knee in the axilla, and still more recently of the triumphs by the method of elevating the arm. All admit that the old-fashioned plan by the heel in the axilla is very efficient. From the fact that out of the large number which present themselves at this Hospital we scarcely ever have one in which chloroform is needed, we may gather that by one or other method success is generally obtained easily. Each Surgeon has his favourite plan. The one which I prefer, and which I have "never known to fail," is that of combining extension outwards with the knee in the axilla and the use of the humerus as a lever. The extension force of two assistants is always sufficient, and I have never known pulleys necessary. Let the arm be extended straight away from the chest, then at a certain sign let the elbow be depressed so as to make the humerus act as a lever on the Surgeon's knee. If difficulty is encountered, try the same method again, and make slight rotation of the limb whilst depressing it. I have never heard of a case at this Hospital in which reduction was found impracticable(a). Of course I am speaking of recent injuries only.

*Reduction of Old Dislocations.*—We get a fair share of old cases of unreduced dislocations, but these are mostly instances of neglected diagnosis, not of failure in the attempt at reduction. A good number of reductions at various periods under three weeks or a month have occurred during the last few years, but I do not recollect any instance of success after unusually long periods. I am not myself an advocate for attempts to reduce very old dislocations. It seems to me that in making such we run much more risk than the prospect of advantage warrants. After all, an arm with an unreduced dislocation at the shoulder is a very useful one, and after the lapse of years the patient experiences scarcely any inconvenience. The longer the duration, the greater the range of motion; it goes on improving with every year the patient lives. Set against this, first, that attempts at reduction will very likely fail after having caused the patient much pain, and perhaps greatly increased the thickening of the tissues about the joint; second, that they are really dangerous, and that many patients have died after them either from inflammation of the part, or from rupture of an artery or vein. In a case, not long ago, of a six weeks' dislocation we were compelled to desist because the skin had torn across the axilla. This curious accident occurred whilst we were trying the heel in axilla method, and without the application of any unusual force, nor was the operator's boot on. Suddenly the skin gave way from side to side and a great transverse rent presented itself. The patient was a woman of 50, of lax, flabby tissues. We were compelled to desist. The wound healed quickly, and the patient is at the present date very well content with her condition, and assures me that she can use the limb nearly as well as the other.

The longer the dislocation has existed, the greater the danger of attempting its reduction, and the less also will be the gain of the patient. If the patient be young, there is certainly in that fact a motive for a careful trial; but if, on the contrary, he be old, and with degenerate tissues, then let me beg of you not to allow any impulse of selfish vanity or the desire to vaunt an unusual success mislead your judgment into attempting that which is not really for your patient's advantage. Let him go elsewhere if he likes, and let another possibly obtain the credit of success; you will still be able to reply, with the celebrated General, that, despite the fact of victory, you still hold to your former judgment that the battle ought not to have been fought. I will relate to you a warning case, which occurred to us about a year ago. Although we made the attempt under a mistaken impression as to the duration of the lesion, yet that does not make the case the less instructive as an instance of what may occasionally follow these attempts.

*Death from an Attempt to Reduce an Old Standing Dislocation of the Humerus.*—An elderly Irishwoman was one night carried in so tipsy that she could give no account of herself. She had a dislocation of the right humerus into the axilla. The House-Surgeons and dressers tried their utmost to reduce it, and failed. In the morning, when sober, or nearly so, she informed us that her shoulder had been dislocated for several years. I discredited her statement, believing that, as is not unfrequently the case, she wished to deceive us, in order to prevent us putting her to pain. We accordingly gave her chloroform, and again tried to reduce. The method tried was by extension directly outwards, using the knee in the axilla as a fulcrum. We did not employ pulleys, nor resort to any unusual degree of violence. The extension was manual only. We did not occupy more than ten minutes in this second attempt; finding that the bone did not move, I concluded that the woman's story was correct, and desisted. Great inflammation followed this attempt. The shoulder-joint suppurated. The abscesses were freely opened, but the woman, who had been a very intemperate person, in spite of liberal support, sank into a very low condition, and at length died. At the autopsy we found a new cup of bone, formed below and in front of the glenoid cavity, for the reception of the head of the humerus. The soft tissues of the joint were wholly destroyed by suppuration, and every trace of cartilage removed. The dislocation had been subcoracoid, and the head of the bone still rested immediately beneath that process. The chief interest of this case seems to me to be, not in the circumstance that we discredited the statement of a drunken old woman, when unfortunately it was perfectly true, but in the illustration it affords of the dangers which sometimes attend attempts at the reduction of old dislocations. No injury had clearly been done by the first attempt, it was the second one which caused the mischief. Yet this attempt was by no means a prolonged or violent one. I have often tried much longer and used much more force. As regards the degree of usefulness retained by a permanently dislocated shoulder, we may just note that this woman assured us that she had experienced no appreciable detriment. She "could do anything with the arm; it was just as good as the other." In another case, which was under my care a few months ago, an old woman, who had a dislocation into the axilla of three months' standing, said that her arm was quite useful to her, and that, "excepting lacing her stays with it, she could do anything." She could not get the arm behind her. She was most unwilling that anything should be attempted. These facts, showing on one hand that this form of dislocation does not entail much inconvenience if left unreduced, and on the other that attempts at reduction in old-standing cases are not devoid of danger, seem to me to point very clearly to our wisest line of practice.

As regards the Surgical neck, upper third, and middle third of the humerus, I have nothing of especial interest to state. These injuries are easy to treat in almost all instances, for the bone is well buried amongst muscles, so that any irregularity which may be permanent is concealed; and secondarily, so long as we get it straight in direction, a little shortening is of no consequence. A man finds it out if his thigh is shortened after a fracture, but he feels no inconvenience from a little inequality in the length of his upper extremities.

## ORIGINAL COMMUNICATIONS.

◆

## ADDRESS TO THE UNIVERSITY MEDICAL SOCIETY, GLASGOW.

FEBRUARY 3, 1866.

By Professor BUCHANAN, M.D.

THE QUANTITY OF BLOOD IN THE BODY—EXPERIMENTS ON CONDEMNED CRIMINALS—THE CARDIOGRAPH AND SPHYGMOGRAPH.

THE lecturer explained how he had come to associate together two subjects having so little apparent connection as those discussed below. He had always great pleasure in meeting with the Society, and had therefore been unwilling to decline their invitation, although at this busy season he could not pretend to offer them anything like an elaborate dissertation. He had merely taken up and amplified two subjects which were present to his mind at the time their invitation reached him from his being then engaged in lecturing on the quantity of the blood, and afterwards on its circulation through the body.

1. On the respect enforced by law in this country towards condemned criminals both before and after their death.

The consideration of this subject arose naturally out of the lecture on the quantity of the blood. You are all acquainted with the ingenious process of Valentin for determining the quantity of the blood. It is mathematically accurate as applied to a liquid contained in shut vessels; but as the capillary system of blood vessels resembles much more a sieve than a shut vessel, no reliance can be placed upon Valentin's method for determining the quantity of the blood. The water injected into the vein would be dissipated, and never equably mixed with the whole mass of blood; hence the second measure of blood taken would be too rich, and so the estimate of the quantity of the blood would be too high. Valentin estimates the quantity of blood as one-fifth of the weight of the body.

On the whole, the most straightforward and trustworthy mode of finding the quantity of blood in the body of any animal is to weigh it, bleed it to death as rapidly as possible, and weigh it again. The difference of the two weights is the quantity of blood which has flowed from the body, and the quantity still remaining in it must be estimated by injecting water into the arteries till it returns free from colour by the veins, evaporating the water, and finding the quantity of blood which the residuum represents by comparing it with the residuum left from known quantities of blood mixed with water.

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(a) Dr. Hamilton has with great candour recorded a case of recent dislocation into the axilla in which he and his colleagues after four attempts, and after using chloroform and pulleys, were unable to effect reduction.

In this way it has been found that in the sheep the weight of the blood is to the weight of the whole body as 1 to 25; in the lamb as 1 to 20⅓; in the dog as 1 to 10 or 9·6. Now, it was impossible amid these discrepant results to determine the proportion in man, although it was reasonable to conjecture that it would be nearer the proportion in the dog than that in herbivorous animals. The only method, therefore, of solving the problem was to have the experiment performed upon a man. Now, Weber and Lehmann were enabled, by the intelligence of the Saxon Government, to perform this experiment. They weighed the bodies of two criminals before and after decapitation, thus determining the quantity of blood that flowed directly out of the trunk and head, and then the quantity of blood still remaining in the blood-vessels was determined as above. The result was as follows:—

| | Gram. |
|---|---|
| One of the men weighed before decapitation . | 60,140 |
| „ „ after „ | 54,600 |
| Blood flowing from vessels . . . . | 5,540 |
| Blood washed out . . . . . | 1,980 |
| Total blood . . . | 7,520 |

This quantity is almost exactly one-eighth of the weight of the body—a proportion confirmed by the result of the experiment made on the other criminal. We may infer, therefore, that in a man of ten stone the quantity of blood is 17½ lbs.

Alongside of these experiments I would place one of Kuchenmeister, who, to show the bad effects of diseased pork upon the human body, introduced cystocerci into the food of a condemned criminal, and found them after death to be developed into tapeworms in the man's bowels.

All of these experiments were made without the slightest suffering to the unfortunate men on whom they were performed, and made to answer ends important to science, and therefore to humanity and to civil society.

Now, I hold it to be the part of a wise Government, anxious to promote the welfare of those subject to it, to adopt every legitimate means to accomplish that object, and that of such means there is none more legitimate than that of converting the bodies of criminals who have forfeited their lives to the violated laws of their country into a source of benefit to the community, always provided that no injury be done to the prisoners themselves. This principle has been recognised from time immemorial in the penal code of our own country, and till of late habitually acted upon. Among the first persons inoculated in London for small-pox were felons, who purchased their lives by submitting to the operation—an excellent bargain certainly for them, and a still better one for the community—profitable, therefore, on both sides, which is all that a commercial people can desire in their mercantile transactions. Such was the public confidence inspired by these trials, that not long after some of the members of the Royal Family were subjected to inoculation. Still further, till within the last thirty years, or thereabouts, the bodies of murderers and other great malefactors were not only permitted, but commanded by law, to be dissected.

But, however sound might be the principle on which this injunction was founded, it is now fully recognised that there was an error in making it a part of the penal sentence that death was to be followed by dissection. It made people suppose that to be dissected after death was ignomnious, because it formed part of the punishment of felons, and thus raised a deep-seated and almost universal prejudice against the practice of dissection, to counteract which the philosopher Bentham, as other great men had done before him, left his body to be publicly dissected for the good of mankind. This faulty legislation did more harm still, by degrading the members of the Medical Profession, by placing them on the rank of the public executioner, seeing they were ordained to complete after death the ignominious sentence of which the hangman had executed the first part.

It was, therefore, a great improvement upon our penal code which was made at the time mentioned above, when the obnoxious law, enjoining the dissection of malefactors as a part of their punishment, was abolished.

But never was the spirit of any law more thoroughly misunderstood than that of the new or amended law here in question. It was enacted on behalf of the members of the Medical Profession, and to do away with an irrational prejudice in the public mind against dissection. But it was never intended to be the palladium of condemned criminals, to render their persons during life and after death sacred and inviolable. But such is the actual interpretation that has been put upon this law, and the practice that has resulted from it. The good old principle of our law, that the dead body of a criminal is public property, and ought to be turned to public account, is held to be a relic of barbarism; and we hold ourselves to have attained to a great height of wisdom and of civilisation, because the dead bodies of felons are in this country held sacred, and interred untouched, immediately after death, within the precincts of the gaol. There is no form of human folly so unbearable as that which disguises itself under the garb of wisdom.

To such a ridiculous length has this form of "red tapeism" been carried, that in the case of a wretched criminal executed in Glasgow the members of the Phrenological Society despaired of being able to obtain a cast of his head; and only obtained it, at length, through the intercession of an intelligent clergyman, whose high character and humane care of the criminal after condemnation gave weight to his intercession. As to the examination of the brain, which would have been so deeply interesting, it was deemed utterly vain to make any application respecting it. The same spirit was shown in a less objectionable form towards the many foolish people who coveted a lock of hair from the head of the great criminal or a tuft from his beard. To all such applications the subordinate functionaries replied with dignity that the criminal was under the protection of the law, and not a hair of his head should be violated.

Now, I regard this as an absurd and misplaced sentimentality, founded on an utter misconception of the spirit of the law by which it is supposed to be sanctioned. I hope the day may soon arrive when a policy on this subject will be adopted in this country which shall be more enlightened without being less humane. The bodies of condemned criminals are public property, and no public property should be uselessly wasted when it might be turned to profitable account. The heads of all persons undergoing capital punishment should be carefully examined; the brain should be taken out, weighed, and examined, the cerebrum and cerebellum separately, and all the so-called phrenological organs, as those of destructiveness and acquisitiveness, leading to murder, violence, and theft; and the whole results should be carefully preserved in a public register. Nor should the scrutiny be confined to the head alone. All the other organs of the body should be carefully examined; and if we fail in finding the treasure we are in quest of, we may trust to the old fable, that we shall receive in another form an ample return for our labour. Besides this, every facility and encouragement should be given to intelligent members of the Medical Profession suggesting experiments and modes of treatment that may redound to the public good without compromising the health or feelings of the prisoners. Lastly, Government ought to sanction a commutation of punishment, extending to criminals of every class, a liberal remission of the awarded penalty being made in consideration of benefit rendered to the public by the criminal submitting to certain forms of diet and regimen, to the operation of certain medicinal agents, and to other physiological conditions, considered by competent Medical authorities as equivalent to the punishment to be remitted.

2. On the cardiograph and sphygmograph of M. Marey.

Under this second heading of his address, the lecturer directed the attention of the Society to the work of M. Marey, of Paris, entitled "Medical Physiology of the Circulation of the Blood," characterising it as among the most important contributions that has been made of late years to physiology and physiological medicine. He described the ingenious instruments devised by Dr. Marey, by which each of the organs of the sanguiferous system is made to tell its own tale, and authenticate it by a permanent autograph, which can be read and studied at leisure. The autographic delineations of the auricles and ventricles of the heart, of the heart pulse, and of the arterial pulse, were then exhibited, as taken from M. Marey's work; and, lastly, the sphygmograph was exhibited in operation.

# GUNSHOT WOUND OF THE ABDOMEN.

## LODGMENT OF THE BULLET, AND ITS ESCAPE AFTER A PERIOD OF SEVEN YEARS AND A-HALF INTO THE ALIMENTARY CANAL, CAUSING INTERNAL STRANGULATION AND DEATH.

By **WILLIAM JOHN RUNDLE**, M.D., Ext. L.R.C.P. Lond.
(One of the Medical Officers of the Royal Portsmouth Hospital.)

A. B., aged 40, an officer in the Royal Artillery, received a severe gunshot wound of the abdomen during the Indian mutiny, seven years and a-half before his death. On April 2, 1858, when commanding a company of Artillery at an attack upon some forts of the Island of Beyt, in the Gulf of Cutch, he was struck by a bullet just above the sword belt, which passed down between the cloth and lining of the tunic for a short distance, and then obliquely entered the abdomen two inches above and one inch to the right of the umbilicus. He was immediately carried off the field, placed on board ship, and then taken to Bombay. The Medical officers who attended him had at first very little hope of his recovery, and he was mentioned in the dispatch of the commanding officer as being "very dangerously wounded in the abdomen." The history of this part of the case is very deficient, and little is known respecting the progress of the wound beyond the fact that it healed in the course of four or five weeks, and that he rapidly regained his health and strength. On his return to England, a few months after his recovery, he consulted several Surgeons, who were unanimous in the opinion that the bullet was lodged in the abdomen, and urged him to refrain from all unnecessary exertion for fear of disturbing it from its position.

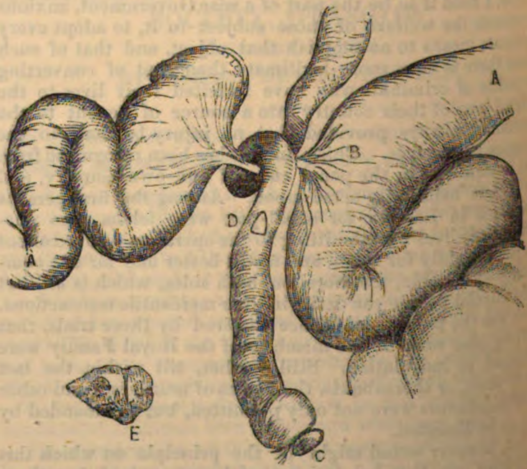
The patient has been well known to me for the last four or five years, and during that time he has suffered from occasional attacks of constipation, which were relieved by gentle aperients and enemata. He continued in his usual health up to Monday, October 16, 1865, when, about midday, he began to complain of sickness and abdominal pain. During the evening I visited him, and prescribed a draught and full enema. In a few hours, however, he rapidly changed, and at five the next morning I found him in a state of collapse, vomiting frequently a fetid and dark-coloured fluid, with a cold skin and almost imperceptible pulse. He gradually sank, and died at 7 a.m.

*Post-mortem Examination Forty-eight Hours after Death.*—The body presented externally a cicatrix, about the size of a sixpence; it was situated two inches above the umbilicus and one to the right of the median line, and was continuous with a fibro-cellular cord which extended obliquely downwards and inwards through the abdominal walls for two inches, and then became lost in the surrounding structures. On opening the abdomen, the parietal peritoneum was free from adhesions, and everywhere healthy; and no scar or puckering could be seen on its surface marking the spot at which the bullet penetrated the cavity. The superficial intestines were pale and much distended with flatus; but on turning them aside, a few coils, deeply congested, were found lying in the right iliac region. In this situation the alimentary canal was bound together by several old and firm adhesions, and around one of them—a short and narrow band attached to two adjacent pieces of intestine—another portion of the gut had become completely twisted. At the seat of the twist the intestine was stretched into the semblance of a cord, and perfectly occluded, and about three inches below it the bullet was discovered lying loose in the canal. The peritoneal cavity was quite free from any kind of effusion, and there were no flakes of lymph or other traces of recent inflammation. The mesentery was likewise healthy, and contained a moderate amount of fat; and neither in this organ nor in the coats of the intestines could any thickening or cavity be found to indicate the part where the missile had remained encysted for so many years. All the other organs were healthy. The bullet is about the size of a small nut, flattened at one extremity and irregularly conical at the other. It weighs 372 grains, and appears to have been rudely manufactured from a rod of lead, according to the custom of the Asiatics.

*Remarks.*—From the position of the cicatrix, and the direction of the tract through the abdominal walls, together with the distinct traces of bygone inflammation, it is evident that the missile penetrated the body obliquely, passed into the abdominal cavity, and there found a lodgment between the intestines in the right iliac region. It is also certain that the bullet must have remained encysted for many years, either in some portion of the mesentery or between the coats of the intestines, and recently, under the influence of gravity or muscular action, or else the changes produced by the absorption of the surrounding tissue, it escaped into the alimentary canal. Although the intestines and mesentery were carefully examined, it was found impossible to determine with certainty the part in which the ball had been originally impacted; but this is not surprising when we consider the small size of the cyst, and the rapidity with which such a cavity would contract amid such soft and yielding strictures. Moreover, as a general rule, foreign substances travel very slowly when lodged within the body; therefore in this case it is quite possible that some contraction of the adjacent tissue may have followed the first movements of the ball before it wholly escaped from its position; and even when these gradual changes were accomplished, and it was lying free in the intestinal tube, some days may have elapsed before the fatal accident. The passage of any solid matter along the alimentary canal is always attended with a certain amount of risk; but it was unusually hazardous in this case from the presence of adhesive bands, which bound together the intestinal coils in the right iliac region. These bands, by limiting the muscular contractions of a portion of the small intestine, must have often delayed the passage of its contents; and thus we can explain the occasional attacks of constipation from which the patient suffered. The close proximity of the bullet after death to the seat of strangulation clearly proves that it was the exciting cause of this fatal complication. During some irregular peristaltic movements occasioned by its presence in the canal, that portion of intestine in which it was contained caught on a fibrous band, and then twisting upon itself resulted in the sudden and irremediable obstruction. At the moment of strangulation it is very probable that the bullet was grasped within the twist, and that after death it was dislodged from this position, partly by its own weight and partly by the relaxation of the surrounding structures. It is a singular fact that the products of the peritoneal inflammation which immediately followed the entrance of the ball into the abdominal cavity, formed the snare in which it became entangled, just as it was about to be expelled through the natural passages after remaining imprisoned for so many years.

I am indebted to my friend, Dr. Cousens, of Portsea, for the accompanying sketch of the post-mortem appearances:—

SKETCH SHOWING SEAT OF STRANGULATION.



A, A, coils of intestine, united by the fibrous band, B, around which the gut, C, was entangled. D, bullet lying loose in the canal. E, size a shape of bullet.

Audrey House, Gosport.

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THE REPORTED OUTBREAK OF CHOLERA AT ALEXANDRIA.—It has been emphatically denied by the French Consul-General that the epidemic has reappeared at Alexandria. One case is said to have occurred on the 7th inst. The Quarantine at Malta has been removed.

MR. BAKER BROWN has just been elected a Member of the Medical Society of Christiania, in recognition of his services in Operative Surgery.

# REMOVAL OF A FOREIGN BODY FROM THE URETHRA.

### By THOS. B. CHRISTIE, M.D.

The following case I have thought might be interesting, as showing what peculiarities are developed in the insane under the various phases of delusion they are the subject of, and also to what extent the male urethra may be quickly dilated:—

On Saturday, March 10, about 1 a.m., I was called to see an inmate of the Asylum—D. M., aged 55 years—who complained to the attendant of the ward that he was unable to void urine. I found he had lost a quantity of blood, the result of the violence he had used; the bladder was largely distended, and, as a consequence, he was suffering acute pain, straining severely and begging for relief. He stated that he had passed a piece of wax taper into the urethra to relieve a supposed stricture. Externally, by manipulation, I could detect a hard substance within, in the membranous portion. The means I adopted were to dilate as much as possible the urethra by the largest size elastic catheter, and then by passing a thin pair of fine bone forceps, I was enabled, after about half an hour, to secure the foreign substance; this consisting of a piece of wax taper three-eighths of an inch in diameter, and measuring fourteen inches and three-quarters in length. The end was just four inches from the meatus. No untoward symptoms were exhibited afterwards. The forceps, when open, expanded the meatus to just half an inch.

Pembroke House, Hackney, N.E.

# REPORTS OF HOSPITAL PRACTICE
# IN
# MEDICINE AND SURGERY.

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## SAMARITAN HOSPITAL.

### CASES OF OVARIOTOMY.

(Under the care of Mr. SPENCER WELLS.)

(Continued from page 145.)

*Case 76.—Multilocular Ovarian Cyst—One Tapping—Ascites—Ovariotomy—Death on the Twelfth Day—Cancer of Tumour and of Peritoneum.*

A married woman, 39 years of age, applied to Mr. Wells in August, 1865, with an ovarian tumour, which reached to four inches above the umbilicus. She had been married eighteen years, and had seven children, the youngest being 4½ years old. During that and the former pregnancies she had been very large, and had been increasing in size ever since the birth of the youngest child, but more rapidly since the spring of 1865. The catamenia were regular; the uterus normal; the ovarian tumour moved freely quite independently of the uterus. In general appearance the patient was robust, but fat, and the complexion very florid, particularly the upper part of the face, where many capillary vessels were distinct. The pulse was very feeble, and the heart's impulse almost imperceptible. She was directed to avoid fats and sweets, eat lean meat, and was put upon iron and quinine. She gradually increased in size, and was admitted to Hospital November 24, 1865. The girth at the umbilicus was fifty inches, and she was suffering much from distension. She was tapped two days after admission, and twenty-five pints of brown fluid highly charged with cholesterine were removed. She was much relieved for a time, but the cyst re-filled, and she was re-admitted in January, 1866. The tumour was then freely moveable in surrounding ascitic fluid, and, so far as the local conditions went, the case appeared to be a favourable one for ovariotomy; but she was very fat, the face still highly florid, and the pulse extremely feeble, so that the constitutional condition was far from satisfactory. Mr. Wells was so apprehensive as to the state of the heart that he procured Mr. Clover's attendance to administer chloroform, when ovariotomy was performed on January 31, 1866. Sir Wm. Fergusson, Dr. Makeyeff, of Moscow, and Dr. Skoldberg, of Stockholm, were present. After opening the peritoneal cavity, and evacuating twenty-six pints of clear fluid, a semi-solid ovarian tumour was exposed covered by a piece of adhering omentum. The omentum was separated, and the tumour pressed out entire through an opening eight inches long. A pedicle not thicker than a finger was secured in a small clamp three inches from the right side of the uterus, and the tumour was cut away. There was scarcely any bleeding. The left ovary was healthy. On closing the incision by sutures, Mr. Wells felt that the peritoneum was studded all over with small hard nodules, which at once led to the suspicion of cancer, and this was confirmed by an examination of the tumour at the College of Surgeons with Drs. Bowen and Pettigrew. It weighed 9 lb. 6 oz., and furnished unmistakeable naked-eye and microscopic evidence of soft cancer. A beautifully injected section of the tumour may be seen in the College Museum.

The patient went on remarkably well for the first few days after operation—only required one opiate—and was not sick after the first night; but the pulse was always feeble and occasionally intermitting, and the urine scanty and concentrated. The stitches were removed on the third and fourth days, except the lowest, which was left till the fifth day. On the fourth and fifth days there was a very offensive leucorrhœal discharge. On the sixth day the pulse was 88, but there were occasional feelings of faintness with long sighing inspirations. On the eighth day there were signs of a small quantity of fluid in the peritoneal cavity, and some discharge beside the pedicle. The clamp came off on the ninth day. The bowels were cleared by an enema on the tenth day. After this she complained of much pain in the track of the transverse colon, and had frequent sensations of faintness at night. On the eleventh day she was sick several times, and the urine, which had been clear and more copious for some days, again became scanty and charged with pink lithates. A free sero-purulent discharge went on from the lower angle of the wound, and continued during the twelfth day till she died.

On examination, eighteen hours after death, the body was found to be still warm. In all parts the quantity of yellowish fat was very large. Between two and three pints of brown serous fluid were found in the peritoneal cavity. A few recent adhesions connected the omentum with the abdominal wall beneath the united wound. The right Fallopian tube, and a part of the right broad ligament, adhered to the inner surface of the abdominal wall at the lower angle of the cicatrix. A clot of blood, as large as a walnut, lay below the Fallopian tube between the layers of the right broad ligament. The peritoneum covering the posterior surface of the uterus and the front of the rectum, and generally all over the abdominal wall, and in some few spots on the surface of the small intestines, was studded with innumerable small hard nodules of cancer. The heart was very soft and flabby, and both lungs were soft, œdematous, and friable.

In this case cancer was not suspected before the operation; but Mr. Wells had said that although the operation would probably prove to be an easy one, yet the existence of ascites in a very fat woman, whose heart was very feeble and face very florid, augured unfavourably for her; and the result is confirmatory of a rule which he has laid down, to the effect that a large adherent tumour may be removed from a patient of good constitution with far greater prospect of success than a small unattached tumour from a patient whose heart, lungs, liver, or kidneys are unsound, or who is the subject of some form of cachexia.

(To be continued.)

## HOSPITAL FOR DISEASES OF THE CHEST, VICTORIA PARK.

### CASE OF HEART DISEASE IN WHICH THERE WAS A LEFT AURICULAR SYSTOLIC MURMUR—CLINICAL REMARKS.

A few weeks ago we had occasion to bring forward two very instructive cases of heart disease, in which during life an auricular systolic murmur was heard. A contracted state of the mitral orifice was diagnosed. The post-mortem examination confirmed this diagnosis. It is still, however, a question with many Physicians whether it is possible, with any degree of certainty, to say that the mitral orifice is contracted and not dilated. We have therefore this week brought forward additional evidence, in hopes that it may assist us in arriving at a more satisfactory conclusion.

*A Case of Heart Disease in which there was a Pre-systolic Murmur.*

(Under the care of Dr. H. G. SUTTON.)

Elizabeth G., aged 13 years, was admitted November, 1865. She complained of pain in the region of the left breast, and of a troublesome cough. She said she had never had rheumatic or scarlet fever; nor had she ever been laid up with any serious illness. She had suffered from her then present symptoms during the previous four or five months.

On examining the chest, the impulse of the heart was felt between the fourth and fifth ribs, and three-quarters of an inch to the left of the left nipple. The area of cardiac dulness was diminished rather than increased. On listening with the stethoscope, placed at the point of the apex beat, a loud, harsh, prolonged sound was heard preceding the beat of the pulse. This murmur was most distinctly heard immediately under and a little to the left of the left nipple; but on listening just above the nipple, it was still heard, but in this position the quality of the murmur did not appear to be either so harsh or to be so much prolonged. In order to ascertain the exact rhythm of this murmur, the stethoscope was placed an inch to the right of and just above the left nipple—in fact, over the fourth rib or the third interspace. There the harsh murmur was very readily detected. The second sound of the heart over the left base that is heard over the pulmonary artery was markedly intensified. After the second sound there was an interval of silence, although a very short one. Next the harsh sound was heard running up to and apparently involving the first sound of the heart.

On placing the hand over the apex beat of the heart a very distinct thrill was felt. On listening over the heart the thrill was found to be synchronous with the harsh, prolonged sound. This thrill was felt over a very limited area, and did not extend beyond the third interspace. This pre-systolic sound was so loud that it was heard all over the cardiac region; also heard over the angle of the left scapula: in the last situation, however, the murmur lost, to a great extent, the character of a pre-systolic murmur, and more resembled a systolic bruit. The pulse was small and rather jerking. Breath was very short on exertion. Urine acid, sp. gr. 1015; no albumen; urine plentiful.

### *A Case of Heart Disease in which a Left Pre-systolic and a Tricuspid Regurgitant Murmur was heard.*

(Under the care of Dr. H. G. SUTTON.)

Isaac S., aged 49, a pale, anxious-looking man, came as an out-patient to the Victoria-park Hospital. He complained of shortness of breath, which had got much worse of late. He had suffered with difficulty of breathing on exertion for about two years. Stated that he had never had rheumatic fever. There was no increased area of cardiac dulness. The apex beat was felt immediately under the left nipple. In a small circle immediately around the nipple a well-marked running-up-to pre-systolic murmur was heard. Over the lower end of the sternum a distinctly-marked systolic bruit was heard—a murmur, much softer in quality, and a good contrast with the left auricular systolic bruit.

Dr. Sutton remarked in both these cases it was easy to make out that the murmur heard over the left apex of the heart was pre-systolic and not systolic. In the case of the female patient, on placing the stethoscope immediately above the left nipple, the murmur could be heard, and, in addition to this murmur, the sharp, loud, intensified second sound produced by the closure of the pulmonary valves. It may have been noticed that after the second sound there was a very short period of silence, yet it was an appreciable period of silence, and after it began the harsh prolonged murmur, which ran into, and appeared to take the place of, the first sound. Again, the click of the second sound was heard. The interval of silence between the second sound and the murmur clearly showed it was not a diastolic murmur; and as it occurred just before the first sound, it was considered to be pre-systolic in rhythm. In some of the cases it was not so easy to prove that the murmur was pre-systolic, and not systolic. One of the difficulties in such cases was that the second sound could not always be heard over the left apex. To obviate this difficulty, Dr. Gairdner has used Dr. Scott Alison's binaural stethescope. With a little care, however, Dr. Sutton has usually succeeded in finding a spot where, as in the first-named case, the second sound and the murmur could be distinctly heard.

There was, said Dr. Sutton, also another way in which the murmur might be shown to be pre-systolic in rhythm. On listening to the murmur, and at the same time feeling the pulse at the wrist, especially in cases in which the motion of the heart was slow, it would be noticed that the murmur preceded the beat of the pulse. Again, in some cases the impulse of the heart's apex against the walls of the chest marked the time of the first sound. Thus the prolonged murmur was heard, next, the impulse of the heart against the chest; thirdly, the second sound.

All cases, however, were not so easy, Dr. Sutton continued, as the two preceding. When the pre-systolic murmur was associated with a systolic murmur it was often more difficult to diagnose it. When the pre-systolic sound was short, feeble, and soft in quality, while the systolic murmur was prolonged, loud, and well-marked, the pre-systolic murmur might be easily over-looked, and it often required the greatest care and attention to distinguish the pre-systolic portion of the bruit.

Dr. Sutton then said, "I may here be permitted to allude to a case I saw in Guy's Hospital—a female patient, Sarah B., in Lydia Ward, under the care of Dr. Wilks, who has kindly allowed me to make use of the case. I examined this patient several times while in the Hospital. On January 11, 1866, I made the following note:—There is a double bruit heard over the cardiac region, but heard with the greatest intensity over the left apex of the heart, and most distinctly audible in the axilla, one inch and a-half to the left of the left nipple. The second portion of this double murmur was heard most distinctly. I represented it at the time by a diagram, such as is used by Dr. Gairdner (see "Clinical Medicine," p. 577). The figure 1 is understood to represent the position of the first sound of the heart and the impulse of the heart. The dark shading preceding the figure 1 represented the first half of the murmur running up to the first sound; the shading behind the figure 1 represented the second portion of the double murmur running off the first sound. The second portion of the bruit appeared to be double the length of the first portion. I further noted down there is no murmur carried along the aorta; the apex beat is between the fourth and fifth ribs, under and to the left of the left nipple. The area of cardiac dulness is bounded by the third rib above and mid-sternal line to the right, and by a vertical line an inch to the left of the left nipple. The second sound heard over the third left costal cartilage is loudly and very distinctly heard, evidently intensified, but no second sound can be heard over the left apex of the heart. There is also a soft systolic murmur heard over the lower end of the sternum; the rhythm of the heart is regular; the pulse is small and feeble. This patient had had rheumatic fever more than once, and had been in Guy's Hospital with that disease; there is great ascites and some œdema of the feet and legs, but the ascites is proportionately much greater than the œdema of the legs. She died February 8, 1866, and the autopsy, conducted by Dr. Moxon, showed, with respect to the heart, the pericardium somewhat thickened on the visceral surface, apparently of old date, and the thickening looked like irregular milk patches on the whole surface; all the cavities of the heart were dilated; the mitral orifice contracted, and its walls thickened; it allowed the tips of two fingers only to pass; it allowed regurgitation freely, as shown by throwing water into the aortic opening, when the water returned in a full stream up through the mitral orifice; the aorta-valves were healthy; the right ventricle was dilated and hypertrophied. Now, bearing in mind what the post-mortem examination showed, it would appear that the first portion of the double murmur had been most probably produced by the blood passing from the left auricle through the contracted mitral orifice, and the second portion of the murmur produced by the blood regurgitating through the orifice. There was no recent pericarditis to account for the murmur, and the thickening of the pericardium was evidently of old date, and the aortic valves were healthy. I would here mention, although it was not possible during life to say positively that the double murmur was not exocardial, yet the fact that it was heard with the greatest intensity to the left of the left nipple, that it remained equally audible for three weeks, led to the conclusion that it was not pericardial, but endocardial.

Such cases as the one just alluded to are, however, not the most common kind. It would appear that one of the most frequent forms of heart disease due to rheumatic endocarditis is where the lining membrane of the left auricle is thickened, milky-looking, and opaque; the fibrous tissue around the orifice thickened, and the orifice diminished in size, but not extremely so; the mitral valve thickened, and the chordæ tendinæ also thickened and contracted,—the result of this being a certain amount of obstruction through the orifice, and imperfect closure of the orifice by the mitral valves, thus allowing of regurgitation. In cases of this kind we would expect to hear a systolic murmur over the left apex and over the angle of the left scapula. There is evidence during life of regurgitation through the mitral orifice, and in some cases it has appeared to me that there was also evidence of mitral obstruction as well as of regurgitation. Dr. Barlow has kindly allowed me to mention the case of a young girl, who was a patient of his in Lydia Ward a few weeks ago. On listening over the apex of the heart a loud systolic bruit was heard, also in the axilla, and over the angle of the left scapula. A faint systolic murmur was heard over the left and right base of the heart, and carried along the aorta, but no diastolic murmur. So far it appeared to be a case of mitral regurgitation, with some amount of aortic obstruction; but on placing the stethoscope immediately under the left nipple the systolic murmur was noticed to be preceded by a very short, soft sound. This sound was very different to the prolonged, harsh, pre-systolic murmur already spoken of. If care was not used, it appeared to be part of the systolic murmur; by careful listening, however, the loudly-marked click of the pulmonary artery was heard; then the brief period of silence, and then a short murmur going before and running up to the systolic murmur. The presence of this sound again led to the question as to whether it might not be produced outside the heart. I had several times in other cases heard this sound, and suspected it was due to some amount of obstruction through the mitral orifice, but had never had an opportunity of proving it by post-mortem examination. This patient died, and the post-mortem examination by Dr. Moxon showed the pericardium healthy; the mitral orifice contracted, but not extremely so; the mitral valve much thickened and indurated; the chordæ tendinæ were greatly thickened, rigid, and apparently shortened. The aortic valve also showed signs of recent disease. The latter form of murmur is common, and since my attention has been drawn to it I have been led to consider that a great many of the so-called regurgitant mitral murmurs are of this kind—that is to say, there is a short pre-systolic and also a long well-marked systolic murmur. In the first two named cases no murmur followed the pre-systolic sounds, and the latter are typical instances of the auricular-systolic or pre-systolic murmurs, and such as I have found, by subsequent post-mortem examination, to denote a great degree of mitral contraction—the so-called "button-hole mitral." I can call to mind five such cases in which I have heard this pre-systolic murmur, and in every case the examination after death showed the mitral orifice to be exceedingly contracted. Every one of these five cases occurred in Guy's Hospital, and attracted a good deal of attention at the time, so that there cannot be any doubt that such murmurs were heard. One of the patients was under the care of Dr. G. O. Rees, two were patients of Dr. Gull's, and two of Dr. Wilks. Three out of the five have been recorded in the *Medical Times and Gazette.*

In diagnosing contraction of the mitral orifice, the rhythm alone of the murmur can be relied on, for although the quality of the murmur and the position in which the murmur is heard will in many cases lead us strongly to suspect that the orifice is contracted and not dilated, yet it is only by ascertaining the rhythm of the murmur that any degree of certainty can be arrived at. Of the five cases confirmed by post-mortem examination, the pre-systolic murmur was in three out of the five harsh, prolonged, and sounded as if the heart's apex was labouring to get over a rough spot on the pericardium, such as is well represented by Dr. Gairdner by the following aspirated letters—r r r r r f. It is this peculiar quality which renders this sound, once heard, afterwards easily recognised. If at the same time, as not unfrequently happens, the heart's action is slow and regular, so that the rhythm is readily made out, then no murmur is more easily distinguished than this left pre-systolic. In the remaining two cases of the five the auricular-systolic murmur was soft and prolonged, and not harsh. As regards the position in which this murmur may be heard, no rule can be laid down. It is usual to say immediately under or near to the left nipple. This, however, depends on the position of the apex of the heart. In one of the five cases—the patient under the care of Dr. G. O. Rees—the murmur was heard about two inches to the left, and about the same distance below the left nipple, which was owing to the apex of the heart being lowered in consequence of the dilatation and hypertrophy of the left ventricle, associated with granular disease of the kidneys. Again, in some cases the area over which the pre-systolic murmur is heard is exceedingly limited. The size of the cavities of the heart also assists somewhat in the diagnosis. It is well known that the muscle of the left ventricle wastes, and the size of the left ventricle diminishes, in some cases where the mitral orifice is exceedingly contracted; and this owing to the great impediment to the flow of blood into, and in consequence the diminution, in the quantity of blood entering the left ventricle. The result is the apex beat is raised often into the fourth interspace. The apex beat is often seen to the left of the left nipple. This is usually due to the great distension of the right side of the heart. That the left ventricle is distended is shown by the percussion dulness, and in some cases by the still more reliable evidence,—the presence of a tricuspid regurgitant murmur over the right apex. Hence, we are led to argue, the apex beat being raised, the area of cardiac dulness not increased upwards, and no evidence of displacement of the heart, that the left ventricle is diminished in size; which still further assists in forming a correct diagnosis." Dr. Sutton then remarked: "I am led to conclude that it is possible, and in many cases by no means difficult, to diagnose, by aid of this left pre-systolic murmur, that the mitral orifice is contracted. Again, that it is possible not only to diagnose that the mitral orifice is contracted, but further, that the mitral valves are incapable of closing the mitral orifice. Lastly, while in some cases the indications of mitral regurgitation predominate considerably, if great care is used it be possible to diagnose not only that the valves are incompetent, but further, that the orifice is somewhat contracted."

## ABERDEEN ROYAL INFIRMARY.

### POLYDIPSIA—TREATMENT BY LARGE DOSES OF VALERIAN—IMPROVEMENT—CLINICAL REMARKS.

(Under the care of Dr. REITH.)

Jane T., aged 24, married, was admitted into Ruth's Ward on November 25, 1864. She was sent to the Infirmary as a case of typhus, but no symptom of that disease was discovered. She had always enjoyed good health, and to outward appearance was a stout healthy woman, with florid complexion. Her case was regarded at first as one of febrile catarrh, but on December 5 the nurse called attention to an insatiable thirst of which the patient complained, and also to the enormous quantity of urine she passed daily. On being questioned, the patient said she had suffered from these symptoms for the previous nine months, since her child was weaned. Her father and a brother had both been affected with glycosuria. The brother died of it, but the father died of "consumption," prior to which the sugar disappeared from his urine. Shortly after weaning her child she had an attack of hæmoptysis, and has had one or two slight returns of it since; menstruation is regular. Under the right clavicle the percussion tone is diminished, and dry crackling heard on auscultation; other organs healthy. Urine very pale and clear, not to be distinguished in appearance from water; sp. gr. 1000; urea and chloride present in normal quantity; no albumen or sugar. She was ordered ʒj. of tincture of valerian three times a day. The following is the state of her urine for the next four days:

| | Quantity passed in 24 hours. | Sp. gr. | Quantity of tincture valerian per day. |
|---|---|---|---|
| Dec. 7. | . 17 pints | 1000 | 3 drachms |
| „ 8. | . 17½ „ | 1000 | 6 „ |
| „ 9. | . 16½ „ | 1000 | 6 „ |
| „ 10. | . 18½ „ | 1000 | 9 „ |

Doubtful of the accuracy of the urinometer, I prepared some distilled water, and found that in it the urinometer stood one degree lower than 1000; consequently the real specific gravity of the urine should be marked 1001. The powder of valerian was now given instead of the tincture. The result is as follows:—

| | Quantity passed in 24 hours. | Sp. gr. | Quantity of valeria per diem. |
|---|---|---|---|
| Dec. 11. | . 16½ pints | 1001 | 60 grains |
| „ 12. | . 19½ „ | 1001 | 60 „ |
| „ 13. | . 20 „ | 1001 | 90 „ |
| „ 14. | . 17 „ | 1003 | 90 „ |
| „ 15. | . 16½ „ | 1002 | 90 „ |
| „ 16. | . 14 „ | 1004 | 90 „ |
| „ 17. | . 17 „ | 1004 | 120 „ |
| „ 18. | . 12 „ | 1004 | 120 „ |
| „ 19. | . 14½ „ | 1004 | 120 „ |
| „ 20. | . 12½ „ | 1004 | 120 „ |
| „ 21. | . 13 „ | 1006 | 140 „ |

I now lost sight of the patient, owing to an attack of illness, but I was told that before she left the Hospital the specific gravity of the urine had risen to 1008. I afterwards had a sample of the urine sent me on March 3, 1865; the specific gravity was 1006. I have not seen the patient since.

*Clinical Remarks by Dr. Reith.*—Polydipsia, once established, is generally incurable. Although at first a mere inconvenience, and not interfering materially with the general health (the subjects of it, like our patient, being often stout and ruddy) it, sooner or later—it may be after the lapse of years—tells on the system, and at last it ends in tubercular phthisis. The present case will thus terminate, for there were symptoms of tubercular deposit in the right lung during her stay in Hospital. This case is an example of the undoubted connexion existing between glycosuria and polydipsia. Two of the patient's near relatives were affected with the sugar disease, and although the father was said to be cured, it is evident that the phthisis of which he died must have been induced by the glycosuria of which it is so often the termination. The polydipsia, therefore, in this patient, as in most, if not all, cases of the same kind, had come by hereditary descent, so to speak, from glycosuria. In fact, it is now generally admitted that glycosuria, polydipsia, and even albuminuria are interchangeable; that is, if an individual be affected with one of those diseases, his descendants are liable to either of the others. The well-known experiments of Bernard show that these diseases may be produced by injuring certain parts of the nervous system in close proximity to each other. Hitherto, polydipsia, or, as it is more commonly called, diabetes insipidus, has been regarded as not only incurable, but also irremediable. M. Rayer was, I believe, the first to point out that valerian administered in large and rapidly increasing doses was a most serviceable remedy. Trousseau relates some cases which were perfectly cured, at least for the time, by this treatment. The result of its employment in the present instance was satisfactory, and there is reason to believe that had opportunity been given to persevere in its use, and had the patient been more tractable than she was, she would have been still further benefited.

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Medical Times and Gazette.

SATURDAY, MARCH 24.

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## RINDERPEST IN THE LAST CENTURY.

During the last century the Rinderpest made several visits to this country, raging on one occasion during a period of twelve years—from 1745 to 1757—without any very apparent intermission. It is generally supposed that the epidemic ran a pretty uniform course, and was finally only checked by the adoption of stringent "stamping out" measures. Most of the points connected with the history of the particular visitation to which we refer have been involved in considerable obscurity; we are, however, enabled to give our readers some rather important data, contained in an official "Memorandum" recently issued. This is a trustworthy account of the distemper which existed amongst the horned cattle during the last century, "compiled especially for the purpose of completing, and in some respects correcting, a notice of the distemper of 1745-57, which is contained in the first Report of the Cattle Plague Commissioners." The "Memorandum" has been noticed by the *Times;* but some of the most important particulars which bear directly upon the position taken by Dr. Farr, noticed by us last week, have entirely escaped attention. We have no bias one way or the other, and are only anxious to put before our readers every point of interest in connection with the subject.

It appears that during the first two years of the epidemic the transit of all lean cattle was prohibited, and, says the report, "there is no reason to believe that this prohibition produced any sensible effect upon the progress of the distemper." However, as there was an occasional relaxation of the Orders of Council, perhaps it may not be fair to argue from occurrences under these circumstances, but subsequently severe prohibitory measures were adopted, and "the rules which were in force during the last nine years of the distemper are contained in the Order of March, 1747-8, strengthened by subsequent Acts of Parliament, and they may be assumed to give the results of the experience of these days, for they were renewed upon the occasion of several short outbreaks of the distemper which took place between 1769 and 1800." The most important of these rules were the compulsory and immediate slaughter of infected beasts, the proclamation of infected places and the disallowance of removal of cattle from them, the stoppage of the movement of all cattle without a health certificate, the closing of fairs and markets, and the prevention of the transit of hides and the like from localities where the Rinderpest existed. Notwithstanding these measures, the general conclusions in reference to the "twelve-year" epidemic 1745-57, are thus stated, viz.:—"That it was capricious in its progress and malignity, like similar diseases among men; that it yielded to no remedies; that general regulations for the purpose of checking it were of little or no avail, and were soon abandoned in favour of local action; and lastly, that although it caused severe losses from time to time in different parts of the country, it produced no sensible effect upon the price of meat."

Now, the Appendix A to the "Memorandum" contains "the declared accounts of John Sharpe and Thomas Francis, copies of which have been furnished from the Public Record Office," and shows the amount of compensation paid by Parliament during the twelve years that the cattle plague raged—viz., from 1745 to 1757. Unfortunately there are no details as to the sums paid to each separate county during the first five years (1746-1750), but only during the last seven years (1750-1757). However, there are valuable inferences to be drawn from the figures as they stand in the Appendix. During the first five years £150,670 2s. was paid for compensation, during the last seven years only £44,326 12s. 9d., and of this sum £36,055 5s. in the way of compensation for the losses in Middlesex, Cheshire, and Shropshire,—that is to say, there was an enormous diminution in the virulence of the disease during the last seven years, which would seem, in fact, to have been *sporadic* rather than *epidemic*, and confined mainly to the three counties mentioned. But though we cannot ascertain any details as to the peculiar places ravaged by the distemper during the first five years, we are enabled to see that the largest amount of compensation was paid during the second and third years (viz., 1747-48), as shown by the following figures contained in the report:—

| | £ | s. | d. |
|---|---|---|---|
| 1746 . . . . . | 12,949 | 18 | 0 |
| 1747 . . . . . | 70,000 | 0 | 0 |
| 1748 . . . . . | 62,000 | 0 | 0 |
| 1749 . . . . . | 7,400 | 0 | 0 |
| 1750 . . . . . | 13,379 | 17 | 6 |
| 1751 . . . . . | 23,904 | 3 | 0 |
| 1752 . . . . . | 6,600 | 0 | 0 |
| 1753 . . . . . | 5,700 | 0 | 0 |
| 1754 . . . . . | 5,200 | 0 | 0 |
| 1755 . . . . . | 4,300 | 0 | 0 |
| 1756 . . . . . | 500 | 0 | 0 |
| 1757 . . . . . | 500 | 0 | 0 |

The figures also indicate a rapid subsidence of the disease in 1749, a rise again in 1750 and 1751, with a rapid declension during the subsequent years until the disease became "sporadic" or scattered; and this notwithstanding the *uniform* influence of the "stamping out" measures.

Although, then, the Rinderpest remained as a visitant for twelve years, yet it did not preserve a steady onward progress, but it varied considerably in course; and its former behaviour lends very considerable weight to the truth of Dr. Farr's statements. The variation in the virulence of the poison, accounted for by transmission through many animals, was very marked, and is well illustrated by an extract, contained in the "Memorandum," from the *Gentleman's Magazine* for January, 1747:—

"When the disease first appeared in the neighbourhood of London, it seemed too violent to admit of relief. The case is now altered, the symptoms become more moderate, and numbers recover, some with more, some with very little assistance, exclusive of attendance and house warming."

Within the whole of the twelve years during which the cattle plague raged there was no evidence at all that the Rinderpest was or could be transmitted to sheep—a point of some anxiety at the present moment. We would just note this fact, moreover, that during the time that the most stringent measures were in their fullest operation the Rinderpest at first steadily declined in severity; but afterwards a rise was actually noticeable; for example, during 1750-51. We take the amount of compensation as our guide, and this is quite legitimate, inasmuch as it represents a definite number of beasts, according to a fixed rate of value.

We do not from these facts draw the conclusion that "stamping out" measures are useless, but that, as Dr. Farr has pointed out, the Rinderpest has a period of increase and subsidence, due to diminished activity of its virus, independently of any extraneous influences that may be brought to bear upon the whole disease—a statement that does not negative the existence of decided usefulness on the part of "stamping out" measures.

We draw another conclusion, that the Rinderpest, in spite of all we may do, may very likely remain amongst us in a sporadic form for some time to come, and we must not be surprised if occasional intensifications of the distemper appear here and there in the country, just as happened during the last century.

A confirmation of Dr. Farr's position is deducible from the latest returns of Rinderpest. For the week ending March 10 the total of attacks is stated to be 6518, a decrease compared with the numbers of the previous week. The total returns for the 20 weeks ending March 10, exclusive of back returns, amount in attacks to 137,200. Dr. Farr's calculation estimates them at 137,980.

The "Memorandum" contains a notice of the distemper of 1714, which lasted only about six months, and in its severity only half that period. Again, at different times from 1769-81, little evanescent outbreaks were noticed in many parts of England; but the account of none of these furnishes any arguments against Dr. Farr's views. Mr. Dossie, in an essay published in 1771, observes "that the effects of the contagion in all these places were confined to a few beasts, and suppressed in a short time." It may be as well to correct the erroneous impression that Lancisi's suggestion to stamp out the cattle plague from Italy during the last century was ever carried into effect. This is not a fact. The Rinderpest epidemic followed the law regulating kindred diseases, and subsided gradually without any such interference.

It is also an interesting point to remember that Dr. Mortimer, in his third account of the cow distemper, says—"Mr. Theobalds, a diligent inquirer, observed that the first infection was brought over from Holland in 1745, by means of two white calves which a farmer at Poplar, near London, sent for in order to mix the breed. The infection got to Maidenhead, in Berkshire, by two cows brought out of Essex and sold at the fair there." Others imagined it was produced by the arrival of distempered hides from abroad.

Lastly, the effect upon the price of meat appears to have been very trifling. Tooke, in his "History of Prices," speaks of the years from 1715 to 1765 as "long periods of great abundance, and consequent cheapness of the prices of provisions." A scarcity did arise, it would appear, subsequently in 1764, but the Committee of the House of Commons which sat upon the question of scarcity of food did not make any reference to the cattle distemper, "nor to any exceptional period of high prices during the years of the distemper which were then so recent." Smithfield market was less supplied than usual with beasts, but probably ordinary demand was met by the establishment of local markets. The recommendations of the Cattle Plague Commissioners are most valuable as aids to what may be termed "individual security." The poison of Rinderpest may be carried from animal to animal by many agencies, and it is against transporting influences that the "*stamping out*" is especially available.

## THE THERMOMETER IN DISEASE.

We propose to continue this week an account of the help the thermometer gives us to distinguish between tubercular and non-tubercular diseases, when the symptoms are so similar that without the aid of this instrument the diagnosis cannot be made.

We again impress on our readers the fact that the temperature is always preternaturally raised when tubercle is being deposited in any of the organs of the body. This elevation often continues for many months. The temperature reached in tuberculosis varies from any point above that of health to 105° or 106° Fah. The usual maximum temperature of the day varies between 102° and 103° Fah.

Not unfrequently when tubercle is deposited in the meninges, or in the substance of the brain, the symptoms that result are almost identical with those that occur from other diseases of that organ. In such cases by an appeal to the thermometer we often gain information by which we can learn the nature of the disease. The correctness of this statement is shown by the following case:—

The patient was a boy of 4 years of age; previous to his admission into Hospital he had suffered from severe pains in the head, frequent sickness, and obstinate constipation of the bowels. There had been no delirium. He was ill rather more than five weeks, and gradually became comatose, from which he could only be partially roused. His head was thrown back, and was fixed in this position by the muscles of the back of the neck. The muscles at this part were rigid and contracted. There was ptosis with intermitting and fluctuating strabismus. The pupils were widely and irregularly dilated, and they acted but little under the influence of light; the skin flushed up to a very unusual degree on irritation. The respiration and the pulse were very slow and irregular for a great part of the time. There was, however, no paralysis, nor rigidity, nor convulsive movements of the limbs. The coma deepened so that he could not be roused, and continued so till the time of his death. The lungs tested by physical signs were healthy. Such symptoms, occurring in a child 4 years of age, were sufficient to lead to the idea that the disease was tubercular meningitis. If the symptoms, however, be more carefully examined they will be found to be insufficient to establish such a diagnosis.

The head of the child was thrown back, and it remained in this position. To what was this position of the head due? In *Children* the three conditions that may cause this are: 1. Angular curvature of the spine. 2. Rickets. 3. Effusion into the ventricles of the brain. With rickets there is great muscular weakness, and the child has much difficulty in retaining the head in the erect position. The head being most weighted behind, therefore falls backwards; also on account of muscular weakness the back is curved and the shoulders raised; this is the common position of ricketty children. They are said to "sit all in a lump." If the position of the head mentioned above be due to this disease, this can be at once detected by the absence of the symptoms that accompany the other diseases producing it, and by the absence of any rigidity of the muscles of the back of the neck. If, moreover, the position of the child be altered, the head will roll forward, or to either side, and will assume the most dependent position. If it be due to angular curvature of the spine, this cause can be at once detected by inspection and by running the fingers down the spinal column.

If these two diseases can be excluded, and if the head be fixed back by the muscles of the back of the neck so that it cannot be pushed forward except with difficulty, and often not at all, and if the muscles of the back of the neck be rigid and firm, we are justified in diagnosing in a child effusion into the ventricles of the brain. This conclusion is based on many cases on which post-mortem examinations were made. In no case have we known the sign to prove incorrect.

In this case the head was firmly fixed backwards, and the muscles of the back of the neck were contracted and hard. There was no angular curvature of the spine. Hence we were justified in concluding that the child suffered from effusion into the ventricles of the brain.

Effusion into the ventricles is, moreover, sufficient to explain most of the remaining symptoms of the case. From this there results loss of consciousness, loss of sight, drooping of the upper eyelids, strabismus with irregularity of the pupils, flushing of the skin or irritation, slow and irregular pulse, the irregular breathing, and curving of the head backwards.

This case, and that which will shortly follow, prove that these symptoms are not significant of tubercle deposited in the meninges or in the brain. That they may result simply from effusion into the ventricles we conclude from a case in which these symptoms were present. At the post-mortem examination there was found considerable effusion into the ventricles produced by inflammation of the straight and one of the lateral sinuses, and the occlusion of these vessels by a firm, old, and adherent clot. This is the simplest form of the disease that can be met with, as it can hardly be maintained that the symptoms were caused by the inflammation of the sinuses, apart from their producing effusion into the ventricles. The brain itself, with the exception of the effusion into the ventricles, was healthy.

Nor can the remaining symptoms present in the case just given—namely, pain in the head, vomiting, constipation of the bowels—be accepted as proof of the tubercular or inflammatory nature of the affection of the brain; for such symptoms occur in other diseases, as this case proves. The utmost, therefore, that could be arrived at from the symptoms present was the certainty that the child suffered from effusion into the ventricle of the brain.

What diseases may produce such an effusion into the ventricles of a child of this age? 1. Inflammation, simple or tubercular; 2. Tumours of the brain; 3. Coagulation of blood from inflammation of the straight or lateral sinuses, with occlusion, complete or partial, of these vessels. If other diseases cause the effusion, they are very rare. Of those mentioned, the former two are by far the most common. How are we to learn to which of these causes the effusion is due? The thermometer often gives us the information we require. We have seen that the deposition of tubercle causes an elevation of the temperature of the body. If, therefore, the temperature be normal, the disease producing the symptom is not tubercular. It may be objected that tubercle may be deposited in the brain, and the further deposition may cease, and that in such cases the temperature will be normal, while the effusion remains, the symptoms resulting from this will also continue. It is true that such cases occur, but they are infinitely rare, as the deposition of tubercle very generally continues till the patient dies. This is rare of tubercle in the brain substance; it is still rarer of tubercle in the meninges of the brain. How can we learn if the effusion is caused by non-tubercular inflammation of the meninges of the brain? If the temperature be normal at the commencement of the attack, this disease is excluded from the diagnosis. But children much more commonly survive the simple acute than the tubercular inflammation of the meninges of the brain. The non-tubercular inflammation of the meninges either destroys life in five or ten days, or the inflammation subsides and the temperature becomes normal; but in such case the effusion into the ventricle continues and may increase in quantity. How are we to learn that in such a case the effusion is due to a previous inflammation? The two chief points to be relied on are, the age of the patient and the method of invasion of the attack. The former of these is of the most value. Simple inflammation of the meninges in children almost always occurs during the first few months of life. (Tubercle in any of the organs is uncommon under two years and very rare under one year of age) (a). Non-tubercular inflammation of the meninges most commonly begins with an attack of convulsions—tubercular inflammation rarely so. The other cause also of ventricular effusion, namely, tumours, is very rare in children under two years of age. Thus the most common cause of such effusion in very young children is simple inflammation of the meninges.

But while the temperature of the body is raised both by tubercular and non-tubercular inflammation of the meninges in some part of their course, *the temperature of the body is normal in cases of non-tubercular tumours of the brain.*

In the case just given the temperature of the child was *normal*, and thus the tubercular nature of the disease was proved, and as the child came under observation early in the disease, we also excluded simple inflammation of the meninges, and moreover the child was not of the age when this most frequently occurs, nor did it begin in the manner usual with this disease.

The diagnosis, therefore, was that the child suffered from effusion into the ventricles, and that this was most probably produced by a non-tubercular humour (inflammation of the straight sinus and its occlusion by a clot is so extremely rare that this could with probability be excluded from the diagnosis). This conclusion proved correct, for on the post-mortem examination there was found a non-tubercular tumour of the size of a Maltese orange, situated in the anterior and inferior part of the cerebellum. This had pressed on the right half of the medulla oblongata, and had caused much atrophy of this part.

We venture to add another case to exemplify the use of the thermometer in similar cases to the one just given. A boy, aged 11, had suffered from severe pain in the head, with vomiting and obstinate constipation of the bowels. When first seen these symptoms still continued. His head was slightly thrown back, and the muscles at the back of the neck were rigid. His face was flushed, and he was partially unconscious. The pupils were dilated, and failed to act under the influence of light. There was slight strabismus, but no paralysis nor rigidity of any of the limbs. These symptoms are those most commonly met with in tubercular meningitis. *His temperature, however, was always normal.* Thus the disease could not be of a tubercular or inflammatory nature. It was considered probable that he suffered from a non-tubercular tumour of the brain. The symptoms described above disappeared in a few days. He was frequently seized with similar attacks, from each of which he recovered. He died suddenly from some unexplained cause. There was found a large fibro-plastic tumour, situated in the cerebellum. The ventricles were dilated, and contained about 3 oz. of fluid.

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(a) We have met with tubercle in two children both under six months old.

These cases serve to illustrate the assistance we may derive from the thermometer in cases similar to those described.

If in such cases, if the temperature be normal, the disease is not tubercular; if, on the other hand, the temperature be elevated in a child over two years of age, it is in the highest degree probable that tubercle is being deposited in the meninges or in the brain of the patient. For if the elevation of the temperature should be caused by some intercurrent disease, such disease can mostly be detected.

Before concluding this article we add a few words concerning effusion into the ventricles of the brain, and the symptoms that result from this.

If the effusion occur quickly, the consciousness is greatly lessened; if it occurs more slowly, the consciousness is but little impaired. The loss of consciousness is caused by the pressure of the grey matter resulting from the effusion. The brain, however, accommodates itself to slow pressure, and thus the consciousness is but little altered when the effusion occurs gradually. Again, when the effusion has occurred quickly, and the consciousness has been quite lost, if no further effusion take place, or if its further increase be slow, the intelligence of the child to a great extent returns, and after some time has elapsed, it may be chiefly restored. In most of the cases similar to those described, it is the rapid effusion by producing loss of consciousness that quickly destroys life. When the effusion is slowly produced, the children may survive for years, and in some cases they live the number of years usually allotted to man.

The rigidity of the muscles at the back of the neck, and the degree to which the head is drawn back, is proportionate to the amount and rapidity of the effusion. If this displacement of the head is but slight, and but a short time has elapsed, the amount of effusion is small; if, on the other hand, the effusion has occurred slowly, and the head has had time to enlarge, then this rigidity of the muscles, and this position of the head, is but slightly marked. This symptom also disappears after the effusion has lasted some time, if no further increase occurs. It disappears much earlier in young people, in whom the bones of the head are ununited, than in those children whose skull is firmly closed. In the latter it lasts often for a considerable time; it continues long after the intelligence of the child has greatly returned.

The ptosis, strabismus, and inequality of the pupils are but slightly marked when the effusion is slowly produced, and this soon disappears when the further effusion of fluid into the ventricle ceases. Loss of sight, however, is mostly present whether the effusion occurs quickly or slowly, and is one of the last and rarest symptoms to disappear.

The shape of the head, when the fontanelles are open, is so peculiar and characteristic that we need not dwell on it here. The shape, however, somewhat differs when the bones are firmly closed. In such a case, when the effusion occurs slowly, and consequently the patient lives some months, the enlargement is most marked at that part of the skull occupied by the parietal bones. The frontal bone is comparatively little affected. Thus there is formed a very prominent and acutely formed ridge, corresponding to the junction between the parietal and frontal bones. The sudden elevation in some cases amounts to half an inch in extent. It occurs earliest, and is most marked, in the temporal regions.

**Death of the Eldest Son of Sir Dominic Corrigan, Bart.**—We are sorry to state that the death of Captain J. J. Corrigan, 3rd Dragoon Guards, is reported from Melbourne, whither he had gone on sick furlough from India. It is a remarkable and sad coincidence that the same bereavement should have happened to both the distinguished Physicians selected for the honour of a baronetcy, as representatives of the Profession in Scotland and Ireland.

# THE WEEK.

### THE MEDICAL COUNCIL.

We inserted last week a paragraph from our lively contemporary, the *Pall-Mall Gazette*, conveying to the public the idea that each member of the Medical Council receives ten guineas a-day for attendance at meetings. This sum, however, is not correct; the fee is only five guineas. It is well known that the presence of the members of the Council at the deliberations generally involves very considerable loss, especially in the case of the Scotch and Irish representatives, and that the sum named is not in the least compensatory. We can only regret that the powers of the Council are very limited, and that they should have been so curtailed by the original framers of the constitution of the Council. A great deal of good, however, has resulted, especially, we think, in the effect produced by the appointment of delegates to supervise examinations; and there can be no doubt that eventually, by steady work, the Council will acquire a degree of moral influence which will lead to results of the highest and most satisfactory character.

### THE NEW PHARMACOPŒIA.

We have every reason to believe that the new Pharmacopœia is now in course of active preparation at the hands of Messrs. Redwood and Warrington, who have been appointed by a sub-committee of the Medical Council to undertake the matter. No doubt the errors contained in the former editions will be rectified, and several valuable preparations which are used very largely by the majority of Medical men, but have unfortunately been omitted, will be replaced. We may indicate, for example, *the acetum cantharidis, the liquor hydrargyri bichloridi, the infusum aurantii compositum,* and *the infusum gentianæ compositum;* in addition, it is probable that some remedies which have been getting into favour of late, such as carbolic acid, may be likewise added. An attempt will also be made to secure a greater uniformity, not only in the arrangement of the contents, but the use of terms. The former edition contained some few contradictions which it would be well to avoid. This was, no doubt, due to the fact that the compilation was effected by several gentlemen who held different views upon similar subjects. The terms "sesquioxide" and "peroxide," for example, will be employed each in a uniform sense. The first and second parts of the Pharmacopœia, including the Materia Medica and preparations respectively, will be incorporated, and the contents arranged in alphabetical order. At present the descriptions of some drugs are separated in twain; some details of the mode of preparation, for instance, are given under one, and the properties under another head. In the forthcoming edition all that is to be said about any one preparation will be said in one place once for all. The Medical Council has expressed a desire at various meetings that, at least a month before the publication of the new edition, the proof sheets of the latter may be placed in the hands of its members, in order that the contents may undergo careful criticism, and that corrections may be suggested if necessary. We believe that the greater part, if not the whole, will be ready for this purpose.

### MEDICAL CANDIDATES FOR THE ARMY MEDICAL SERVICE.

We have heard that the promise of better things in our public services has not been without its effect on the London Schools. It is well known that the students at our Metropolitan Hospitals have hitherto held aloof from those services, but there seems to be a general conviction that the recommendations of the late committee will be acted upon, and that a perfect equality in the two services must also follow in time. Many English students, we believe, have presented themselves for the competitive examination at Chelsea. It only remains for the Government to give effect to the hopes of our Profession, and there will be no lack of good men from all schools. We are glad to perceive that Colonel North will repeat his question to the Secretary for War as to the adoption of the Committee's report after the Easter recess.

### THE NAVAL MEDICAL SERVICE.

DR. FREDERICK JAMES BROWN, of Rochester, has published some "Comments on the Recommendations of the Committee to Inquire into the Position of the Medical Officers of the Army and Navy." As this gentleman has laboured very hard indeed for the cause of the Naval Medical officers, and is thoroughly acquainted with their wishes and interests, our readers will naturally ask what he thinks of those recommendations. In the first place, he expresses his sense of the fairness with which the Committee acted in the selection and examination of witnesses, and he bestows a good deal of praise upon their labours; and no more than they deserve. The recommendations, he says, taken collectively, are liberal. There is only one point upon which he strongly animadverts—viz., the pecuniary punishment (as he terms it) attendant upon optional retirement. Five-tenths of the pay, on which sum such retirement is recommended after twenty years' service, being a commuted allowance in lieu of the half-pay earned by active service, will not be considered a boon. It must be remembered that this was a requisition of the Medical officers of the Army as well as of the Navy. Dr. Brown cordially agrees with the Army Director-General in his protest—indeed, the plan proposed by Sir Jas. Gibson appears to be the more popular one with the Naval Surgeons. Dr. Brown considers that the two Services should be equalised in every particular, and the question of pay ought not to be one that should constitute inequality. In this we must say we agree with him. Compensation for loss of time by half-pay in the Navy is met by a four-yearly instead of the five-yearly increase of pay. By the way, there is an unfortunate mistake—for we hope it was a mistake—into which the Committee have fallen. The present excellent rule of Naval Staff-Surgeons having the option of retiring after twenty-five years' active service *regardless of age*, has been done away with. The recommendation of the Committee restricts that right, rendering age or illness necessary as well as service. On comparing the recommendations of the Committee with the proposals contained in Dr. Brown's pamphlet, we are bound to state that a very large number of his requisitions have been conceded. We may, therefore, join with him in saying to the authorities, "The Medical Profession will repose trust in your good faith. Carry out the regulations of Orders in Council and Warrants in their strict integrity, and you will never want Physicians and Surgeons for your fleets."

### SANATORIA.

AN important public meeting was held in the Town Hall of Birmingham on Thursday last "for the purpose of considering what measures should be taken to further the success of the scheme for the formation of a Sanatorium in the neighbourhood of Birmingham, initiated by the Committee of the 'Cotton Districts Relief Fund.'" The Cotton Relief Fund promises to contribute £7000 towards this most desirable object, and considerable support has also been already obtained from the public, including a large sum subscribed by the working men of Birmingham. We need hardly say that the scheme has the hearty support of the Medical men of the locality, Dr. Fleming and Mr. O. Pemberton having made able speeches in its favour. We are glad to learn also that the "Prudhoe Convalescent Home" for the benefit of the sick poor of Newcastle may be looked upon as almost a *fait accompli*. Sir W. G. Armstrong, already a munificent supporter of the charity, has offered "to double his present subscription of £1000, provided a sufficient number of existing contributors join in raising a further sum of £1000 by doubling the amounts they have already given." Such an act of generous benevolence needs no word of praise. The establishment of institutions of this kind is one of the most admirable and valuable "movements" of the day.

### GINGHAM OR LIFE?

THE Hong-Kong correspondent of the *Daily Telegraph*, at the end of a long letter on the tragedy lately enacted in the well-appointed and salubrious military establishment there, makes a statement which, if true, is a new and most striking instance of the minute and considerate care and attention with which the War Office watches over the discipline, health, and expenditure of the British soldier, wherever he may be placed. The extreme heat rendering out-of-door movement in the day time dangerous, unless the head is protected by an umbrella as well as by helmet and *puggery*, and it being impossible to manage without sending orderlies about during the day, the general in command had, with what may appear to ordinary mortals only simple common sense, directed a certain number of umbrellas to be issued to each company. The idea of a soldier on duty carrying an umbrella is, however, too much for the martinets of the War Office, and, moreover, umbrellas probably cost something even in China, so "orders have been received from the War Office that no more umbrellas are to be issued to the troops." *Vive le* pipeclay and petty economy, and *á bas* the British soldier if his life or health clash with them! His duty is boldly to face all his enemies, sun and sunstroke included. In England no one ever saw the British soldier march with an umbrella; and why, then, should he need it at Hong-Kong? Discipline must be kept up, and the estimates kept down. *Fiat* the will of the Horse Guards, *ruat* the soldier!

### DR. RICHARDSON'S METHOD OF LOCAL ANÆSTHESIA.

DR. RICHARDSON is still engaged in perfecting his method of producing local anæsthesia, and we shall be able in an early number, we hope, to present from himself an account of the improvements he has been able to introduce. Meanwhile, we may report that he has now constructed a very effective multiple instrument composed of three distinct jets, which can be moved to various angles, which can be worked with a single pair of small bellows, and which produces good anæsthesia over a surface of the body three inches long and nearly two wide. He is also, as stated in our last impression, closely investigating the action of various liquids of low boiling point, with a view of ascertaining whether a more efficient agent than ether can be obtained. Up to this time, we understand, ether retains its position, and a singular and unexpected fact has been elicited that, at all events, some fluids which have a lower boiling point than absolute ether (92° Fah.) do not act so efficiently as ether itself. A very pure hydro-carbon obtained from paraffin (photogene oil), analogous to kerosolene, produces an action next best to ether; but in London it is not easily procurable, and the boiling point of different specimens varies so much that it cannot be relied upon.

Lastly, Dr. Richardson has been using various applications to the skin preliminary to the distribution of the spray, in order to prevent the smarting which is sometimes complained of, especially when the action is prolonged. For this purpose he has used different liniments—oils, glycerine, narcotic solutions, and tincture of iodine; the tincture of iodine being apparently the best. On the whole, however, nothing succeeds so well as rapid action of the spray; when complete narcotism is produced in six or seven seconds the process is quite painless.

The reception of the process by the Profession is almost without parallel, and its success may be considered as established. Owing to the circumstance that the demand for absolute ether is as yet greater than the supply, some partial failures have occurred, and we would, therefore, specially direct the attention of the Profession to the rules on the subject of the ether to be employed, which have already appeared in this journal.

In concluding this short notice, we may observe that Medicine, not less than Surgery, receives a new addition to its resources in "narcotic spray;" the application has proved to be signally serviceable in the local treatment of neuralgia, lumbago, subacute rheumatism, nervous headache, and spinal irritation.

The question is constantly being put to us,—In what operations may the anæsthetic process be used with success? This question can only be answered by experience, but we may state that to our knowledge it has been successfully used in the following operations:—Opening of abscesses and sinuses, removal of tumours, removal of fingers, tooth extraction, removal of the eyeball, dividing tendons, laying open the knee joint, operation for whitlow, dividing carbuncles, removing piles, phimosis, application of nitric acid to ulcerated surfaces, operations for fistula, circular incision round the coccyx, removal of toe-nail, and tying a nævus. The process, as we noticed last week, has also been employed by Mr. Spencer Wells with an unexpected degree of success in the great operation of ovariotomy.

### THE MICRO-SPECTROSCOPE IN THE DETECTION OF BLOOD STAINS.

At the trial of Coe for the Mountain Ash murder, corroborative evidence of the presence of blood on the hatchet was furnished by the micro-spectroscope. Dr. W. B. Herapath conducted the scientific inquiry, and we believe has the merit of first using the micro-spectroscope in Medico-legal inquiry. Of course, the evidence furnished by it cannot prove the presence of human blood, but it may prove a valuable corroborator of other testimony. The following is Dr. Herapath's evidence:—

> Dr. Bird Herapath sworn: "I am a Fellow of the Royal Societies of London and Edinburgh. I practise as analytical chemist and also Physician. The hatchet produced was given me by Mr. Wrenn, and I carefully examined it. On the metallic portion I did not find any marks upon which I could rely. I removed the handle and experimented on thin slices of wood which I took from underneath the metallic ring. I examined those sections with a microscope, and found the majority of the stains were due to oxide of iron; some of them showed clotted blood—in some cases the woody portions had been infiltrated with the colouring matter of blood changed by the action of water. On some of the sections of the handle I found globules of blood, and by the micrometer I measured the size of those globules. I placed a section of the handle in a glass cell in which there was a fluid medium, and the blood globules floated off into the cell, and by the measurement of these I could determine the size of the globules therein contained. These globules were exactly the same size as some globules from dried human blood which I purposely procured, and tested with the same apparatus in the same way. Finding this evidence of blood to be small, I obtained more numerous sections of the coloured surface of the handle of the hatchet—immersed them in distilled water, and obtained thereby a slightly coloured solution, which after filtering was ready for chemical tests, and for optical examination by the micro-spectroscope. I subjected this fluid to the action of light, and it had undoubtedly the properties peculiar to a solution of blood. When a solution of blood was examined in this instrument (instrument here produced) the fluid absorbed some of the rays of light, and thus altered the spectrum or rainbow. Within the green and on the border of the yellow rays two dark absorption bands were produced by the blood fluid. Only one other substance would produce two dark bands—that is, cochineal dissolved in ammonia, but the position of the two bands was different. The spectroscope alone would not enable me to *readily* distinguish between the two, but combined with chemical examination it would satisfactorily do so. From this optical test I was satisfied that the sections of the hatchet had been stained with blood—and by chemical analysis I also demonstrated it was blood. The combination of the three tests showed that the substance on the hatchet must have been blood.
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> "Cross-examined: I should not like to say that the stains were those of human blood, but my opinion is that they were."

### FROM ABROAD.—PRIZE QUESTIONS OF THE ACADÉMIE DES SCIENCES—DISCUSSION ON TREATMENT OF CARBUNCLE.

The following are the subjects proposed for the next prizes by the Paris Académie des Sciences:—1. The Montyon Prize in Statistics, a gold medal, 453 francs in value, will be awarded for either a M.S. or printed work relating to the Statistics of France. 2. The Grand Prize in the Physical Sciences, 3000 francs in value, for the best essay forwarded before December 31, 1866, on the question "The Production of Hybrid Animals by means of Artificial Fecundation." This prize-question, originally proposed in 1861 for 1863 was remitted to 1866. 3. The Montyon Prize of 764 francs will be adjudged for the work (whether M.S. or published) which shall appear to the Academy to have most contributed to the progress of Experimental Physiology. The works to be sent in by June 1 of each year. 4. M. Montyon's Prizes in Medicine and Surgery and Occupations Inimical to Health. The objects of this prize are discoveries and inventions which shall be deemed of most utility in the Art of Healing, or calculated to render the pursuit of any occupation less injurious to health. No award will be made to any work which does not contain a well-defined discovery. No specific sums can be named, as the number of the prizes to be awarded is indeterminate; but the liberality of the founder of the prize has furnished the Academy with the means of raising them to a considerable value—so that the authors will be compensated for any expensive experiments or researches they may have undertaken, and receive rewards proportionate to the services they have rendered, whether by preventing or diminishing the insalubrity of certain occupations, or in perfecting Medical science. Works or essays to be sent in by the 1st of June of each year. 5. The Academy Prize in Medicine and Surgery of 5000 francs, subject "The Application of Electricity to Therapeutics," not having been awarded for 1865, is offered again for 1866 (1st June). 6. The same observation also applies to the Grand Prize in Surgery of 20,000 francs, offered conjointly by the Academy and the Emperor, for the best essay on "The Preservation of the Limbs by the Preservation of the Periosteum" (1st June, 1866). 7. The Cuvier Prize, consisting of a gold medal 1500 francs in value, will be adjudged to the author of the most remarkable work which has appeared between January 1, 1863, and December 31, 1865, either upon the Animal Kingdom or Geology. 8. The Bordin Prize, a gold medal 7000 francs in value, postponed from 1864, will be adjudged in 1866 (June 1) for the following subject:—"Determine by anatomical investigation whether there exists in the structure of the stems of plants, characters proper to the great natural families, and in accordance with those derived from the organs of reproduction." The same prize will be adjudged, after June 1, 1867, for the best essay on "The anatomical investigation of the pistil and the fruit in their principal modifications." 9. The Breant Prize of 100,000 francs will be adjudged in 1866 to the discoverer of a cure for the cholera, and in the case that *non est inventus*, the interest of the sum will be presented to those who may have most advanced our knowledge concerning cholera and other epidemic diseases. Printed books or essays competing for this acknowledgment must be sent in by the 1st of June of each year. 10. The Gecker Prize will be presented in 1866 to whomsoever the Academy deems the progress of Organic Chemistry is most due. 11. The Barbier Prize of 2000 francs is annually awarded for the most valuable discovery in Medical, Surgical, or Pharmaceutical science. 12. The Godard Prize will be given for the best essay on the anatomy, physiology, and pathology of the Genito-Urinary Organs. 13. The Savigny Prize, the interest on 20,000 francs, will be given to young travelling zoologists who are not in the receipt of aid from Government, and who especially are engaged in the investigation of the Invertebrata of Egypt and Syria. 14. The Desmazières Prize of 1600 francs will be adjudged to the author of the best work or essay on the Cryptogama which may have appeared during 1865. 15. The Thore Prize of 200 francs will be given in 1866 for the best work or MS. which may come under the notice of the Academy before June 1 on the "Habits or Anatomy of any Species of European Insects."

In resuming the discussion on the treatment of carbuncle at the Académie de Médecine, which we noticed in our number for March 10, M. Gosselin observed that although Surgeons had long entertained the opinion that the erysipelas and purulent infection which sometimes complicate carbuncle arise under conditions which can neither be foreseen or prevented, yet several of them have of late occupied themselves in the investigation whether certain conditions, acting as occasional causes, may not favour this development of erysipelas. Among such may be placed large incisions, the pain these give rise to, and the moral emotions which ensue. And since he has adopted the plan of making deep punctures, in a greater or less number, in the centre of the mortified parts, and evacuating these by compression, M. Gosselin has met with neither erysipelas nor purulent infection. M. A. Guérin's mode of subcutaneous incision is a move in the same direction, and by avoiding large open incisions is calculated to prevent erysipelas. Carbuncle is not in itself a fatal disease, and the only reason that can be argued in favour of large incisions is that they may abridge the course of the disease, and more speedily put an end to the suffering it causes; but they have their own danger, and it is for this reason that some Surgeons substitute other modes of incision, and others resort to caustics. M. Velpeau observed that the real question was whether erysipelas does really arise oftener in consequence of large incisions, and he urged caution in coming to any such conclusion. Between 1835 and 1866, out of 184 cases of anthrax which have occurred in his Hospital practice, he has only met with three cases of erysipelas. Two of the 184 have died from erysipelas, and two from purulent infection; but surely in 184 cases of erosion of the nose or ear as many as three cases of erysipelas would be met with, and what security is there that erysipelas may not follow even small incisions or cauterisation? The pain produced by multiple large incisions, though considerable, has been exaggerated, especially if these are made rapidly one after the other; and it may be obviated by chloroform. As to purulent infection, this does not appear until some days afterwards, and is more probably due to the mortification of the tissues than to the incisions. It is not always necessary to make incisions, and when the progress of the carbuncle, though this may be a large one, seems to be arrested and well defined, they may be abstained from. "I conclude, therefore, from all these considerations that open incisions are preferable to any other mode of treatment, and that from an experience of forty years. There is a tendency at the present time to encourage moderate Surgery, a young ladies' Surgery, in which the bistoury is employed as superficially and as lightly as possible. Subterraneous Surgery is not safe, for you know not what you do. I prefer Surgery open to the day." M. Ricord observed that his experience quite confirmed that of M. Velpeau, that erysipelas complicates anthrax left to itself just as often as when incisions have been resorted to. He certainly does not practise incision so frequently as at the commencement of his practice, but in fitting cases he has a high opinion of this mode of treatment. He does not now follow Dupuytren's practice of making the incisions at a very early stage, in order to induce abortion of the anthrax, which, indeed, can rarely be done, but waits until suppuration is just about to take place. At this period the incisions diminish the pain, and the subcutaneous mode of performing them proposed by M. A. Guérin seems to be an eligible one. But when the suppurative process has once commenced, there is no advantage in cutting beneath the skin, while there is risk of only effecting an imperfect *degorgement* of the parts, facilitating the formation of purulent sinuses, and encouraging the advent of erysipelas and purulent infection. When, therefore, there is suppuration, or gangrene of tissue, free and open incisions should be resorted to. Not only are not incisions responsible for erysipelas which may complicate anthrax treated by them, but in some instances they have arrested an erysipelas already set up. M. Velpeau, in reply to an objection that his cases were all Hospital cases, which as respects anthrax are not as severe as those met with in private practice, observed that he had preferred Hospital cases as being capable of more exact verification; and that, in fact, cases of anthrax are not more serious in private practice, but that Consulting Surgeons are only called in to them at an advanced period, the patients often having resisted efficient treatment until too late. Incisions, too, to be efficacious, must not only be made in good time, but effectual; and cases are every day brought to the Hospital in which they have been imperfectly made, and the patient consequently remaining uncured. But here the Practitioner himself, not the incisions, are to be blamed. To be of use they must be multiple, radiating, deep, prolonged, and practised in good time.

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### PARLIAMENTARY.—THE CATTLE PLAGUE—ORDERS IN COUNCIL—SUNDAY LECTURES ON SCIENTIFIC SUBJECTS—THE CONTAGIOUS DISEASES BILL—THE COMMITTEE ON ARTISANS' DWELLINGS—TRADE IN CATTLE—THE MEDICAL OFFICERS OF THE ARMY AND NAVY—MANURE AND OFFAL IN THE METROPOLIS—THE MORTALITY AT HONG-KONG.

On Thursday, March 15, in the House of Lords,

Lord Granville, in reply to a question from Lord Ellenborough, stated that any magistrate who should improperly grant a certificate for the removal of cattle without a compliance with the conditions prescribed in the Orders in Council, would be liable to prosecution and dismissal from the magistracy.

Mr. Gregory asked the Attorney-General whether his attention had been directed to the Act 21 George III., c. 49, and whether, in his opinion, that Act applied to Sunday lectures on scientific and religious subjects by persons learned and competent to explain the same; and, if so, whether the Act might not be amended with advantage.

The Attorney-General stated that the point of law involved in this question would be brought before the Court of Queen's Bench in the next term; and, therefore, the House would see that, under these circumstances, he could not undergo any cross-examination upon the matter.

Mr. Childers (for Lord C. Paget) obtained leave to bring in a Bill for the better prevention of contagious diseases at certain naval and military stations.

This Bill was afterwards brought in and read a first time.

On the motion of Mr. M'Cullagh Torrens, the following Committee was nominated on the Artisans' and Labourers' Dwellings Bill:—Mr. M'Cullagh Torrens, Mr. Goschen, Mr. Kinnaird, Mr. Locke, Mr. Knatchbull-Hugessen, Sir C. O'Loghlen, Mr. M'Laren, Mr. Akroyd, Mr. John Abel Smith, Mr. Henley, Lord R. Montagu, Mr. Adderley, Sir M. Farquhar, Mr. Graves, and Mr. Greene; power to send for persons, papers, and records; five to be the quorum.

On the motion of Mr. Monsell, a Select Committee was appointed to inquire into the manner in which the home and foreign trade in animals by sea and railroad is conducted, and to report what regulations, if any, should be enforced with a view of improving the treatment of animals in transit, and to prevent any introduction and spreading of infectious or contagious diseases among them.

On Monday, March 19,

Colonel North asked the Secretary of State for War whether it was the intention of Government to carry out the recommendations as regards increased pay, etc., of the Committee which was appointed to inquire into and report upon the grievances of Medical officers of the army and navy.

The Marquis of Hartington said that as the report of the Committee had been received only a very short time ago, he was not aware what view the noble duke at the head of the

Admiralty took of the subject. He was, therefore, unable to state at present how far the recommendations of the Committee would be adopted.

On Tuesday, in the House of Lords,

The Duke of Montrose inquired the intentions of the Government as to prolonging the prohibition of the removal of cattle by railway after the 25th inst., remarking that the restrictions upon movement at present in force had not interfered with the supply of meat, nor increased its price, while the returns of cattle attacked with disease showed a diminution of numbers that bore testimony to the usefulness of those restrictions.

The Duke of Marlborough complained that foreign cows were imported into London, and were distributed throughout the metropolis without any check.

Lord Granville could not admit that inconvenience had not arisen from the prohibition of cattle transport by railway, but it was intended to continue the present restriction after the 25th inst., until a permissive Order in Council could be issued. The Government intended to-morrow (Wednesday) to introduce in the other House a Bill with the object of extending the powers of the Privy Council.

In the House of Commons,

In answer to a question by Mr. Chambers in reference to the difficulty of getting rid of manure and offal in London,

Mr. T. G. Baring said there was no doubt that great complaints had been made in different parts of the metropolis by the contractors for the removal of refuse that they were unable to remove it in consequence of the orders, or rather the notices, published by various local authorities. The Secretary of State yesterday received a letter from the Board of Works, Holborn district, containing the report of the Medical officer of that district, in which he stated that in consequence of the interpretation put by the contractors and others upon those orders they were unable to remove any of the dirt and refuse of the stables in the metropolis, and that even, which was hardly credible, they declined to remove the street sweepings of the metropolis, because there might be some horse dung mixed up with them. The difficulty appeared to have arisen principally from a misconception of the orders issued by the local authorities. He had obtained the orders of those authorities of which complaint was made, and found that their terms by no means prohibited the introduction into their district of any such articles as were not likely to propagate infection. It seemed to be quite untenable that any local authority should regard the removal of all refuse in the metropolis as likely to propagate the cattle plague, when the week before last there were only fourteen cases of the cattle plague in the whole district of the Metropolitan Board of Works, and last week there were only twelve. The Secretary of State had suggested to Sir J. Thwaites, the Chairman of the Metropolitan Board of Works, that the latter should communicate with the local authorities of those counties whose orders were supposed to prevent the removal of those materials from the metropolis.

Colonel North moved for the appointment of a Select Committee to inquire into the mortality in the troops in China, the causes which led to it, and into the conduct of those departments of the Government whose duty it had been to administer to the wants of those troops, prefacing his motion by a brief statement, and spoke in terms of warm praise of the conduct of the Medical Department, and especially of Dr. Saunders, Surgeon to the 9th Regiment.

Sir H. Verney seconded the motion.

The Marquis of Hartington, in acceding to the motion, said it was the anxious desire of the War Office that the causes of this deplorable calamity should be strictly inquired into.

The motion was then agreed to.

On Wednesday,

Mr. Adam obtained leave to bring in a Bill to amend the Acts relating to Lunacy in Scotland, and to make further provision for the care and treatment of lunatics.

Sir G. Grey obtained leave to bring in a Bill to amend the Act of 11 and 12 Victoria, cap. 107, to prevent the spreading of contagious or infectious disorders among sheep, cattle, and other animals.

## BLACK OR BLACKENED SKIN?

(*From a Correspondent.*)

About the latter end of 1857 two female children, one apparently about twelve and the other eight years of age, were found on Fraser's Island, at the mouth of the Brisbane, on the eastern coast of Australia. When found they were both *black*, but when washed they became white, except in parts which remained as irregular black patches, scattered about the skin. The black appeared to have been rubbed in, the white skin seemed natural, and the theory was that they had been shipwrecked on the island, and so marked by natives. The younger turned out clever and industrious, the elder proved a complete idiot, and was sent to the Parramatta Lunatic Asylum. Mr. Rowling, now a distinguished student of King's College, was then Assistant Medical Officer of the Institution, and it occurred to him that the question whether the girl was of black or white origin might be determined by the odour which is peculiar to black races, whether African or Australian. He therefore encouraged this girl to dance until she was in a copious perspiration, when the characteristic perfume, which in Mr. Rimmel's catalogue would be styled "the bouquet d'Afrique," was very easily recognised by every one present. Some time after this the poor girl died, and Mr. Rowling preserved some of the skin. After coming to England he asked Professor Beale his opinion, who told him that the skin alone would decide whether the pigment was natural or rubbed in. The skin has recently arrived from Australia, and Professor Beale has determined by microscopical examination that the pigment is natural; showing Mr. Rowling to have been correct in his judgment founded on the African odour. This disappearance of pigment will not so much surprise any one who has seen much of the West Indian negroes, especially the turtle fishers.

## MR. FARNALL AND THE LONDON GUARDIANS.

(*From a Correspondent.*)

The active part taken by Mr. Farnall—the Poor-law Inspector of the Metropolitan district—in connection with various schemes for the abolition of the existing bodies of Poor-law Guardians in the Metropolis, the erection of district Infirmaries under the auspices of the "Association for the Improvement of the Infirmaries of Workhouses," and other matters which have lately received much attention in the columns of the daily newspapers, has not been without fruit. We understand that at least one Metropolitan Board of Guardians has addressed the Poor-law Board with the object of ascertaining whether the proceedings of the Inspector are in accordance with the views of the Board.

**The Cold Blast.**—The present very inclement and most changeable weather is telling seriously on the aged of both sexes, more particularly females, if we may judge from the obituary column of the *Times*, where, on Monday, Tuesday, and Wednesday last, the deaths of 19 ladies and 8 gentlemen were recorded, all of whom had reached 80 years and upwards. The united ages of the 19 ladies amounted to 1614 years, giving an average of 84 years and rather more than 11 months to each. The oldest was 95, and the youngest 80 years of age. The united ages of the 8 gentlemen amounted to 659 years, giving an average of 82 years and upwards of 4 months to each. The oldest was 85, and the youngest 80 years of age. Our country friends will perhaps be surprised to hear that our parks and squares were covered with snow on Wednesday morning, which continued to fall up to 1 o'clock.

**House of Industry Hospital, Dublin.**—Sir Dominic Corrigan, Bart., having been compelled by the pressure of other Professional engagements to resign his post as Physician to the above Hospital, the election of a Physician in his stead has been fixed for Thursday, the 22nd inst. By Sir Dominic's resignation, Dr. Banks, King's Professor of the Practice of Physic, becomes the Senior Physician to the Hospital, and Drs. M'Dowel and Gordon, of course, obtain a step. It is generally believed that Dr. Lyons will be the successful candidate for the vacancy so created.

**Cattle Plague on the Continent.**—Rinderpest is said to be raging at Merxem, near Antwerp. It has also broken out in Russian Poland, but a few hours' distance from the Prussian frontier.

## REVIEWS.

*Report on the Sanitary Condition of the City of Edinburgh, with Relative Appendices, etc.* By Henry D. Littlejohn, M.D., F.R.C.S.E., Medical Officer of Health for the City. Edinburgh: Colston and Son. 1865. Pp. 195.

Dr. Littlejohn's report manifests the pen of a master of sanitary science With unsparing but skilful hand he removes the bandages that have hidden from view the festering sores which have been undermining the social and moral health of the northern metropolis,—the classic seat of many a historical tradition, and the favourite abode of philosophy and learning. Nothing can well be more complete in its way than this extensive and elaborate statement. No subject of importance to a discussion of sanitary relations is omitted from consideration, and the whole of the author's remarks are savoured with an amount of good, sound common-sense, and exhibit a freedom from prejudice, which are rarely met with among writers upon subjects connected with public hygiene. Most of these—and we do not exclude here even our own Metropolitan Health Officers—have some particular hobby or other which, although they may endeavour to cover it up, so evidently influences the advice they tender as to dispose public bodies with whom they should consult for the public benefit, to trust less implicitly in their direction than they would probably be disposed to do were the opinions they express more logically deduced, and the anticipated successful issue of sanitary improvements more modestly put forward. When, for instance, a public body is told by their Medical adviser that the carrying out of certain works for improved drainage, closet accommodation, and such like, will inevitably result in a reduced death-rate, and, from a variety of circumstances, such as the outbreak of an epidemic sickness, or an influx of a more pauperised population, or overcrowding consequent on the demolition of dwelling-houses, or from an increase in the price of provisions, such a prophecy fails in its fulfilment, the failure is certain to bring into disrepute indisputable sanitary improvements in the minds of men who have not been taught to make the necessary allowances for all these possible contingencies. To health officers who thus commit themselves we heartily recommend the study of Dr. Littlejohn's report. One important lesson is taught in it, and this is the inapplicability of any one system to the abatement of any one sanitary fault when observed in different circumstances. Let us illustrate this—somewhat out of its order, indeed—by what our author tells us about the absence of "conveniences" in the houses of certain parts of Edinburgh. He maintains that the present arrangement by which they are excluded from the many-storied houses in the old town of Edinburgh is the best that can be adopted, and that to force the erection of "conveniences" upon the owners would result in the most deplorable consequences. "In England, where the poorest houses are self-contained and necessarily small, with a court behind in which the convenience is placed, the system works admirably; . . . but the houses in the densely-peopled districts of our Scottish towns are not supplied with such courts, and were conveniences placed outside the houses, from the large population which would use them, they would closely resemble those which are scattered throughout the city for the use of the public. . . . What is intended as a public benefit is very apt to become a nuisance to the surrounding neighbourhood. If, however, as has been proposed, they were placed on each flat of our tall 'lands,' all the evils already referred to would exist in a confined atmosphere and close to the sleeping-rooms of our crowded poor." Dr. Littlejohn is prepared to support as the best system of cleansing, not only for Edinburgh, but for other large towns, that which consists in the deposit of all refuse and filth not passed into water-closets, upon the surface of the streets, from which it is removed by the scavenger. What would some of our sanitarians say to this? and yet no one of them, perhaps, is in a position to maintain that, so far as the old town of Edinburgh is concerned, Dr. Littlejohn is not right.

Edinburgh for sanitary purposes naturally divides itself into three parts—the old town, the new town, and the southern suburbs, the first being the grand focus of pauperism and wretchedness, the second of respectability and comfort, while the last is more mixed in the character of its population. One of the most interesting tables in the book is that which exhibits the mortality per 1000 in each of these respectively. In the new town in 1863 it was only 18·3 per 1000, in the old town 30·73, and in the southern suburbs 20·36.

There are some interesting tables at pp. 43—45, together with some plans showing the influence of elevation upon the death-rate generally, and that from the fever epidemic of 1847-48 and the cholera epidemic of 1848 particularly. Arranging the entire city in terraces, each of 50 feet elevation from the sea level to an elevation of 450 feet, an apparent result is, that while the death-rate in the three lower terraces stands at from 19·56 to 25·85, and that from fever at from 3·87 to 8·28, and that from cholera at from 1·12 to 1·86; the death-rate on the terraces from 150 to 300 feet elevation has for a total from 26·12 to 29·73, for fever from 30·64 to 69·11, and for cholera from 3·61 to 5·38. This would in the last-mentioned disease would appear to invalidate Dr. Farr's well-known law. But the explanation is no difficulty to any one that is acquainted with the ins and outs of the city of Edinburgh. It is at elevations of from 200 to 300 feet that the poor population principally resides, and so far the advantage of site is over-ridden by the pauperism of such districts as the Grassmarket, Cowgate, etc. Taking one poor district, however, tolerably uniform in the character of its population, the law of elevation death-rate is distinctly seen in operation. Dr. Littlejohn selects the district of St. Giles, where the following table, an abstract of that given at page 45, tells its own story:—

| Height above the sea, in feet. | Total Death-rate per 1000 in 1863. | Fever, 1847-8. | Cholera, 1848. |
|---|---|---|---|
| 400—450 | 17·54 | 0 | 0 |
| 350—350 | 21·31 | 17·38 | 6·73 |
| 250—300 | 26·31 | 89·75 | 10·36 |
| 200—250 | 35· | 184·55 | 19·92 |
| 150—200 | 46·08 | 4·6 | 4·6 |

The population living beneath 150 feet elevation is very small—only 217 persons—so that the percentages for this portion of the district can scarcely be considered in the general result.

Edinburgh is not a manufacturing town, so that the principal sources of trade nuisances lie in the evolution of smoke from brewing, printing, and furniture works, and of this the author complains bitterly, on the ground of its compelling the residents in the neighbourhood of such works to deprive themselves of a proper ventilation of their houses by the closure of the windows of their dwellings. Free ventilation of houses in Edinburgh is the more necessary on account of the system of drainage adopted, which is calculated at all times to promote offensive and dangerous emanations into the houses. Every house-drain, where house-drains are present at all, is constructed of rough masonry, such as, under the best of circumstances, is calculated to impede the flow of sewage matters, and soon becoming leaky, permits the saturation of the soil about and in the basement of the house. Moreover, every house-drain has a cesspool attached, and intervening between it and the sewer, the more solid matters collecting in the former, while the sewer only receives the liquid overflow. A dip-stone is provided in the cesspool to prevent, so far as it will, the incursions of rats and the access of gases from the sewer to the house. From circumstances which are explained, these cesspools are very apt to be choked up with excrementitious matters, and their cleansing to be neglected for years together.

Dr. Littlejohn gives a sad account of the condition of the cowsheds, which appears to be worse now than the condition of the London cowsheds was prior to the time when they commenced to be licensed, and thus became amenable to the sanitary requirements of Medical Officers of Health. From cowsheds to diseased meat the step is a short one, and as this is a subject which interests us in London very much at the present time, we feel justified in quoting pretty largely from Dr. Littlejohn's remarks upon it. "It is generally urged by the advocates for the traffic (in diseased meat from cowsheds) that the flesh in question is not unwholesome, and that to deprive the poor of this as an article of diet would seriously diminish their means of substance. The question, however, of the wholesomeness and unwholesomeness of the meat of diseased animals can only be settled in two ways—first, by the common sense of the public; and second, by a large induction carried on for a series of years, during which a general careful market inspection is maintained over the country. . . . . No doubt we cannot appeal to cases of sudden disease caused by the eating of such flesh—cases of so-called poisoning. But we must remember that the stomach, when in a healthy state, can resist the actions of animal poisons, and that it is the continued use, day after day, of meat from diseased animals that we should expect to be attended with marked results. . . . . But I hold myself warranted in attributing to its use many of those instances of indigestion which come on so unexpectedly, characterised by dulness, lassitude, and inability for mental exertion, and which resist the usual remedial treatment."—P. 59. We think, although agreeing with Dr. Littlejohn as to the probability on *à priori* grounds of this connexion, that we ought to know on what grounds of observation he bases a statement of opinion so decided as this. He is usually very cautious, and what we have been long asking for is proof of this asserted fact. Dr. Littlejohn would be conferring a real benefit on sanitarians if he would put into print the facts which warrant him in attributing such cases of indigestion to the use of diseased meat. We quite agree with Dr. Littlejohn that in obscure sanitary, as in therapeutical indications, a reasonable probability should suffice for our guidance, and that we need not and ought not to wait until absolute proof of any preliminary question is obtained; but still the establishment of such preliminary question should be sought after with equal earnestness. Dr. Littlejohn then advocates a strict supervision of the traffic in meat, and believes the best results will follow if our chief towns are in earnest in insisting upon a sounder quality of beef. "The rearer of stock will be more careful in selection and in up-bringing as regards pasturage and exposure. The cattle dealer will protect his drove with increased caution against the admission of infected animals, and will exercise the sharpest scrutiny in approaching a crowded market, feeling assured that the contact of a single diseased animal may imperil his gains for many a season. . . . . Lastly, our dairymen will be still more careful in their choice of cows; while, as we have seen, there will be year by year fewer chances of mistake in their purchases. They will feel the necessity of improving the condition of their dairies as to cleanliness and ventilation, as well as providing suitable accommodation for any infected animal, thus securing the remainder of their stock from disease."—P. 61.

The following extract from Dr. Littlejohn's final observations will conclude our review, and we quote them as manifesting a philanthropic spirit which cannot too sedulously be infused into all our sanitary work. To the honour of our Profession it may with truth be said that it is in such a spirit that this work has been pursued, we believe, without exception, by modern sanitarians, from Dr. Combe to the present labourers in the field which he so successfully opened for cultivation. "It is cheering to reflect that all measures which have for their object the improvement of the sanitary state of communities have a corresponding influence in raising their moral and social condition. On all sides, in the most degraded localities, physically and morally, we find ourselves surrounded by religious agencies, busying themselves in attending to the higher interests of the masses in the most devoted manner and at great outlay. Bitter complaints have been made as to the poverty of the results obtained by such multifarious and strenuous endeavours. This need be no wonder, when we reflect on the overwhelming disadvantages under which the missionary and the philanthropist have to contend. Our poor are so lodged that to inhale the atmosphere in their houses is enough to produce a lethargic depression, to escape from which is but to be exposed to the temptation of the High-street and Cowgate. With no comfort at home, the poor labourer is forced to go elsewhere for enjoyment. To his sleeping-place he returns to find himself in a crowded apartment, where there is no attempt to maintain the ordinary decencies of life. With so many and varied proclivities to vice in all its forms, it is a heartless task to talk to such a one of righteousness, temperance, and judgment to come. The agencies employed ought, in my opinion, to be more varied; and woman might be enlisted in the cause with great advantage. I have found the missionaries of all denominations nobly discharging duties to the poor of Edinburgh which would be more fitly rendered by the other sex. By means of female assistance, the houses of the poor would be rendered more comfortable and the food of the working classes would be more economically and better prepared. There would be less temptation to seek the pleasures of the alehouse, and lessons of thrift would be imparted in the management of the household that would pave the way for the higher ministrations of the ministers of religion. In attempting to raise the poor in our towns from their degraded position, we must attack that which lies on the surface. Until the dwellings of the poor are rendered more habitable, and the poor themselves are taught the wholesome lesson of outward cleanliness, it is not to be expected that their deeper nature can be effectually stirred."—P. 120.

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*The Modern Practice of Photography.* By B. W. Thomas, F.C.S. London: Harrison. 1866.

The value of the art of photography to Medical and scientific men as a means of recording the experience of the eye, for the after use of themselves and others, is now so fully appreciated, that we are glad to be able to speak favourably of a small treatise on its practice by Mr. Thomas, and to recommend it to those of our readers desirous of taking up the art. As far as can be, the author seems to have ensured successful results to the amateur who carefully follows his directions. The particulars of each step in the ordinary process are given in the form of a series of short essays. The theory of the subject is purposely omitted.

## GENERAL CORRESPONDENCE.

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### PEREIRA'S MATERIA MEDICA—THE DOSES OF MEDICINES.

Letter from Dr. Farre.

[To the Editor of the Medical Times and Gazette.]

Sir,—I have not, except on one occasion, replied to the reviews of "Pereira's Manual of Materia Medica;" because reviews, if fair, are frequently beneficial by their suggestions both to the author or editor and to the reader; but I think I ought not to pass over in silence such an attack as Dr. Bree's, because it assumes the principle of the Editor's responsibility for the contents of the work. As Dr. Bree finds fault with the posology of the Manual, and with the editors whom he considers to be answerable for the posology, I beg to state that whatever is faulty in that part of the work must be laid to the charge either of Dr. Pereira or of myself. I have, indeed, in much of the work had the advantage of the very able assistance of Professor Bentley and Mr. Warington, the former of whom has been prematurely elevated by Dr. Bree, F.L.S., to the Presidency of the Linnean Society, but neither of these gentlemen took any part in the posological table, to which alone Dr. Bree refers. Dr. Bree has alluded to the disappointment felt at the absence of a posological table from the British Pharmacopœia. He thinks that a table given in the Manual by one of the editors of the Pharmacopœia should have been unexceptionable; and as it is in his opinion very faulty, he evidently thinks that if the Pharmacopœia had contained a posological table, it might have been little more satisfactory. I think so too, not only on account of the different opinions that exist with respect to doses, but principally for the following reason:—

The Pharmacopœia does not teach therapeutics, but only defines and describes certain articles which have been selected as especially deserving of use in Medicine, and certain preparations and compounds of these which are considered to be the best forms for their administration. Doses belong to therapeutics; they are the quantities of these drugs, or of their preparations, which are administered in certain diseases to produce certain effects. The doses will vary not only with the nature and stage of the disease, and with the effects intended to be produced, but also with the age, sex, strength, and constitution of the patient, and with the temperature and climate and other externals to which he is exposed, so that the dose which is proper in one case may be highly improper in another. In posological tables the dose is generally supposed to be such as is suitable for an adult; and when a Medicine is used for two or more different purposes, the dose is usually given in each case. More than this is seldom attempted, except a limited range of doses between what are roughly called the maximum and minimum doses; probably, however, few Medical Practitioners restrict themselves to these extremes. The range can only be considered the average range of doses. Far smaller doses than what are commonly called minimum doses are often useful, especially if given in combination with other ingredients, while larger than maximum doses are occasionally required; but if these were included in the average range they would make it useless as a guide. These objections apply to all posological tables, but especially to an authorised one. A posological table is probably most useful when it has no authority beyond the reputation of its author, and when it does not interfere, except as a guide, with the liberty of the Practitioner; but an authorised table could hardly fail to be felt as some restriction, and would have a tendency to limit original investigation.

A treatise on Materia Medica and therapeutics, by entering at length into the circumstances in which Medicines are employed, does away with most of the difficulties I have mentioned; but a table must always be an insecure guide when consulted alone.

I have been led into making these remarks by Dr. Bree's allusion to what I believe to be the judicious omission of a posological table in the British Pharmacopœia. I will now reply *seriatim* to his charges.

He has selected eighteen or rather twenty-four articles, of which he considers the doses in the posological table to be too large. I reply to this that the work in question only bears my name as the chief editor; but that it is still "Pereira's Manual of Materia Medica," and in order that it should continue to be so I have stated in the preface that I have avoided, as far as I could do so, interfering with the opinions of the author. Now the doses of Medicines are certainly examples of the author's opinions, and as such I have generally left them untouched, except when the strength of a preparation has been altered, or for some other special reason. Hence my doses are for the most part merely repetitions of Pereira's; and to such Dr. Bree's objections are rather late. The doses have been long before the world, and Dr. Bree's objections would have been better made while the author was living.

Of the articles selected by Dr. Bree, the minimum doses of twelve—namely, ammoniæ carbonas, argenti oxidum (not oxydum), atropia, capsicum, extractum aconiti, extractum belladonnæ, extractum hyoscyami, liquor morphiæ hydrochloratis (now half the strength of P. L.), lobelia as an emetic, tinctura colchici seminis, vinum colchici, and tinctura opii—are those of Pereira.

Extractum aconiti is now more carefully prepared and is a better preparation than that of the P. L., but the latter was generally inert, at least in one-grain doses.

Lobelia.—Dr. Bree says lobelia ought never to be given as an emetic in spasmodic asthma (Manual, p. 330, 331). I have merely followed my author. The dose of the tinctures, Dr. Bree says, is dangerously large. If he refers to Manual, p. 331, or to Pereira, vol. ii., part 2, p. 13, he will see that the dose of the tinctures, as an emetic and anti-spasmodic, is stated to be from one to two fluid drachms, repeated every two or three hours till vomiting occurs. It is true that a smaller dose is named as an expectorant; but what does Dr. Bree think of Pereira's recommendation, that for children one to two years old the dose is from ten to twenty minims?

Tinctura Colchici Seminis, Vinum Colchici.—Dr. Bree incorrectly quotes the maximum dose of both of these preparations, which he says has been known to cause death, as fl. drs. ij. I have followed Pereira in giving fl. drm. j. as the maximum dose of the wine. The maximum dose of the tincture only I have given as two fluid drachms. I rarely myself give colchicum to produce purging, but Pereira, after mentioning one drachm as the ordinary maximum dose, says, "I have repeatedly given two drachms of the tincture at a dose without any violent effect." See also Dr. Barlow's recommendation of drachm, drachm and a half, and two drachm doses of the tincture night and morning till it purges briskly (Manual, p. 195).

In three other instances my minimum dose, which Dr. Bree considers too large, is either less than Pereira's, or, at all events, not greater.

Liquor Strychniæ.—I have given min.vi. = gr. $\frac{1}{20}$ of strychnia. Pereira says, "the dose of strychnia or its salts is at the commencement $\frac{1}{16}$ or $\frac{1}{20}$ of a grain." I rarely begin with less than $\frac{1}{20}$, but cases undoubtedly occur where much less than this, even $\frac{1}{100}$ of a grain has caused temporary spasm. I have alluded to such cases in Manual, p. 319, but they are exceptional, and need not influence practice.

Aloe Barbadensis, Aloe Socotrina, gr. iij. to gr. v.—Pereira says, "The ordinary dose is gr. v." I have given both kinds largely alone, and find that three grains produce in from twelve to twenty-four hours one, two, or three evacuations. I consider it better to increase the aloes than to add extract of nux vomica, except in cases of great torpor of the bowels such as occur in some forms of paralysis.

In five cases only, if in so many, does my minimum dose exceed that of Pereira.

Acidum Hydrocyanicum Dilutum, min. iij. to min. vij.—Pereira says, "The dose of the acid of the London College may be taken at from two to seven minims;" and again, "I generally give from three to five minims of the dilute acid three or four times a-day." Some persons are unfit to take hydrocyanic acid in any dose; but I have seldom given less than four minims, and certainly never saw "symptoms of poisoning" from three minims, and feel pretty sure that no serious symptoms could arise from such a dose, unless the acid was altogether unsuitable.

Pilula Colocynthidis et Hyoscyami, gr. viij. to gr. xx.—Dr. Bree finds two grains usually sufficient, and four always so, and asserts that Dr. Christison's practice was the same as his own. My experience is somewhat different; and Dr. Christison, in his Dispensatory, gives as the dose, not 2—4, but 5 to 15 grains; and Pereira did the same.

Extractum Opii, gr. $\frac{1}{2}$ to gr. ij.—The minimum dose in Pereira is gr. $\frac{1}{4}$.

Ipecacuanha (as an expectorant), gr. i.—Pereira says, "Not exceeding one grain."

Zinci Sulphas (as a tonic), gr. ij. to gr. x.—Pereira gives one grain as the minimum dose, and says that he has not found it of much value in epilepsy or chorea. I find it very valuable in chorea, but I seldom begin with less than three grains, and should think that the use of one grain would be loss of time. I generally, but not always, find ten or twelve grains sufficient.

I believe, then, that the only cases of any importance in which I can be said to have substituted a larger minimum dose for a smaller one of Pereira are, extractum opii, pilula colocynthidis et hyoscyami, and perhaps ipecacuanha. I admit that a quarter of a grain of the extract would have been better, and I am willing to say the same of ipecacuan if by that means I can appease Dr. Bree.

Dr. Bree will, however, perceive from the foregoing observations, that if he should at any time put his threats into practice he will be virtually plucking the great pharmacologist whose work I have had the pleasure as well as the labour of editing. Apologising for the length of this reply,

I am, &c., Fred. J Farre, M.D. Cantab.

St. George's-road, Pimlico, March 14.

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## THE NURSING IN THE METROPOLITAN WORKHOUSES.

### Letter from Mr. E. Hart.

[To the Editor of the Medical Times and Gazette.]

Sir,—The estimate which you give of five thousand pounds for paid nursing of the pauper sick and inmates in the Metropolitan Workhouse Infirmaries in your last number affords in itself a very striking illustration of the truth of the statements which you seem to consider that it invalidates.

In the London Hospitals it would be considered necessary to supply for the 6000 Infirmary cases in the London Workhouses nurses who would cost, at the same estimate which you admit as a basis, £30,000. Besides these 6000 sick and disabled, there are 1800 idiots, imbeciles, and epileptics, and 10,500 old and infirm, of whom about one-half are in the Doctor's hands, and a small army of nurses are needed for these.

But no mere money estimate of the disparity could give any idea of the shocking barbarities incidental to a system of pauper nursing, or the cruelty of that lack of night nursing which is found in most, if not all of the metropolitan Infirmaries. Pauper nursing is, as the archbishop described it, a system of pure wrong-doing from beginning to end. I am, &c.

69, Wimpole-street, March 27. Ernest Hart.

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## FEES FOR PUBLIC VACCINATION.

[To the Editor of the Medical Times and Gazette.]

Sir,—Through the medium of your journal we beg to call the attention of the Poor-law Medical officers and public vaccinators to a meeting, held by the Medical officers of the Fulham Union on March 13, to consider the proposed Vaccination Bill. At this meeting it was proposed:—

"That a fee of two shillings and sixpence, and three shillings and sixpence, should be substituted for one shilling and sixpence, and two shillings and sixpence, in consequence of the responsibility involved, and the trouble necessitated by the several certificates required by the proposed Act.

"That in successful re-vaccination the same fee should be paid, inasmuch as it will involve more trouble than primary vaccination, and in many instances such re-vaccination will be unsuccessful, and therefore cannot be charged.

"That the appointment of a public prosecutor should be made compulsory."

Letters expressing these resolutions were forwarded to Messrs. Bruce and Baring, and a petition was drawn up for presentation to Parliament, to the Lower House if time permitted—if not, to the Upper House. At the same time it was felt that this movement, to carry weight, should be a combined one, and with this view that meetings should be held by the Medical officers of, at least, all the metropolitan districts, where either separate petitions should be forwarded to Parliament embodying the opinion of the Poor-law officers, or that our petition should be forwarded to the next Union for signature, and from thence forwarded in turn to the next adjoining, till the round of the metropolitan district is made.

We meet again on March 28, at 12 a.m., and shall be glad to receive any suggestion from the Medical officers of other Unions. We are, &c.

THE MEDICAL OFFICERS OF THE FULHAM UNION.

52, King-street East, Hammersmith, W., March 20.

## REPORTS OF SOCIETIES.

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## OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, FEBRUARY 7, 1866.

Dr. BARNES, President.

THE following gentlemen were elected Fellows:—Messrs. J. C. Burrows, Brighton; Robert Jones, Manchester; J. J. Phillips, Guy's Hospital; Samuel Tilley, Rotherhithe.

The PRESIDENT announced that several important responses had been received in answer to the invitation to aid the approaching exhibition of instruments. Dr. Radford, of Manchester, had forwarded a very large and valuable collection. Dr. Hugenberger, of St. Petersburg, promised contributions from St. Petersburg and Moscow; Prof. Ninon, from Denmark; Drs. Laggati and Casati, from Italy; and Dr. E. A. Meissner, Secretary of the Obstetrical Society of Leipzig, offered the cordial aid of that Society.

Dr. MEADOWS related two cases of

### AMPUTATION OF THE CERVIX UTERI.

In both the operation was performed for *allongement* of the uterus, with more or less complete procidentia. In one case the patient was 23 years of age, single, and had suffered from procidentia three years. Treatment of various kinds, by pessaries and otherwise, had been tried without any benefit. The uterus measured four inches and three-quarters in length, the length of the cervical cavity being fully two inches and a half. The *allongement* was limited to the infravaginal portion of the cervix. There was no rectocele or cystocele. About an inch and a half was removed by means of the écraseur, the patient making an excellent recovery. In the second case the patient was 28 years of age, married, and had had two children and two abortions. She first suffered from procidentia after the birth of the second child, and for several years the uterus has been outside the vulva. On examination, it was found to measure no less than five inches and a half, the uterus being also much thickened and indurated. There was neither rectocele nor cystocele. About two inches of the cervix was amputated with the écraseur, but so difficult was it to cut through the thick indurated cervix that no less than two wire ropes and three chains were broken before the operation was accomplished. The uterine wall at the seat of amputation measured fully an inch in thickness. The patient has since made an excellent recovery, and in both these cases the uterus has continued so high up that there is every reason to hope that a cure will be effected.

Dr. BARNES related two cases of

### SUDDEN DEATH DURING LABOUR.

In one case, that of a primipara, maniacal excitement came on during the dilatation of the cervix. Chloroform was given to induce moderate anæsthesia, so as to facilitate the application of the forceps. Gentle traction, aided by uterine contraction, effected delivery in half an hour. The placenta was cast. The patient maintained a good pulse; she spoke deliriously at times, but also rationally afterwards. Death occurred almost suddenly ten hours after delivery. No post-mortem examination was held. He (Dr. Barnes) did not think death was owing to the chloroform, but was disposed to attribute it to the nervous shock which was manifested before the chloroform was given. The other case was more clear. The woman was in her seventh labour. Convulsion, stertor, and syncope set in before the expulsion of the child. The child was expelled alive. The mother died in twenty minutes afterwards. A small clot, quite recent, was found in the left thalamus opticus; and another, larger and of a dissecting character, in the left crus cerebri. The abdominal and pectoral organs were healthy. The record of such cases Dr. Barnes considered to be exceedingly important, as supplying illustrations of the fact that death during labour might occur independently of any fault on the part of the Practitioner.

Mr. BENSON BAKER read a paper on

### ABORTION AND MENORRHAGIA DEPENDENT UPON LEAD-POISONING (WITH CASES).

The author observed that this subject had received little attention in this country. In Dr. Graily Hewitt's work on the Diseases of Women there was an allusion to it, and reference to a paper in the *Archiv. Gén. de Méd.* This was all the author had been able to learn from the obstetric literature of this country; consequently he had availed himself of M. Paul's paper, of which he had made an abstract. The author's cases and observations afforded concurrent testimony of the effect of lead-poisoning in the woman. The lead poison killed the fœtus in utero, and then abortion took place. Not that abortion was dependent upon the action of lead on the muscular structure of the uterus. After abortion took place, persistent menorrhagia was often found to exist, and which would not yield to ordinary treatment, but was cured by treating the patient for lead-poisoning. With respect to the mortal effects on the spermatozoa, the woman being free from lead taint, cases had not come under his observation, although M. Paul affirms that the mortality to the fœtus is equally great whether the father or the mother be permeated with lead poison.

Dr. SANSOM read a paper

### ON THE ANÆSTHETIC PROPERTIES OF THE BICHLORIDE OF CARBON.

The author considered that this new anæsthetic would be of great value to the Practitioners of obstetrics. Very much as to its constitution and properties had yet to be determined, and more could not be attempted at present than the presenting to the Society a few scattered hints and observations. Dr. Sansom claimed to be the first to describe this body as an anæsthetic in his book on Chloroform, published in May, 1865. It was then called tetrachloride of carbon; it has since been determined to be a bichloride, and Sir James Simpson has suggested for it the convenient term chlorocarbon. The fluid possesses many of the characteristics of chloroform; its odour, however, is more pleasant and less pungent; its density is slightly greater, and its volatility less. It takes a longer time to induce anæsthesia. On the 4th of July, 1864, the author, in conjunction with Dr. John Harley, tried the effect of the inhalation of the new anæsthetic upon a frog. The circulation in the web of the foot was observed by the microscope throughout the process. It was seen to cause a considerable amount of irregular muscular action, and a very decided contraction of the capillary arteries. A state of torpor was then induced for three-quarters of an hour, but reflex action was not wholly abolished. Experiments were made upon dogs and guinea-pigs. In these there was considerable muscular agitation at the outset. Deep anæsthesia was slowly produced, but, once induced, continued very profound until death. The post-mortem signs were, complete collapse of the lungs and distension of the right side of the heart, so that the organ assumed a globular form. The sensations produced by the inhalation of the bichloride of carbon are at first very agreeable: there is a pleasant sensation of warmth, and, as the author thought, a freedom from the vertigo such as is produced by chloroform. Dr. Sansom has employed it in cases of midwifery. It was readily inhaled: it mitigated the pains, and in one case almost completely abolished them; it did not interfere with consciousness. In reviewing the relative merits of the two anæsthetics, the author considered (1) that chlorocarbon has the advantage over chloroform in its being inhaled with greater comfort; it is not susceptible of decomposition with the formation of deleterious chlorine compounds; and its cost will probably be considerably less. Being much less volatile than chloroform, it will probably be best administered by pouring it upon a sponge wrung out in hot water. (2) It is, during its early stage of action, a powerful stimulant to the circulatory system. It will probably be especially valuable in midwifery, for it abolishes pain without affecting consciousness, and its tendency is certainly to increase muscular action. (3) It is not advisable to induce deep narcotism by means of this agent. Its profound effects are very persistent, and it is eliminated from the system slowly.

Dr. Greenhalgh stated that two and a half months ago he requested Dr. Sansom to administer chloroform to a lady during the removal of a large polypus from the uterus. She was extremely anæmic and feeble, from large and frequent losses of blood occurring over a period of two years and a half. She had a damaged heart, and a profuse sanious and offensive discharge from the vagina. Shortly after the administration of the chloroform, and before complete anæsthesia was induced, her pulse began to falter, her breathing became embarrassed, and her countenance livid. Dr. Sansom, without delaying the inhalation, substituted ether with the best results. Dr. Greenhalgh begged to ask that gentleman if he had adopted a similar practice in other cases with good effects; and if so, whether he considered that the vapour of ether could be regarded as an antidote to the evil consequences of chloroform, and whether he could offer any physiological explanation of how such beneficial effects are brought about.

Dr. Sansom replied that it was his constant practice to administer ether if in any case chloroform seemed to produce a depressing effect. Indeed usually, in prolonged operations, he thus maintained the anæsthesia. The substitution, or rather addition, was never attended by any return of sensation. He always found that the plan answered admirably: it certainly restored the force of the circulation. It was perhaps premature to explain the *rationale* of the procedure; but he would remark on the singular circumstance that whereas chloroform tended to empty the blood-corpuscles, ether tended to distend them—chloroform reddened the blood, and ether darkened it. There thus existed, as it were, a natural antagonism amongst agents of the anæsthetic class. Again, they influenced differently the sympathetic system. Ether would cause contraction of the heart and arteries even during the period of the influence of chloroform, and the bichloride of carbon did the same in a marked degree.

Dr. Snow Beck read a paper

### ON ENLARGEMENTS OF THE UTERUS WHICH FOLLOW ABORTIONS, PREMATURE OR NATURAL CONFINEMENTS (WITH CASES).

The author remarked that these enlargements had been long recognised by pathological anatomists, and quoted some microscopical observations by himself, and communicated to the Medical Society of London in 1851, which showed that the pathological condition essentially consisted in an enlargement of the muscular tissue of the uterus, without the presence of any inflammatory or heterologous deposits. The causes were considered to depend chiefly upon—(1) a want of complete and persistent contraction of the uterus, which permitted an increased circulation of blood in the gravid organ, and interfered with the changes which took place after parturition; and (2) on the partially developed state of the uterine tissue in abortion, which appeared to be unfavourable to the development of those changes necessary to its complete reduction in size. The enlargement of itself gave rise to few and comparatively slight symptoms, unless it existed to such an extent as to be felt as a tumour in the hypogastrium; but it rendered the patient liable to profuse hæmorrhages, coming on suddenly and without appreciable cause. These enlargements might exist for many months, or even for some years, without any symptoms of importance; but from the recurrence of the catamenia, or other causes, congestion of the enlarged organ was gradually induced; or congestive inflammation, which may be either of the whole or of any portion of the uterus, might take place, the usual symptoms of uterine affection being then present. Amongst the subsequent changes which took place were anteversion and retroversion, with more or less bending of the organ, which lesions interfered with subsequent impregnation. But a more important change was a gradual hardening of the organ, which reduced it to an indolent state, and rendered it very rebellious to treatment. The modification of the symptoms thus produced was shown by the cases recorded, and the physical examination of the organ detailed. The author found that in these cases the uterus was equally enlarged, smooth, pyriform, the cavity enlarged, and the orifice open. The sound readily passed to an extent varying from three to five or six inches. When inflammation was added the organ became tender, the arteries were felt to beat with more or less force, and the interior became very sensitive. Subsequent and various alterations were made; the lips became enlarged, often lobulated, projecting into the vagina, red and raw in appearance, and bounded by a distinct line, which marked the division between the mucous membrane of the vagina and that of the uterus. It was this condition of the organ which had been so frequently described as ulceration, although no such morbid change actually existed. With respect to the treatment, various cases were recorded showing the importance of injecting the cavity of the uterus with astringent lotions, and the safety with which it could be done, provided the actions of the uterus were perfectly quiescent. The cavity of the uterus being enlarged, and the orifice open, impregnation readily took place, and the physiological changes which followed were decidedly the best means of restoring the organ to the healthy state. Congestion or inflammation, when present, would have to be met by the usual means; and when the uterus was in the hardened, modified condition, in addition to the ordinary means of treatment, it would require some local stimulant to rouse the local action, and enable the other remedies to act. For this purpose cauterising the lips with potassa cum calce had been generally employed.

The President observed that he continued the practice of injecting a solution of perchloride of iron into the uterus to arrest hæmorrhage after abortion and labour, and with excellent effect. He no longer dreaded flooding as of old. So far he could illustrate by experience the safety of intra-uterine injections. But he thought a more desirable method of applying fluid styptics or caustics to the inner surface of the uterus would be by swabbing—that is, soaking a bit of sponge or cotton-wool in the liquid, and passing it into the cavity. He had contrived an apparatus for this purpose. An excellent plan of applying solid nitrate of silver was one he had learned from Sir Benjamin Brodie. That eminent Surgeon dipped a silver probe in fused nitrate of silver, thus obtaining a thin stratum, which could be passed freely and safely into a sinus. This was the safest way of cauterising the inner surface of the cervix or body of the uterus.

Dr. Greenhalgh said that Sir J. Y. Simpson had described these enlargements under the terms of subinvolution or incomplete involution of the uterus. He (Dr. Greenhalgh) quite agreed with the author as to their frequency and the obscurity of the local symptoms. He regarded it as a common cause of sterility, but that where impregnation resulted it was always curative, except where abortion ensued. In this disease he had found the uterus enlarged, flabby, and ill-defined, the sound entering an enlarged cavity four inches, and even seven inches and a-half. He considered that hæmorrhage was not a frequent symptom in this disease, and, where it did exist, was mainly attributable to some affection of the lining membrane of the uterus. He advised, where hæmorrhage was frequent or profuse, so as to affect the general powers and resist the ordinary treatment, the injection of the compound tincture of iodine into the uterus; but laid great stress upon the importance of first freely dilating the internal os uteri, which dilatation in itself was more or less curative. He had found resolvent and sedative pessaries of value, as also douches of tepid and cold water with a Kennedy's syringe, and medicated fluids. He likewise advocated the administration of tonics, with the iodide of potassium and liquor of the ergot of rye, and alterative doses of the bichloride of mercury. He relied greatly for success upon improvement of the general health, out of some impairment of which this affection frequently originated and persisted.

Dr. Wynn Williams agreed with much that had been stated, but, remarking on that portion of the paper alluding to ulceration of the os uteri, he considered there were various degrees of ulceration in mucous membranes as well as in the skin, according to the strength and nature of the irritant. Fortunately, the mucous membrane covering the os and cervix uteri is not ordinarily exposed to an irritant powerful enough to produce the amount of ulceration which we so often see in prolapsus uteri. He found that superficial ulceration, or excoriation, happens when perverted or irritating secretions remained in contact with the mucous membrane of the os and cervix uteri. For treatment he relied on constitutional and local remedies, and found nothing answer so well as the injection of weak solutions of iodine. As before stated to the Fellows of the Society, he considered iodine as perhaps the most powerful disinfectant or decomposer of the products of animal decomposition we possess.

Dr. Rasch said he saw a great number of cases of subinvolution of the uterus, in some of which the sound would pass six or seven inches. Careful bi-manual examination left no doubt that there were no tumours in the uterus, the walls being in some cases quite thin and flaccid, like a bladder. He had often practised intra-uterine injections. He had mostly used acet. pyrolign., recommended by Carl Mayer, though not for this purpose. Diluted with equal parts of water, it had often checked obstinate flooding, and not produced untoward symptoms. The patient should stand or walk after the injection, to allow the fluid to gravitate out of the uterus. He thought before injecting, if any flexion of the uterus existed, it should be known, as this prevented the ready outflow of the fluid. To distinguish between broken and merely reddened mucous membrane on the os uteri, he used, with a brush, a solution of nitrate of silver. The parts denuded of membrane presented an appearance strikingly different from those which were covered.

At the annual meeting, on January 3, the following bye-law was passed :—"That a limited number of Medical students, each bringing a recommendation from his Lecturer in Midwifery, be admitted to the ordinary meetings of the Society, without privilege of participating in the discussions." Applications to be made to the honorary secretaries.

## THE PATHOLOGICAL SOCIETY.

### Tuesday, February 20.

### Dr. Peacock, President.

**Dr. Barratt** showed (at the previous meeting) a specimen of a

### PILIFEROUS CYST OF THE OVARY,

not dissected, but containing more elaborate structures than those that spring from epithelial development—viz., true bone and cartilage.

Dr. **Barratt** next exhibited a specimen of an

### ABORTIVE CRANIAL BONE REMOVED FROM AN OVARIAN CYST.

It was a small, well-ossified bone, resembling in part a miniature sphenoid. The patient was, as in the former case, unmarried. It showed an abortive plastic attempt, but of a more advanced kind than is usually met with in such specimens. There were also observable true foramina, not unlike the foramen ovale, the foramen rotundum, and foramen spinosum. There were what looked like nervous filaments passing through these foramina. During cleaning much glistening ligamentous tissue was removed, and the bone had been developed between two strong membranes.

Dr. **Barratt** then showed a specimen of a

### LARGE MULTILOCULAR CYST.

Accident had thrown more than usual interest around this specimen. The patient was operated on for presumed ovarian cysts, and her Medical history affords nothing worth recording. After the customary incisions, a few adhesions and straight vessels were observed running from the lower border of omentum, and from the upper surface of the cysts, and on looking for the pedicle none could be found. In fact, it was "sessile" on the omentum; the ovaries and uterus were present, and they were healthy. The nature of this cyst, Dr. Barratt remarked, is of more than usual interest, and it was more by a process of exclusion, and by saying what it is not, that he could arrive at the truth of what in great probability it was. Dr. Wilson Fox, Dr. Barratt added, had kindly joined him in the examination, and he contented himself with saying that it was an ordinary group of cysts with contents and structures, such as are uniformly seen developed in ovarian dropsy. In the first place this cystic growth was not indigenous to the omentum; cysts of this membrane are generally simple filmy bags with a thin serosity in them; they are dilatations, as it were, of the peritoneum. It was not a translated cyst from the par ovarium, for they are single, small, and generally have a pedicle, as Dr. West describes them; neither has it for its origin an ovary which by twisting on itself has been severed (as happened in the case recorded by Dr. Turner, of Edinburgh), and had thus attached itself to a neighbouring place. "Thus," Dr. Barratt said, "I have exhausted almost all possibilities, except one—viz., that it may be a detached cystic growth from the parietes of the uterus. The uterus was, however, quite normal. I believe it to be a link that was wanting to prove the truth of the views held by the Ritchies, a few others, and myself—viz., that the ovum is itself oftentimes the point of departure for cystic degeneration. The Graaffian follicles, the corpora lutea, the stroma of the ovary, each and all have been regarded as giving rise, in different modes, to capsules of fluid, which, by pressure and by aggregation, become the large growths we see in the ovary. But one cannot long examine ovaries without asking the question, Does the unimpregnated ovum always die? In connection with such researches it is only right to mention the name of the late Dr. Charles Ritchie. Dr. Ritchie exhibited a diseased cyst, developed in the Fallopian tube, to the Fellows of the Obstetrical Society, December 6, 1865. In the specimen I am alluding to I cannot but conclude that its origin is really ovular, and that it escaped from its receptacle, the Fallopian tube. If so, the share the ovum may take in cystic disease is made apparent, and, as I believe, in looking at the three specimens before us, we are only contemplating different phases of the same structure—pathologically developed in the one and physiologically in the two others, by the diseased cysts. These cases, I may add, were all operated upon successfully by Mr. Baker Brown, and I am indebted to his kindness for having them at my disposal."

Dr. **Moxon** showed a specimen of

### RUPTURE OF THE HEART.

Dr. Moxon said:—This heart I removed from the body of a man who was brought dead into Guy's Hospital on January 17 last. The history was short: he had been seized with faintness whilst sitting in an omnibus; he tried to get to the door of the vehicle, but in doing so he fell dead on its floor. The state, upon inspection, of the other organs of the body I may pass over. The pericardium was full of blood, pretty firmly coagulated. This had issued from the heart by a rent situated in the usual place of spontaneous rupture—that is, the anterior face of the left ventricle, rather more than one inch from the apex; this rent was near the septum, at right angles to it, and about three-quarters of an inch long. So far the case was only a usual one of rupture of the heart; it was only on viewing the injury from within the cavity of the left ventricle that the conditions were seen which I thought would be worthy of the attention of the Society. The left ventricle being opened down its hinder wall, there was seen a tear across the septum near its lower part, transverse in its direction, and irregularly continuous with the fatal tear in the outer wall. Above this for nearly two inches, and below it for half-an-inch, was a patch of inflammatory granulations on the endocardium. On section into the substance of the septum under these granulations a pale cheese-coloured fibrinous mass was found embedded in the septum; this mass exactly resembled firm decolorised blood-clot. The interest concerning this appearance seems to me to turn on the relation it bears to certain specimens of so-called fibrinous deposit which have been at intervals shown to the Society. These deposits are nearly always in the septum—a part where laceration might be expected less frequently to reach the surfaces. The opinion which has occurred to me is that these so-called fibrinous deposits are really none other than clots formed in the substance of the wall of the ventricle by injury to the vessels, in spontaneous ruptures which fail to reach either surface of the wall. Another view is of course possible—it may be supposed that my case is an instance of rupture of the wall of the heart due to weakening of the wall from the presence of "fibrinous deposit," this being supposed to be the cause rather than the effect of the rupture. I, however, think this view not to be the correct one. The state of the left coronary artery, which is seen to be in a very advanced stage of atheromatous and calcareous degeneration, is sufficient cause of the rupture of the ventricle, and it is unnecessary to assume a further cause of rupture. Whichever view is received by the Society, I do not doubt that the fibrinous matter here present in the walls of the heart is of the same nature as those masses in the heart which have been formerly shown to the Society as fibrinous deposit.

(To be continued.)

We regret to announce the death of Dr. John Spurgin, from the effects of severe injuries received during an attack made upon him by thieves in Bishopsgate-street last September. Dr. Spurgin graduated at Cambridge, after having studied in London and Edinburgh. He was a Fellow of the College of Physicians, and Honorary Physician to St. Mark's and the Foundling Hospitals. In 1851 he delivered the Harveian Oration. Dr. Spurgin, it will be remembered, was the author of the essays entitled "Fallacies of the Faculty Fallacious," "The Drainage of Cities," and other works.

## MEDICAL NEWS.

**UNIVERSITY INTELLIGENCE.—UNIVERSITY OF LONDON.** The following Candidates passed the late examination for the Degree of

MASTER IN SURGERY.

*Pass Examination.*

Edwyn Andrew, M.D., University College; Peter Maury Deas, M.B., University of Edinburgh.

*Examination for Honours.*

Peter Maury Deas, M.B. (Scholarship and Gold Medal), University of Edinburgh; Edwyn Andrew, M.D. (Gold Medal), University College.

**APOTHECARIES' HALL.**—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, March 15, 1866:—

John Frederick Pritchard, Southsea; Richard Ley, South Molton; Henry Cecil Smith, Kensington-park-gardens; Frederic Tickell Prince, Sawston, Cambs.; William Henry Ellis, Swavesey, Cambs.; Patrick James O'Neill, Canning Town, Essex.

The following gentlemen also on the same day passed their First Examination:—

Robert Vacy Ash, St. Mary's Hospital; Thos. Edwd. Stainthorpe, Middlesex Hospital.

### APPOINTMENTS.

⁂ The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

**COLLIE, A.**, M.D., has been appointed Assistant Medical Officer to the London Fever Hospital.

**DAVIDSON, ALEXANDER**, M.A., M.B. Edin., has been appointed Lecturer on Comparative Anatomy and Zoology at the Liverpool Royal Infirmary School of Medicine.

**DEWSON, Mr. F. S.**, has been appointed Resident Dispenser at the Queen's Hospital, Birmingham.

**GIBSON, FRANCIS W.**, M.B., has been appointed Assistant Medical Officer to the Broadmoor Criminal Lunatic Asylum, near Wokingham.

**JACKSON, JABER**, L.F.P.S.G., L.M., has been appeinted Medical Officer and Public Vaccinator to the Fourth District of the parish of Birmingham.

**NICOLL, R. CHARLES**, Esq., F.R.C.S., has been appointed Medical Officer to the Charterhouse.

**WILLIAMS, W. RHYS**, M.D., has been appointed Resident Physician and Medical Superintendent of the Royal Hospital, Bethlehem.

### BIRTHS.

**BARRIE.**—On March 10, at Glasgow, the wife of John Barrie, M.D., of a daughter.

**BUSWELL.**—On March 20, at 5, Loughborough Villas, Brixton, the wife of Richard Buswell, M.R.C.S.E., of a son.

**CRISP.**—On March 16, at 42, Beaufort-street, Chelsea, the wife of Edward Crisp, M.D., of a daughter.

**DATE.**—On March 8, at Ilkeston, Derbyshire, the wife of William Date, M.R.C.S. Eng., of a son.

**DRYSDALE.**—On March 19, at Sheerness, the wife of A. Knox Drysdale, F.R.C.S., Surgeon R.A., of a son.

**FARQUHARSON.**—On March 7, at St. John's-road, Stockton-on-Tees, the wife of John Farquharson, L.R.C.P. Edin., of a son.

**LEGAT.**—On March 8, at South Shields, the wife of Andrew Legat, M.D., of a son.

**MAWHINNY.**—On March 5, at Woodlawn, Mount Nugent, Co. Cavan, the wife of Dr. T. Mawhinny, of a son.

**M'CABE.**—On March 2, at Waterford, the wife of Dr. M'Cabe, of a daughter.

**MOXON.**—On March 8, at Northampton, the wife of William Moxon, M.R.C.S.E., of a daughter.

**MUNRO.**—On March 15, at Boulogne-sur-Mer, the wife of Alexander Munro, M.D., of a daughter.

### MARRIAGES.

**FLEMING—CHARLES.**—On March 1, at Moneymore, Samuel Fleming, L.R.C.S. Edin, to Margaret, daughter of the late Stewart Charles, Esq.

**MASSY—YIELDING.**—On March 14, at St. Thomas's Church, Dublin, D. G. Massy, Esq., Bengal Medical Staff, to Fanny Augusta, eldest daughter of H. Massy Yielding, Esq.

### DEATHS.

**BOWDEN, ALFRED**, M.R.C.S. Eng., off Port Phillip Heads, on January 15, aged 45.

**GRAY, WILLIAM**, M.R.C.S. Eng., late of Orford-hill, Norwich, on March 4, aged 35.

**JONES, W.**, M.R.C.S. Eng., at Byrom-street, Manchester, on March 3, aged 51.

**LOWE, JOHN**, Surgeon, at Coupar Angus, N.B., on March 9, aged 84.

**MORISON, Sir ALEXANDER**, M.D., at Balerno Hill House, Edinburgh, on March 14, aged 87.

**PARCHAPPE.**—M. Parchappe, Inspector-General of Asylums, one of the most distinguished of the French psychologists, well known by his writings on the nervous system and as Director of the St. Yon Asylum, Rouen, which was built after his design, died March 12, aged 65.

**SPURGIN, JOHN**, M.D. Cantab., at 17, Great Cumberland-street, Hyde-park, on March 20, aged 69.

**WELLS, FREDERICK J.**, M.R.C.S.E., at Blyth, Worksop, on March 16.

**WINTER, JAMES**, M.D. Glasg., at Hampstead, on March 13, aged 34.

### POOR-LAW MEDICAL SERVICE.

⁂ The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

*Cockermouth Union.*—Mr. Henry Bell has resigned the First Cockermouth District; area, 22,061; population, 8046; salary, £30 per annum. Also the workhouse, salary, £20 per annum.

*St. Saviour's Union.*—Dr. Edward Hibberd has resigned the St. Saviour's District; area, 124; population, 18,887; salary, £75 per annum.

APPOINTMENTS.

*Bridge Union.*—Henry G. Sadler, M.R.C.S.E., L.S.A., to the Third District.

*Crediton Union.*—Charles Snape, M.D. Edin., M.R.C.S.E., L.S.A., to the Marchard Bishop District.

*Forehoe Incorporation.*—Robert J. Tunaley, M.R.C.S.E., to the Fourth District and the Workhouse.

*Poplar Union.*—Henry S. Gale, M.B. Lond., M.R.C.S.E., L.S.A., to the Western District.

**THE LEVÉE.**—At the Levée held on Monday, by H.R.H. the Prince of Wales on behalf of Her Majesty, the general circle was attended by Sir Henry Holland, Physician in Ordinary to the Queen. The following presentations to the Prince on behalf of the Queen took place:—Dr. R. H. Bakewell, by Mr. Beresford Hope; Dr. A. Bryson, C.B., on appointment as Companion of the Bath, by the Duke of Somerset; Surgeon T. Duka, Bengal Army, by the Secretary of State for India; Sir William Fergusson, on being created a Baronet, by Earl Granville; Surgeon H. J. Gane, by the Secretary of State for India; Dr. Horatio Goodday, by Major-General E. R. Hill. The Levée was attended by Drs. Frederick G. Reed, Breslin, Sieveking, Forbes Winslow, Acland, Armstrong, R.N., T. King Chambers, Minter, and by Messrs. Toynbee, F.R.S., and Erasmus Wilson, F.R.S.

**THE MILITARY MEDICAL SERVICE IN NEW ZEALAND.**—In the "General Orders" published by General Chute on the taking of the Putahi pah, Dr. Gibb, Deputy-Inspector of Hospitals, and his staff are thanked for their "zeal, energy, and attention upon the occasion."

**SIR ALEXANDER MORISON.**—We regret to announce the death of this distinguished Physician. Sir Alexander Morison was known as one of the most successful Practitioners of his time in the treatment of mental disease, and was one of the first, if not the first, Physician who delivered special courses of lectures on insanity. He graduated at Edinburgh in 1799, became a Fellow of the Edinburgh Royal College of Physicians in 1801, and was at one time President of that College. In 1808 he obtained the Licence of the London College and was elected to the Fellowship in 1841. He was the author of several treatises on mental disease, and founder of a Society for Improving the Condition of the Insane. He held the offices of Consulting Physician to the Middlesex County Asylum and to Bethlehem Hospital. The honour of Knighthood was bestowed on him at the time of the coronation of her Majesty. Sir Alexander had reached the venerable age of eighty-six.

THE election of a Medical officer to the Charterhouse has been decided in favour of Chas. R. Nicoll, Esq., Battalion Surgeon, Grenadier Guards. There were originally eighteen candidates, one of whom did not go to the poll. Amongst them were two Army Surgeons, one retired Militia Surgeon, one or two Physicians, and the rest were general Practitioners. The appointment has for many years been considered the great prize for the general Practitioners of the vicinity.

**OBSTETRICAL SOCIETY OF LONDON.**—We are given to understand that the Fellows of the Obstetrical Society will dine together on Thursday, March 29th (the day following the conversazione and exhibition of obstetrical instruments at the Royal College of Physicians). The distinguished foreigners, several of whom have announced their intention to be present at the conversazione, will be invited to meet the Fellows at the dinner. The occasion will be an interesting one, and we doubt not that the dinner will prove a successful termination to this great obstetrical gathering. The dinner will be given at Willis's Rooms, King-street, St. James's.

THE will of the Countess Dowager of Dundonald has been proved by Sir Charles Locock, the sole executor under the will. Sir Charles received all the property of the late Countess "in compliance with the wishes of my late husband, to discharge, so far as lies in my power, a debt of honour incurred many years since."

Alleged Death from Diseased Meat. — The *Guardian* states that at Topcliffe, near Thirsk, a labourer's family were poisoned by eating diseased mutton, and a child named Henry Stringer died.

The installation of Mr. Carlyle as Rector of Edinburgh University will take place on April 2, when it is hoped that the state of his health will permit him to speak his address.

Petrified Native. — Mr. Stevens, of King-street, Covent-garden, announces that he will sell on Tuesday, the 27th, a petrified aborigine from South Australia. It is the only specimen known in the scientific world; is stated to be very perfect, and, of course, "is believed to be of great antiquity."

Railway Damages.—A dentist named Huet, practising at Wolverhampton, has recovered £850 from the London and North Western Railway Company as compensation for injuries received in a collision which occurred on September 2. The symptoms proved were "headache, giddiness, numbness of limbs, and impaired vision."

Trichiniasis.—In consequence of the announcement of several deaths from trichiniasis, the municipal councils of Lille, Marseilles, and other towns in France have resolved that the Veterinary Surgeons appointed to inspect the butchers' meat offered for sale shall be supplied with microscopes for a more minute examination.

The Honiton Clist Murder.—A woman named Mary Ann Ashford has been sentenced to death for the murder of her husband by the administration of arsenic and strychnia. Both poisons were found in her possession, and arsenic was found in some tea she had prepared for her husband. Mr. Herapath, sen., was the expert employed.

A Scrap for the Anthropologists.—Miss Edmonia Lewis, half negro and half red Indian, has taken a studio in Rome as a sculptor.—*Guardian.*

A New Name.—M. le Docteur Caron announces in the *Union Médicale* that his public conferences on *Puériculture* are about to commence.

Carbolic Acid and the Cattle Plague.—Mr. W. Crookes, F.R.S., in a letter to the *Times*, states that the great demand for carbolic acid as a disinfectant has led to the fraudulent sale of an imitation composed of oil of tar, which is utterly valueless for disinfecting purposes. He gives the following tests of the purity of carbolic acid:—Commercial carbolic acid is soluble in from 25 to 70 parts of water, or in twice its bulk of a solution of caustic soda, while oil of tar is nearly insoluble. To apply these tests—1. Put a teaspoonful of the carbolic acid in a bottle; pour on it half a pint of warm water; shake the bottle at intervals for half an hour; when the amount of oily residue will show the impurity. 2. Dissolve one part of caustic soda in ten parts of warm water, and shake it up with five parts of the carbolic acid. As before, the residue will indicate the amount of impurity.

Rinderpest in Sheep.—The Committee of the Chamber of Agriculture and Scottish Farmers' Club, at a meeting held at Edinburgh, on Wednesday, resolved, on the motion of Mr. Hope, Fentonbarns, "That the evidence of sheep having taken Rinderpest is far from conclusive, and that if sheep become affected with the disease they are certainly not naturally susceptible of it." The Edinburgh Cattle Plague Committee, on the other hand, have adopted a resolution of an opposite tenour—namely, "Having carefully inquired into the alleged cases of Rinderpest in sheep reported to have occurred in the county of Fife, having had the advantage of hearing a full statement on the subject by one of their own number, Professor Strangeways, Veterinary Surgeon, who went down to Fife for the purpose of examining into the matter, and having themselves witnessed the post-mortem examination of several of the sheep in question, they are of opinion that the cases reported from Fife are undoubted cases of Rinderpest, and that it is expedient that measures should be adopted for the prevention of the removal of sheep from infected places to places hitherto uninfected."

An Hysterical Freak.—The fascination which the idea of depth exercises over some minds has been often observed, and some persons by no means generally nervous shun great heights, as they are conscious of an almost irresistible desire to leap into space. On Wednesday, a girl under treatment for hysteria in King's College Hospital was coming down the stairs which wind round the lofty walls of the vestibule; when she reached the level of the Surgical wards, she sprang over the banisters, and was seen by Mr. Howells, the House-Surgeon, descending like a parachute, or rather as a parachute should, but seldom does, for she landed on her feet, and, except a slight strain of the ankle, was uninjured by her descent of more than twenty feet. She screamed when falling, but says that she now forgets all about it.

Clinical Teaching of Mental Diseases at Milan. —The directors of the Milan General Hospital, among numerous changes that have been made, have instituted a chair for the clinical teaching of insanity. M. Verga, the chief Physician of the Hospital, has been appointed the first Professor, and it is said to be his intention, before commencing his lectures, to visit the foreign countries where similar *cliniques* have been founded, in order to examine into their operation. In the absence of such institutions, neither England nor France will be honoured with the learned Professor's presence!

Accumulation of Stable Manure in London.— Dr. Septimus Gibbon, in his fortnightly Report presented to the Board of Works, Holborn District, on March 12, 1866, draws attention to the non-removal of stable manure from the mews, laystalls, and streets of London in consequence of a clause of the Cattle Disease Prevention Act 1866, which forbids the exportation of manure, offal hides, etc., from the Metropolis or any other place in which cattle plague has existed within six months previously. This provision extends from March 1 to April 15. The Board have memorialised the Home Secretary on the subject, and it will be seen from our Parliamentary Report that this matter has come under the notice of the House of Commons and the Government.— We may add that orders for removal are easily obtained through the police, except in cases where there is reasonable fear of infection by Rinderpest.

The Vaccination Fiasco.—The feuilletonist of *L'Union Médicale* exclaims that "This *maudit* contagious typhus of cattle brings us nothing but surprises and 'sells.' Doctors Murchison and Ceely have constituted themselves apostles of the doctrine put forward timidly long ago by Bouvier and Auzias Turenne, that the Rinderpest is identical with small-pox, and set all England at work to find proofs of this by the effects of vaccination. The identity of Rinderpest with small-pox has been disproved by the most conclusive experiments, but not before every one hastened to vaccinate the cattle, nor until there was no lymph left, and knaves sold mixtures of collodion and lytta instead."

"La Noblesse Medicale."—Under this title the feuilletonist discusses the honours awarded to Medical men. La Baronnie of Sir W. Fergusson he thinks due to his belonging to the metropolis, and he is glad that Sir Dominic Corrigan has got a Barony too, for "*verte* Erin" has had no Doctor raised to this dignity since Sir H. Marsh died in 1860, and she now welcomes the honour paid to "one of her most devoted patriots." As to Sir James Simpson, he considers the choice must have been an easy one, as the only wonder it excited was that the Barony had not been awarded long ago, so completely has he outstripped all his rivals. The writer makes some graceful allusions to the sad events which have occurred almost coincidentally with the honours paid to the great Scotchman. He also has a few words of sympathy for those who might reasonably have expected Earl Russell to remember their claims, and shows that the names of Syme, Christison, Watson, Lawrence, and Burrows are well known and honoured on the south of the Channel.

A Dying Child in St. Pancras Workhouse.—On Tuesday Dr. Lankester, the Coroner for Central Middlesex, opened an inquiry at the Elephant and Castle Tavern, Camden-town, upon the body of an infant which, it had been alleged, was "laid out" while alive, under the extraordinary circumstances detailed in the *Times* of Monday. Charlotte Adams, the first witness called, said she was the grandmother of the infant, which was seven weeks old, and was the illegitimate child of her daughter, Elizabeth Adams. Her daughter was confined in St. Pancras Workhouse, and left there with the child three weeks last Saturday. She had since been taken into custody on the charge of deserting her child—the deceased—and she was now awaiting her trial upon this charge. Dr. Sidney Ringer, the Materia Medica Professor of the University College, and Physician of University College Hospital, who had been instructed by the Coroner to make a post-mortem examination, said he thought the death arose from a slow wasting away. He was decidedly of opinion that if the child had been "laid out" for some hours such treatment would accelerate its death. Mr. James Inches Hillocks, of 34, Stanhope-street, Regent's-park, who described himself as the evangelist of Tolmer-square Congregational Church, repeated the statement made in his letter referred to in the *Times* of Monday. The Coroner said this was a most important inquiry, and one which should be closely investigated. Mr. Hillocks had given his evidence in a very clear and open manner, and he would, no doubt, attend on a future occasion to answer any questions which might be asked of him. The inquiry was then adjourned for a week.

The Etiology of Heart Disease.—Jackson and Wife *v.* the Lancashire and Yorkshire Railway Company.—This was a case tried before Mr. Justice Mellor at Manchester on March 14. The action was brought to recover compensation for injuries suffered by the plaintiff's wife through the negligence of the defendants; one of their carriages in which the plaintiff's wife was riding to Oldham in May last having run off the line, whereby she received a serious nervous shock, which had resulted in heart disease and dropsy, from which she was expected not to recover. It appeared that after the accident she had had pleurisy and bronchitis, and it was urged for the defence that heart disease might have been occasioned by those complaints. The liability of the defendants was admitted, but it was contended they were not responsible for damages which might have been occasioned by a common cold caught after the accident. The plaintiff, it appeared, had been subjected to expense in nurses and servants consequent on his wife's illness, and also in Medical attendance and wine and expensive diet for her during her illness. His Lordship, in directing the jury, told them that the defendants' railway company were not insurers, and were only liable to make good injuries which had been suffered from some want of due care on their part. In the present case the carriage in which the plaintiff's wife rode, being the third carriage, ran off the line, from some unexplained cause, and the defendants' liability might have been a question; they did not, however, dispute it. The plaintiff's wife, it appeared, was 37 years of age, and not likely to live. Whether the shock she had received had rendered her more susceptible of cold and had caused the pleurisy and bronchitis from which she had suffered was for the jury. They must take all the circumstances into their consideration—the station in life of the plaintiff, and the expenses to which he had been put, and the loss he had endured, and give a reasonable verdict accordingly. The jury found a verdict for the plaintiff—Damages £300.

Alleged Poisoning by Mistake.—Home Circuit, Lewes, March 21.—Richard Noakes, a chemist and druggist at Brighton, was indicted for the manslaughter of one Samuel Boys in August last. The death had been caused by the administration of aconite by mistake, and it excited some interest. The prosecution, it was stated, had not been instituted by the relatives of the deceased, but by the public authorities, who considered that a trial ought to take place. Mr. Boys, the deceased, was an old gentleman of the age of 80, who resided at Lansdown-terrace, Brighton, and suffered from disease of the heart. He had been attended by a Dr. Dill, who had prescribed for him 30 drops of henbane, to be taken occasionally, with a view to his relief. The deceased kept the drugs he used in a medicine chest in his own bottles, and among those he took were henbane and aconite. The prisoner (who is about 60 years old) was stated by the counsel for the prosecution to be a most respectable chemist, and he from time to time supplied Mr. Boys with drugs and medicines, and, among other things, for years with aconite, and on one or two occasions with henbane. The last day he supplied any drugs was on the 16th of August, when two bottles were taken by Mrs. Boys to his shop "to be filled," one of them being labelled "henbane, 30 drops," and the other was labelled with the name of a medical oil which was required as a liniment, "for outward application only," and the bottle had those words also on it, but in small letters. It was admitted that on this occasion the prisoner himself had filled the bottles, which were sent to the house of the deceased, and given to his servant; and there was no doubt that they found their way to the medicine chest of Mr. Boys. On the night of Sunday, the 20th of August, he felt an attack of his disorder, and said he would take a dose of the henbane, which he then accordingly did take, measuring it out himself in a "drop-glass," as it is called, which measures the number of drops. The dose, it will be borne in mind, was thirty drops (which was written on the outside of the bottle), and there was no reason to believe that it had been exceeded. Upon swallowing it, however, he observed that it "felt hot." About a quarter of an hour afterwards he said his limbs had become benumbed. After this he felt sickness. He became alarmed and looked at the bottle, having a suspicion that there was some mistake; but on looking at it and seeing it marked "henbane," he said, "It's all right." He was extremely ill all night, and early in the morning desired that the bottle should be sent to Mr. Noakes to see if it was right, retaining, however, a portion of it in the house. Not long afterwards he became drowsy, and in the course of the hour he died. The attention of the Medical men was directed to the contents of the bottle in question, and they were satisfied from its pungent taste that it was aconite. A post mortem examination, however, disclosed the seat of the cause of death was the heart. The jury returned a verdict of not guilty.

Discussion on Local Anæsthesia.—At the meeting on March 14 of the Imperial Society of Surgery of Paris, M. Giraldès in the chair, the following discussion took place on local anæsthesia, induced by a jet of pulverised æther. The subject was brought forward by M. Le Fort, who described Dr. Richardson's recently-introduced method, and that by dropping the æther and causing rapid evaporation by a current of air. M. Foucher had employed and seen employed a similar apparatus to that exhibited by M. Le Fort for local anæsthesia. He had only been able to induce an incomplete and transient anæsthesia, so he gave it up. M. Demarquay had done many operations, using ether to produce local anæsthesia. Generally he let it fall drop by drop on the part he desired to render insensible, and he kept up rapid evaporation by a current of air. He thus obtained a superficial local anæsthesia sufficient for the almost painless performance of usually painful operations, as removal of nails, opening of abscesses, &c. For all operations of that class M. Demarquay has, thanks to the local application of æther, given up the practice of general anæsthesia. Æther thus employed only acts as a refrigerant. M. Velpeau had been a witness on many occasions of the application of æther as a local anæsthetic agent, and, like M. Foucher, never saw very wonderful results from it. On the contrary, almost always the anæsthesia so induced was superficial, incomplete, and transient. Besides, the abundant dissemination of the æther vapour by the new apparatus cannot be without inconvenience to the assistants. M. Velpeau would not wish that a desire for new things should lead to forgetfulness of the old. There is a very simple and very efficient method described by Arnott, consisting of pounded ice and salt in a muslin bag. M. Velpeau uses it constantly in removal of the nail. Its application for some minutes is sufficient to produce insensibility. When the skin of the toe is white you may extirpate the nail absolutely without pain. This is, therefore, superior to æther, as it, according to the confession of M. Demarquay, does not wholly suppress the pain. M. Desormaux has used, for ten years at least, a little bellows, invented by Charrière, throwing air and æther on a part at once. More recently he has used the vaporiser of the perfumers, and on one occasion exhausted *l'energie pulmonaire* of six of his pupils without results. He has found that patients complained of the pain of Arnott's freezing mixture, and preferred to be operated on without it. M. Laborie, in removal of the toe-nail, used æther and a tight ligature round the root of the toe. M. Perrin has seen pain as acute as that of the knife induced by æther. M. Broca mentioned a case where Robert removed the great toe so congealed that during the operation the assistants could hear the flakes of ice crackling under the bistuary; there was no pain, and not a drop of blood lost. The flap healed by first intention.—*L'Union Médicale*, March 17.

Preparing for Cholera.—On Saturday last at the Clerkenwell Police Court, Edwin King, and the other owners of property in Grosvenor-street, Essex-road, Islington, were summoned by Mr. William Mayes, sanitary inspector, for knowingly suffering to be occupied a front room on the basement floor, contrary to the provisions of the Act for the better local management of the metropolis (the 18th and 19th of Victoria, cap. 120), there not being an area three feet wide in every part from six inches below the floor of the room to the surface of the ground adjoining. There were other summonses against the defendants under the Nuisances Removal Act for England, 1855, for allowing the houses, the inhabitants whereof consist of more than one family, to be so overcrowded as to be dangerous to the health of the inhabitants. Mr. William Mayes said he is sanitary inspector to the Vestry of Islington. On the 22nd ult. he inspected the houses in Grosvenor-street, and found at No. 2a that the kitchen was used as a separate dwelling by a man, his wife, and two children. A death from fever had taken place in this house about six weeks since, and there was now one person in the house under Medical treatment. The house is filthy. At No. 6, the kitchen was occupied by a man and his wife, and there was a bed and bedstead in it. At No. 7 the kitchen was occupied by a mother and daughter, and there was a sofa-bedstead in the room. The house No. 8 was overcrowded, seven persons sleeping in a room, which only gave 123 cubic feet of air to each person. The house No. 11 was occupied by thirty-two persons—viz., six men, eight women, and eighteen children, seven sleeping in the front and five in the back kitchen. At No. 14a, the house was occupied by thirty-six persons—viz., eight men, eight women, and twenty children, the front kitchen being occupied as a separate dwelling by one man, one woman, and four children. The back kitchen was occupied by one man, one woman, and two children. A child recently died in this room, and one that was then under Medical treatment has since died. The room is very damp, the drains are very defective, depositing the liquid soil in the passage, which saturates the partition and floor boards. Frequently the water flows under the bed. The first-floor front was occupied by one man, one woman, and six children. No. 15 was occupied by 33 persons—viz., five men, eight women, and 20 children. Here the front and back kitchen were occupied by three and four persons separately. No 16a was occupied by 39 persons—viz., eight men, eight women, and 23 children, the front parlour being occupied by one man, one woman, and three sons, aged 9, 12, and 19, and the back parlour by one man, one woman, and four children. The whole of these houses contain eight rooms each, the largest of which is 12 ft. by 14 ft. by 9 ft.; the annual value of each is £30, but as they are at present let they are producing £65 each per annum. The basement of the whole of the houses are very damp; the drainage is defective, the yard being without any, the surface water in one instance flowing into the back doors, the water running down the wall, washing off the paper at the side of the bed. The houses generally are in a very filthy condition. The 32 houses in this street contain 528 men, women, and children. Eight of the above houses belong to Mr. Edwin King, and contain 239 men, women, and children. Dr. Edward Ballard, Medical Officer of Health for the Vestry of Islington, gave evidence generally confirmatory of the previous witness as to the kitchen occupation and overcrowding. The overcrowding is dangerous to health. During 1865 there was a very high death rate on all houses in that street—viz., 13 deaths in 16 houses. Seven of them were children under five years of age. This year, in January and February, four children have already died. Mr. Layton called the attention of the Court to the fact that Mr. Goodwin, the district surveyor, had certified that these underground dwellings were contrary to the provisions of the Act 18 and 19 Victoria, cap. 120. The defendants all said that they would remedy the evils complained of as soon as possible. The magistrate made orders for the abatement of the nuisances, and fined the defendants in sums varying from 10s. to 2s. 6d., besides ordering the defendants to pay the costs. Mr. Layton applied for fourteen other summonses of a similar description, which were at once granted.

THE RINDERPEST.—Dr. Andrew Smart has addressed a letter to the Lord Provost and magistrates of Edinburgh, in which he brings forward additional evidence of the value of the sulphites and hyposulphites in the preventive treatment of the cattle plague. The evidence is chiefly that of agriculturists who, living in infected districts, have administered to their cattle the hyposulphite of soda, and have escaped losses by the disease. His letter terminates with the following paragraph on Rinderpest in sheep:—"Before closing this letter I shall ask your lordship's permission to express, in reply to many urgent requests, once more my opinion upon one of the most vital and important questions of the day, namely—do sheep take Rinderpest? In a report which I had the honour to submit to your lordship and colleagues, dated December 11, and subsequently published, I stated that I had completed a careful experiment, undertaken for the purpose of deciding that very important question, and that I had succeeded in inducing the disease in a perfect form in a sheep which had during a lengthened period been kept in contiguity with affected cattle. Although there were at this time many conflicting opinions and apprehensions as to the ovine susceptibility to the poison of Rinderpest, this report, so far as I am aware, gave the first public announcement of the fact deduced from conclusive experiment that sheep were undoubtedly liable to the disease. And had the distinct note of warning which I then sounded been heeded, and the simple precautions attended to which I had recommended, I venture to think we should not now have had the plague amongst our flocks, and anxious owners of stock would have been spared the perplexity of diverse opinions. I would again repeat the opinion which I formerly expressed. There need be no great apprehension as to the disease passing over the country as an epizootic among the sheep, as it has been with cattle. With the exercise of ordinary precaution such a catastrophe will not occur, although isolated cases and occasional little outbreaks are inevitable during the continuance of the disease in this country. Let it be remembered that ovine susceptibility to the virus of true cattle plague is greatly less than pertains to the oxen tribe, and sheep succumb to the disease only after inoculation, or in consequence of lengthened exposure to the contagion in a more than usually concentrated form."

NEW REMEDIES.—EXTRACT OF COD LIVER.—This substance is an extract from the cod liver, and is prepared in a form suitable for pills and sugar plums. It differs from cod liver *oil* in these respects;—that whereas the oil *is oil* mingled with certain fishy matters, to which it owes whatever superiority it may possess over other oil, this *extract* professes to give us in a bodily form those very fishy matters themselves. Therefore it is argued that the extract may not only be a substitute for the oil, but may be available in many cases in which the oil is either rejected by the stomach or is inadequate to relieve the maladies for which it may be prescribed. The extract is said to contain ichthyoglycine, propylamine, gaduine, etc., in the proportion of nearly 80 per cent.; whereas the oil contains these mysterious bodies in the proportion of only $\frac{1}{2}$ per cent. If, therefore, the virtues of cod liver oil depend upon propylamine, gaduine, etc., aforesaid, it is clear that the extract must, according to Cocker, be 200 times as efficacious, weight for weight. The question may be raised, however, whether the oil is not of value as a peculiarly light and digestible form of fat, independently of these mystical bodies. Be this as it may, any one who is condemned to take cod liver oil, and who would be delighted to have a substitute in the form of pills and sugar plums, had better consult a little pamphlet on the "Medicinal Properties of Cod Liver," by M. Guffroy, published by Mr. Hardwicke, Piccadilly.

THE following are the last week's Cattle Plague Returns.

| Census Divisions. | 1. Attacked. | | | 2. Result of reported Cases from the Commencement of the disease. | | | | |
|---|---|---|---|---|---|---|---|---|
| | Week ending March 10. | Week ending March 3. | Week ending February 24. | Attacked. | Killed. | Died. | Recovered. | Unaccounted for. |
| 1. Metropolitan Police District . . | 14 | 12 | 12 | 7639 | 3234 | 3490 | 333 | 582 |
| 2. South Eastern Co. . | 13 | 23 | 16 | 5002 | 1567 | 2788 | 442 | 210 |
| 3. South Midland Co. | 616 | 573 | 711 | 15146 | 3385 | 9621 | 1487 | 455 |
| 4. Eastern Counties . | 313 | 241 | 262 | 9586 | 3646 | 4736 | 723 | 481 |
| 5. South Western Co. | 35 | 41 | 48 | 1481 | 451 | 757 | 198 | 75 |
| 6. West Midland Co. . | 405 | 1067 | 298 | 9575 | 1778 | 5937 | 1122 | 738 |
| 7. North Midland Co. | 910 | 1032 | 880 | 10673 | 3332 | 5951 | 1039 | 551 |
| 8. North Western Co. | 2023 | 1544 | 3988 | 48401 | 4212 | 38511 | 4691 | 5987 |
| 9. Yorkshire . . | 611 | 1193 | 1369 | 29532 | 8012 | 18021 | 5609 | 2890 |
| 10. Northern Counties. | 522 | 697 | 577 | 6006 | 2455 | 2478 | 926 | 147 |
| 11. Monmouthshire & Wales . . | 90 | 113 | 268 | 7294 | 166 | 5780 | 1017 | 329 |
| 12. Scotland . . | 766 | 834 | 1843 | 44785 | 5027 | 26475 | 9839 | 3444 |
| | 6518 | 7310 | 10167 | 195322 | 82367 | 119740 | 27426 | 15889 |

*Note.*—225 inspectors have not reported this week in time for this return. Of these 15 reported cases last week—viz.:—For the county of Buckingham, 1; Chester, 2; Lancaster, 1; Lincoln, 1; Norfolk, 1; Oxford, 1; Salop, 1; East Riding of York, 2; the Metropolitan Police District, 1; and for Scotland 4. These inspectors returned 1416 cases last week.

STATISTICAL SOCIETY.—The following is the list of Members of Council and Officdrs for 1866-67:—*President*: The Right Honourable Lord Houghton. *Council*: Major-General Balfour, C.B.; *Lord Belper; A. J. Beresford Beresford-Hope; Sir John Boileau, Bart., F.R.S.; William

John Bovill; Samuel Brown; William Camps, M.D.; Edwin Chadwick, C.B.; *David Chadwick; Leonard Henry Courtney; *William Ewart, M.P.; William Farr, M.D., D.C.L., F.R.S.; Right Hon. Earl Fortescue; William Augustus Guy, M.B.; James Thomas Hammick; Frederick Hendriks; James Heywood, M.A., F.R.S.; William Barwick Hodge; Charles Jellicoe; *William Stanley Jevons, M.A.; Francis Jourdan; Leone Levi, F.S.A.; William Golden Lumley, LL.M.; Matthew Henry Marsh, M.P.; George Moffatt, M.P.; William Newmarch, F.R.S.; Frederick Purdy; *Rev. J. E. T. Rogers, M.A.; Col. W. H. Sykes, M.P., F.R.S.; *John Walter. [Those marked (*) are new members.] *Treasurer:* William Farr, M.D., D.C.L., F.R.S. *Honorary Secretaries:* William Augustus Guy, M.B.; Wm. Golden Lumley, LL.M.; Frederick Purdy.

## NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

*A Subscriber.*—Yes.

*Opium in Continued Fever.*—This paper shall be inserted.

*Igno.*—Consult any respectable Surgeon and pay him his fee.

*J. W. H.*—John Woodall, Surgeon to St. Bartholomew's Hospital, invented the Trephine in 1626.

A *Student.*—The Registration commenced at the College of Surgeons on the 22nd inst., and will close on the 31st inst.

*A. B.*—Legal qualification to practise now depends on registration. What qualification may be required by a candidate for a Medical office in a county Infirmary depends entirely on the laws of that Infirmary.

*Tyburnia.*—The skeleton of Jonathan Wild, which is contained in the Museum of the College of Surgeons, is that of a short man. The body of Sterne was removed by resurrectionists from Marylebone and sent to a professor of anatomy at Cambridge.

*Medical Charities.*—Mr. William Whitehead, of Dobcross, Saddleworth, Yorkshire, lately deceased, has bequeathed to the Manchester Eye Hospital £100; to the Manchester Blind Asylum £500; to the Huddersfield and Upper Aybridge Infirmary £1000; to the Manchester Deaf and Dumb Asylum £500.

*Ozone.*—We have received so many inquiries about that mysterious substance, ozone, that we think we cannot do better than lay before our readers a general account of it, what it is, how it is produced, and what are its properties. This we hope to do in our next number. Ozone has been talked of by many as a substance of such exceedingly active powers for good and for evil, in a sanitary point of view, while there are, at the same time, such slender proofs of a direct kind of its existence as a specific form of matter, that we are not at all surprised at the peculiar interest manifested about it by the members of our Profession.

*Congleton.*—Belladonna has failed over and over again as a preservative against scarlatina. If the homœopathic doctrines were true, no organism under the influence of a medicine *could* be susceptible to the attack of a miasm or other pathogenetic agent. But they are. *Ergo*, the doctrines are false. Any woman can treat patients homœopathically, for the globules all come out of one bottle. Physical diagnosis and morbid anatomy are superfluous; the disease is the symptoms, and the symptoms are the disease, says Hahnemann, and the symptoms being known, the right globule can be found in the Index. It is rather unlucky that some morbid changes have no constant symptoms.

*An Old Carthusian.*—The body of Thomas Sutton, the founder of the Charter House, was embalmed by Edmund Phillips, who received £40 4s. 8d. The two Serjeant-Surgeons who opened and embalmed George II., received £122 8s. 9d. each, and the apothecary £152 for "a fine double cere cloth, and a due quantity of rich perfumed powders."

*H. L., Barnsbury.*—The famous epigram on George the Third's Physicians, to which you allude, is an example of the advantages of rhyme, the wit lying in the metrical form, and in the form only, viz.:—

"The King employed three Doctors daily,
Willis, Heberden, and Baillie,
All exceedingly skilful men,
Baillie, Willis, Heberden;
But doubtful which most sure to kill is,
Baillie, Heberden, or Willis."

*Trichinosis.*—An Hungarian agriculturist writes to a Vienna journal that in his country the pigs have been long known to be affected with trichinæ. That if the disease is not communicated to man, it is owing to the thorough cooking and smoking to which the meat is subjected, and also to the circumstance that they do not consume trichinal meat. They easily recognise it, as meat affected with trichinæ gives to the eater the sensation of sand being between his teeth. He maintains that in Hungary they cure trichinous pigs in about fifteen days by giving them hempseed to eat, and they distinguish the diseased animals by their savage propensities and their mania for gnawing wood.—*L'Union Medicale*, February 15, 1866.

*Erratum.*—P. 277, col. 1, last line, *for* Dr. Phipps *read* Dr. Helps.

"*Scientific Opinion.*"—Under this title a new scientific journal is to be published on April 4. We understand that it is to be conducted upon the model of *Public Opinion*, and will contain extracts from the more important articles which appear in the English and Continental journals. Reports of the local and foreign Societies, and notices of new books, will also form part of its scheme. In this age of periodical literature it is utterly impossible to get even a satisfactory glance at the several scientific magazines; *Scientific Opinion*, therefore, meets a serious and growing want. By its means those of our Professional brethren who are desirous of being posted up in the doings of the *savants* will be kept quite *au fait* of scientific progress.

*Disease among the Finches.*—For some time past a disease has caused considerable havoc among the poultry. Fowls which at evening had gone to roost apparently well were found dead the next day. Those which resisted the attacks of the disease presented all the symptoms of pip, soon followed by such a wasting that the wind raised them like feathers, and carried them sometimes to considerable distances, where they lay on their sides unable to rise. After that form of epidemic ceased to ravage the useful family of gallinæ, the family of the passeres had their turn. But there the disease took quite a different character. The sparrows and finches, which have been specially attacked, come and fly around persons as if they were tame. This surprising change is due to an almost complete blindness. The eyes of the unfortunate birds are covered with a white membrane sufficiently tense almost to conceal the pupil. On nearer examination, the lens can be seen to be opaque. It is affected with true cataract. Unable to seek their food, the poor flutterers die by starvation if they do not fall into the clutches of man or some animal. The cause of this disease we must seek in the air. But the air, physically and chemically, is a very complex fluid. One meets sometimes in the open sea floating banks of dead fish as if they had been poisoned *en masse* by some unknown agent. Why should not analogous phenomena be produced in the gaseous ocean which on every side envelopes our earth, and the depths of which we occupy?—*L'Union Médicale*, February 20.

### POOR-LAW MEDICAL REFORM.

Mr. Griffin begs us to inform the Poor-law Medical officers that the following subscriptions have been received by him towards the funds of the Association:—G. Taylor, St. Faith's, 19s.; H. D. Ellis, Poole, 5s.; Haynes, New, and Haynes, 21s.; Newman and Atkins, Cosford, 10s.; A. Roberts, Holborn, 10s.

By Mr. Prowse:—T. Odell, Hertford, 10s.; H. Jepson, Kingston, 10s.; A. Kirkland, Amersham, 10s.

### GRIFFIN TESTIMONIAL FUND.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The following subscriptions have been further received on behalf of the above fund:—C. H. Carter, Esq., Pewsey, 10s. 6d.; J. Breach, Esq., Aston-up-Thorne, 10s.; Dr. Ed. Ray, Dulwich, £1 1s.; amount previously announced, £134 5s. 3d.; received at *Lancet* office, £13 11s. 6d.

I am, &c.
Robert Fowler, M.D., Treasurer and Hon. Sec.
145, Bishopsgate Without, March 21.

### LOCAL ANÆSTHESIA.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Visitors to King's College Hospital last Saturday afternoon had an opportunity of judging as to the efficiency of sulphuric ether spray as a local anæsthetic. Fortunately, there were two cases very similar to each other—viz., tumours, tolerably superficial and well defined, situated in the left infra-maxillary regions of two women, about the same age. In the first case, after the skin had been exposed to the spray for several minutes, Sir W. Fergusson pinched the skin and drew the back of the knife along the blanched surface, and after waiting a short time longer, desired chloroform to be administered. She became rapidly insensible, the tumour was removed, and she now says she felt nothing except the pinch and the scratch. In the second case, the skin was exposed a considerable time to the spray. Mr. Henry Smith removed the tumour with his usual expertness, but, to judge from the woman's behaviour then and her statement now, hyperæsthesia was the conditien which obtained during the operation. Perhaps in cases where greater isolation could be effected, as in pendulous tumours, or the digits, more satisfastory results might follow. Nearly six ounces of ether were used—all that was in the house.

I am, &c.
An Eye-witness.

### SCIENTIFIC EVIDENCE AT THE TRIAL OF M. A. ASHFORD.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In the report of the trial of Mary Ann Ashford at the Devon Lent Assizes for the murder of her husband, William Ashford, by administering the poisons arsenic and strychnine to him, you will find that Mr. Herapath, sen., when enumerating the symptoms of poisoning by arsenic, stated that retention of urine was one.

Now in this he was manifestly wrong, for the reverse of retention takes place, as is well known. There is an incessant and most painful desire to micturate, amounting to strangury. In Ashford's case the bladder was empty and contracted to such a degree as I have never before witnessed—probably this was due to the action of strychnia—its lining membrane deeply injected, and this state of irritation was continued to the outer urethral orifice.

I am, &c.
Exeter, March 18.
F. H. Warren.

### DR. SMART'S REPORT ON THE CATTLE PLAGUE, AND THE EDINBURGH CATTLE PLAGUE COMMITTEE.

The following letter has appeared in the *Scotsman*:—

"Sir,—Since the outbreak of the terrible epizootic, which for so many months has ravaged Great Britain, I have read with deep interest all that has been contributed to our knowledge of this very remarkable and formidable disease. Amongst the very first, and, I venture to say, most valuable contributions made in this country to our knowledge of Rinderpest, must assuredly be placed the admirable report on "The Pathological Appearanecs of the Cattle Plague," by Dr. Andrew Smart, which was published in your columns on September 13. In that report Dr. Smart, who had only a short time before (September 1), been appointed by the magistrates to investigate the prevalent disease, gave the result of a laborious and painstaking investigation into the pathological anatomy of Rinderpest, and placed on record a mass of facts which, whilst they have served to enlighten those whose duty it is to recognise the disease, served to dispel certain errors which prevailed as to the supposed analogies existing between the, to us, new disease, and certain malarias already well known to affect man. Although a considerable time has elapsed since the report to which I have referred was published, it constitutes one of the very best contributions to our knowledge of the cattle plague, and, as such, most certainly entitles its author to the credit which I trust all who are acquainted with the subject have freely allotted to him.

"Some weeks after the appearance of Dr. Smart's report (September 29), a Medical committee was appointed by the Town Council of this city to investigate the disease which was attracting so much attention, and, in accordance with the request of the magistrates, this committee—of which Dr. Smart was only for a very short time a member, and over which Dr. Audrew Wood presided—commenced its studies: studies which, in so far as the public have as yet been informed, merely led the commissioners to conclusions which have been proved to be erroneous, and to suggestions of whose uselessness experience has long since acquainted us.

"Such being the facts of the case, my astonishment was considerable to find, on reading a pamphlet on the cattle plague by Professor Playfair (which originally appeared in the *North British Review*, but which was afterwards reprinted in a separate form), that Dr. Smart's report is to a certain extent placed to the credit of our very worthy, but, I venture to say, very useless Cattle Plague Committee. 'We refer with approbation,' says Dr. Playfair, 'to the description of the disease given by Dr. Smart in the excellent and practical report of the Edinburgh committee, over which Dr. Andrew Wood presided. The Committee worked with uncommon energy. and produced a report in about a week after they were appointed by the Lord Provost and magistrates—a report which in reality contains one of the best descriptions of the morbid anatomy of disease which have yet been published in this country.'

"When it is remembered that Dr. Smart's pathological report was published on September 12; that the Cattle Plague Committee only came into existence on the 29th of that month; that the first report of the Committee was only published some time after; and that the Committee never published any pathological report, I cannot easily understand how Dr. Playfair could have attributed to the Committee what was undoubtedly the result of Dr. Smart's individual labours. My astonishment at Dr. Playfair's inaccuracy is all the more heightened by the fact that Dr. Playfair is himself a member of this Committee.

"It is a knowledge of the fact that there is nothing more galling to a scientific man than to find the results of a painstaking and successful investigation attributed to those who neither directed it nor shared in the toil, which prompts me to ask you to find a place in your columns (in which Dr. Smart's report first appeared) for a statement which the wide circulation of Dr. Playfair's pamphlet renders eminently called for.—I am, &c., "AN EDINBURGH PHYSICIAN."

**COMMUNICATIONS** have been received from—

Dr. T. C. SHINKWIN; APOTHECARIES' HALL; Mr. R. GRIFFIN; Dr. HERAPATH; Mr. W. H. PLATT; Mr. R. LAWSON TAIT; Dr. S. GIBBON; Dr. A. FLEMING; Dr. R. FOWLER; Dr. T. M. LEAK; A SUBSCRIBER; IGNO; Dr. A. MEADOWS; ROYAL COLLEGE OF PHYSICIANS; Dr. F. J. FARRE; ETHNOLOGICAL SOCIETY OF LONDON; STUDIOUS READER; Mr. F. H. WARREN; Dr. G. H. PHILIPSON; Mr. GEORGE S. GIBBS; Dr. CAMPS; MEDICAL OFFICERS OF FULHAM UNION; ROYAL MEDICAL AND CHIRURGICAL SOCIETY; Mr. J. JACKSON; Dr. FREDERICK J. BROWN; Mr. T. P. MORASSY; A. B.; Mr. R. HARRISON; Dr. BUCHANAN; Mr. G. GASKOIN; Dr. CHRISTIE; Mr. SPENCER WELLS; Mr. J. HUTCHINSON; Dr. HUGHLINGS JACKSON; Dr. DUNCAN MACINTYRE.

**BOOKS RECEIVED—**

Owen's Comparative Anatomy. Vol. II.—Dobell, On Winter Cough.—Odling's Animal Chemistry.—Morgan, On the Danger of Deterioration of Race.—Local Museum Notes. No. 1.—De Morgan, On the Use of the Chloride of Zinc.—Memorandum for the Sanitary Committee. By the Medical Officer of Health, Glasgow.

**NEWSPAPERS RECEIVED—**

Saunders' News Letter. - Macclesfield Courier.—Birmingham Daily Post—The Cambrian.—Sunday Gazette.—The Grocer.—The Scotsman.

## VITAL STATISTICS OF LONDON.

*Week ending Saturday, March* 17, 1866.

### BIRTHS.

Births of Boys, 1140; Girls, 1078; Total, 2218.
Average of 10 corresponding weeks, 1856-65, 1976·2.

### DEATHS.

| | Males. | Females. | Total. |
|---|---|---|---|
| Deaths during the week .. .. .. | 869 | 869 | 1738 |
| Average of the ten years 1856-65 ... .. | 701·9 | 671·9 | 1373·3 |
| Average corrected to increased population.. | .. | .. | 1511 |
| Deaths of people above 90 .. .. .. | .. | 1 | 1 |

### DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

| | Population, 1861. | Small pox. | Measles. | Scarlatina. | Diphtheria. | Whooping-cough. | Typhus. | Diarrhœa. |
|---|---|---|---|---|---|---|---|---|
| West .. | 463,388 | 1 | 10 | 5 | 1 | 3 | 8 | 2 |
| North .. | 618,210 | 9 | 7 | 5 | 1 | 15 | 17 | 2 |
| Central .. | 378,058 | 6 | 10 | 3 | 2 | 8 | 6 | 2 |
| East .. | 571,158 | 7 | 16 | 12 | 2 | 22 | 16 | 1 |
| South .. | 773,175 | 5 | 17 | 8 | .. | 25 | 19 | 3 |
| Total .. | 2,803,989 | 28 | 60 | 33 | 6 | 73 | 66 | 10 |

## METEOROLOGY.

*From Observations at the Greenwich Observatory.*

| | |
|---|---|
| Mean height of barometer .. .. .. .. .. .. | 29·396 in. |
| Mean temperature .. .. .. .. .. .. .. | 39·3 |
| Highest point of thermometer .. .. .. .. .. | 55 3 |
| Lowest point of thermometer .. .. .. .. .. | 25·7 |
| Mean dew-point temperature .. .. .. .. .. | 32·8 |
| General direction of wind .. .. .. .. .. .. | Variable. |
| Whole amount of rain in the week .. .. .. .. | 0·17 |

## BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, March 17, 1866, in the following large Towns:—

| Boroughs, etc. | Estimated Population in middle of the Year 1866. | Persons to an Acre. (1866.) | Births Registered during the week ending Mar. 17. | Deaths. Corrected Average Weekly Number.* | Deaths. Registered during the week ending March 17. | Temperature of Air (Fahr.) Highest during the Week. | Temperature of Air (Fahr.) Lowest during the Week. | Temperature of Air (Fahr.) Weekly Mean of the Mean Daily Values. | Rain Fall. In Inches. | Rain Fall. In Tons per Acre. |
|---|---|---|---|---|---|---|---|---|---|---|
| London (Metropolis) | 3067536 | 39·3 | 2218 | 1400 | 1738 | 55·3 | 25·7 | 39·3 | 0·17 | 17 |
| Bristol (City) . . | 163680 | 34·9 | 104 | 73 | ‡124 | 53·6 | 25·0 | 40·2 | 0·41 | 41 |
| Birmingham (Boro') | 335798 | 42·9 | 269 | 163 | 192 | 50·7 | 26·4 | 38·9 | 0·68 | 69 |
| Liverpool (Borough) | 484337 | 94·8 | 387 | 281 | 530 | 50·5 | 32·3 | 41·3 | 0·51 | 52 |
| Manchester (City) . | 358855 | 80·0 | 294 | 203 | ‡269 | 52·5 | 23·0 | 38·4 | 0·56 | 57 |
| Salford (Borough) . | 112904 | 21·8 | 81 | 57 | 65 | 51·1 | 24·0 | 38·9 | 0·54 | 55 |
| Sheffield (Borough) . | 218257 | 9·6 | 170 | 115 | 155 | 51·6 | 25·0 | 37·9 | 0·58 | 59 |
| Leeds (Borough) . | 228187 | 10·6 | 204 | 116 | 168 | 54·3 | 24·0 | 38·5 | 0 48 | 48 |
| Hull (Borough) . | 105233 | 29·5 | 90 | 49 | 68 | .. | .. | .. | .. | .. |
| Nwcastl-on-Tyne, do. | 122277 | 22·9 | 93 | 65 | 61 | 56·0 | 28·0 | 37·6 | 0·11 | 11 |
| Edinburgh (City) . | 175128 | 39·6 | 125 | 84 | 129 | 49·7 | 27·0 | 38 5 | 0·00 | 0 |
| Glasgow (City) . . | 432265 | 85·4 | 374 | 252 | 292 | 49·9 | 25·7 | 39·1 | 0·27 | 27 |
| Dublin (City and some suburbs) . | 318437 | 32·7 | 173 | †156 | 192 | 51·6 | 26·2 | 42·0 | 0·95 | 96 |
| Total of 13 large Towns . . . | 6122894 | 34·4 | 4582 | 3014 | 3983 | 55·3 | 24·0 | 39 2 | 0·44 | 44 |
| | | | | | Week ending Mar. 10. | Week ending Mar. 10. | | | | |
| Vienna (City) . . | (1863)<br>560000 | .. | .. | .. | 399 | .. | .. | §<br>42·6 | .. | .. |

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·396 in. The barometric pressure was 30·23 in. on Sunday, and fell to 28·97 in. on Saturday.

The general direction of the wind was variable.

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* The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.

† Registration did not commence in Ireland till January 1, 1864; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in that city were the same as the averages of the rates in the other towns.

‡ The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

§ The mean temperature at Greenwich during the same week was 36·8°.

## APPOINTMENTS FOR THE WEEK.

### *March* 24. *Saturday* (*this day*).

*Operations* at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free Hospital, 1½ p.m.

ROYAL INSTITUTION, 3 p.m. Rev. G. Henslow, "On Structural and Systematic Botany."

### 26. *Monday.*

*Operations* at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.

### 27. *Tuesday.*

*Operations* at Guy's, 1 p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p m.; St. Peter's Hospital for Stone, 3 p.m.

ETHNOLOGICAL SOCIETY OF LONDON, 8 p.m. John Crawfurd, Esq., President, "On the Invention and Use of Writing Materials." Prof. Dadabha Naorji, "Notes on Mr. Crawfurd's Paper on the European and Asiatic Races."

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8½ p.m. Mr. T. Holmes, "Case of Lumbar Colotomy." Dr. Morehead, "On the Pathology of Pneumonia and Hepatitis."

### 28. *Wednesday.*

*Operations* at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.

### 29. *Thursday.*

*Operations* at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.

### 30. *Friday.*

*Operations*, Westminster Ophthalmic, 1½ p.m.

# MAW'S CATALOGUE.

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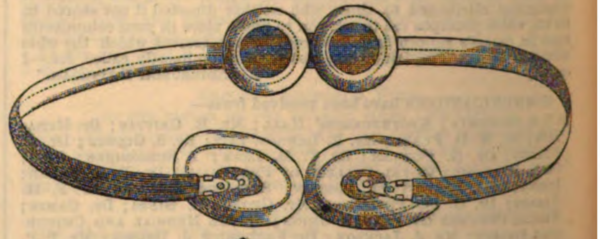

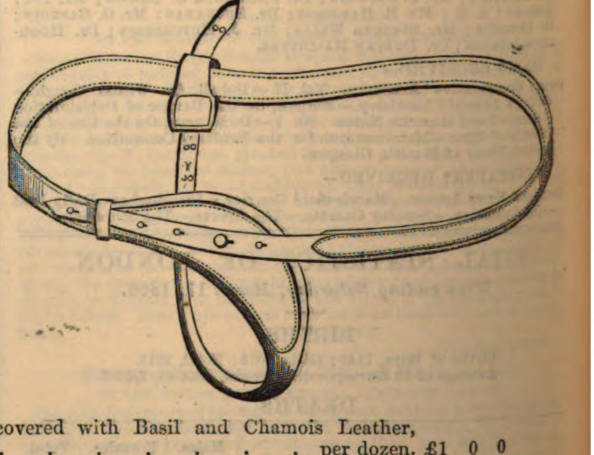

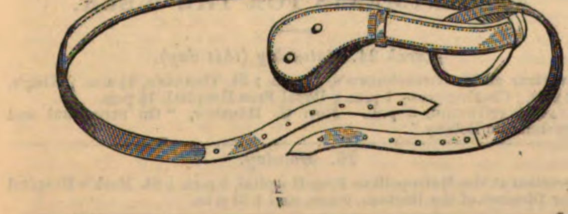

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# ORIGINAL LECTURES.

ON

# GENERAL AND LOCAL CHEMICAL AND MECHANICAL DISORDERS ARISING FROM ERRORS OF CHEMISTRY IN THE DEVELOPMENT AND REPAIR OF THE BODY.

By H. BENCE JONES, M.D., F.R.S.

## PART IV.—LECTURE XI.

INSTEAD of giving you one lecture on this subject it might well, from its vastness, furnish me with materials for a complete course, for the chemistry of nutrition is much more complex than the chemistry of oxidation because it includes not only the chemistry of the formation of the tissues or the assimilation of the albuminous principles of the blood to each organ, but also the chemistry of the removal of the used materials. This chemical building up and chemical taking down must have a direct dependence the one on the other, both in the substances taking part in the quality of the actions, and in the rate at which those actions are carried on.

Moreover, oxidation is actively concerned in rendering the old materials volatile, or soluble, or removeable, and this source of fuel is an economy of the machine; and when food is insufficient, or starvation occurs, it enables it to continue its work, using the products of its own structures and its own stores of fat as sources of power.

If the chemistry of repair is complicated and imperfectly understood, far more ignorance exists regarding the chemistry of development. The chemistry of the formation of the first blood globules, the first nerve cell, or muscular substance, or cartilage in the fœtus, will perhaps never be understood; but when once these substances are formed, it seems comparatively easy to comprehend that like produces like, although this universal law is only a statement of the fact that nerve produces nerve, and muscle muscle, and bone bone, and furnishes no explanation whatever of the chemistry of development or of repair.

The clearest idea I can offer you at present is that each particle of the body must be considered as a ductless gland, having a contact action on the materials of repair brought to it, so that it separates the substances that can be changed into its own structure. If the fœtus would grow where the mammary gland exists, so that instead of milk being formed the fœtus would take from the blood just that which is required to form each structure and tissue of the body, you would on a great scale have a demonstration of the different chemical actions which are continually going on in the building up of each particle of our textures. Each portion of muscle, or nerve, or other tissue takes from the blood that which can nourish it, but in order that this nutrition may be effected not less than three different actions must simultaneously be going on.

First, the food must be brought; secondly, the chemical action of assimilation must take place; and thirdly, the old materials must be taken away. If the balance is not rightly kept between these mechanical and chemical actions, malformations and all degrees of wrong growth between hypertrophy and atrophy will occur.

I shall divide the diseases from the wrong action of one or of all these causes into two great classes; one I shall consider arises from pertrophic, and the other from subtrophic, chemical actions. Hypertrophy and atrophy constitute extreme cases of opposite actions in these two classes of disease.

In every machine the wear must be proportioned to the work, and the amount of repair required depends upon the wear. Hence, from the amount of work done, you may draw some judgment as to the amount of repair that is necessary. Helmholtz states that the best Austrian steam engine can raise its own weight 2700 feet in one hour; whilst he calculates from the pressure of the blood that the human heart raises its own weight 20250 feet in one hour, so that the human machine requires an amount of repair very much beyond that of a first-rate steam engine, and errors of repair, pertrophic and subtrophic, must be ready at all times to occur.

In nutrition the first important condition is that nutritive substances should be brought to the spot where the action of assimilation is going on; this is effected primarily by the circulation through the blood vessels, and secondly by diffusion of lymph into the structures. The third equally important condition is that the used substances should be taken away, and this also is effected primarily by the circulation through the blood vessels and, secondly, by the circulation through the lymphatics. As the circulation in the blood vessels is under the regulating power of the nervous system, it follows that two out of the three simultaneous actions of nutrition are under the direct influence of the nerves.

There is as yet no evidence that the second necessary condition, that of assimilation, can be altered directly in quality or quantity by the nervous system. Indirectly, by lessening or increasing the amount of substances that go to or come from any part, the nerves can exert a potent influence on the pertrophic or subtrophic actions; and indirectly by altering the circulation the nerves can exercise an influence on the peroxidation or suboxidation in any tissue, and thus the temperature at which the process of assimilation is carried on may be affected.

In the vegetable world, on account of the much greater variations of temperature that occur, it is easy to see how assimilation is influenced by heat. The tropical plants will grow in our light, provided the heat of the tropics is given to them here. If in the full light of the sun a plant could be kept all the year round at a temperature just above freezing little or no assimilation would take place.

In animals also the chemical actions of assimilation depend on the temperature, and the variation of a very few degrees makes a material difference in the chemical actions which take place in the textures.

In the present state of our knowledge it is not possible for me to classify the different diseases that are produced by different errors of repair arising from errors of action in the different processes of nutrition. At some future time there will be a class of diseases arising from excess or deficiency of materials to be assimilated, another large class arising from wrong chemistry of assimilation itself, and another arising from excess or deficiency in the removal of materials that have assimilated. Ultimately animal chemistry will enable us to make a far more perfect classification of pertrophic and subtrophic diseases than at present is possible; and now, from want of knowledge, more than from want of space, I shall take only one or two of these diseases of nutrition, and omitting any explanation of the wrong chemistry that produced the malformation and sets up the mechanical diseases, I shall again show you how secondary chemical diseases may arise from the mechanical errors which may be vastly more dangerous than the slight chemical errors by which the mechanical diseases were originally produced.

Perhaps two of the most striking examples that I can bring before you will be imperfect closure of the foramen ovale, and imperforate hymen—two opposite errors of development, the one depending on subtrophic and the other on pertrophic action. Each of these opposite chemical wrongs produces an opposite mechanical effect; and these mechanical diseases give rise to chemical disorders, which ultimately may stop the working of the machine. Imperfect closure of the foramen ovale and ductus Botalli produces general suboxidation, and imperforate hymen causes an absorption of poisonous products of decomposition, which affect and ultimately stop all the chemical actions of nutrition.

In the first disease the result of the subtrophic action is that a space between the two hearts is not filled up. The blood in consequence passes from the right to the left side, without going through the lungs. By this slight mechanical error, as it might seem, compared with the perfection of the rest of the machine, the whole chemistry of respiration is reduced to its lowest point. The absorption of oxygen is so diminished that the blood is not arterialised, and the carbonic acid is not liberated. The chemical action that takes place outside the capillaries, on which the heat and the power of the body depend, is reduced below the average. Dr. Forster, in the *Dublin Quarterly Journal*, August, 1863, mentions some experiments in two cases. In one, "the fingers were seldom more than 5° F. to 8°, the toes 1° to 3° higher than the temperature of the room. In the other the fingers were from 6° to 9°, the toes 2° to 4°. In the mouth in one the temperature was 96°, and in the other 97½°. In one it once fell as low as 90°, and in the other to 92° F." Even the chemistry of repair, by which the reformation of the different structures takes place, falls below the healthy amount. The body is weak, and wastes until premature death liberates the elements and allows the forces they possess to act with greater energy.

Thus, then, the results of this slight deficiency of nutritive action is general suboxidation from insufficient supply of oxygen to the blood and textures; and from this local passive congestions are apt everywhere to occur, and general subtrophic action is the final result.

The first chemical causes of the disease cannot be touched, and the mechanical complaint itself is not within reach; so that the symptoms and complications are alone capable of treatment, and as these proceed from suboxidation and subtrophic action, the mechanical and chemical promotion of oxidation and nutrition are the indications to be continually carried out. The oxidation may be promoted by constant attention to the warmth of the surface and by mechanical friction. Dr. Foster says that peroxide of hydrogen in eight minim doses three times daily improved the colour, made the breathing less laboured, and caused a rise of temperature. The subtrophic action may be palliated by warmth and friction, and also by reducing the work of the machine so far as to avoid all exhaustion. By giving the utmost external warmth the minimum amount of the force set free in the body is required to be expended in keeping up the temperature of the body; and the greatest amount of force remains capable of conversion into motion in those muscles which are necessary for circulation and respiration. If a part of the total force is spent in voluntary actions by strong exertion, the supply of power to the heart and lungs is so lessened that the tendency to passive congestions in the circulation is increased, and then mechanical obstructions, which constitute the most dangerous complications, are produced.

In contrast to this subtrophic disease, I will now shortly bring before you the pertrophic malformation of which I spoke to you, imperforate hymen. Whether a locally increased supply of nutriment leads to the excess of development, perhaps will never be determined, but the mechanical wrong remains for years, producing no bad effects; and if menstruation did not take place, the original complaint might remain unknown throughout life. As soon as menstruation begins, the chemical secondary disease begins also. The excrementitious blood finds no means of escape. It remains within and undergoes chemical changes; products of disintegration, which chemistry has yet to determine, are formed. Those that are soluble are absorbed with the water of the effused blood, and month by month this process is repeated, until the blood and the textures are poisoned, and nutrition and oxidation are modified or stopped, and anæmia, debility, dropsy, and death may result.

With regard to the treatment of the symptoms and complications arising from the chemical disease, nothing need be said, because the mechanical disease can be got at. If it were otherwise, chemistry has no antidote for the poison, and as in uremia or in jaundice, we should be able, perhaps, to do very little for the chemical cause of the complaint, but in imperforate hymen the slightest mechanical operation is all that is required to remove the mechanical obstruction, and then if no inflammation comes on, as no further poisoning takes place, gradually the blood and textures recover their healthy composition—all the poison is oxidised and removed.

Instead of drawing my examples of the origin of chemical disease from malformations, I might show you that the same relationship exists by taking errors of reformation or repair. In nutrition pertrophic or subtrophic errors occur, and from these mechanical and chemical errors arise, which may be far more serious than the original wrong action. In the three simultaneous actions that constitute nutrition, it is not always possible to separate the effects of each action in producing the error of nutrition; but in some cases it is possible to find more of one than of the other two actions, as in the following examples:—

First, let me bring before you chemical diseases of repair, arising chiefly from variations in the supply of nutriment.

Speaking of Hunter's well-known experiment, Mr. Paget says, "When the spur of a cock, for example, is transplanted from the leg to the comb, which abounds in blood, its growth is marvellously augmented, and it increases to a long, strange-looking mass of horny matter, such as is shown in two preparations in the Museum of the College. In one (54) the spur has grown in a spiral fashion till it is six inches long, and in the other (52) it is like a horn curved forwards and downwards, and its end needed to be often cut to enable the bird to bring his beak to the ground in feeding and to prevent injurious pressure on the side of the neck." If this mechanical pressure had not been removed by operation, it would probably have caused the death of the animal by obstruction or starvation. So that here is an instance of a pertrophy producing a serious mechanical complaint.

Instead of an excess of nutriment there may be a deficiency, and the sub-trophy from the want of raw material may be rapidly fatal. I am again indebted to Mr. Paget for my illustrations. "A Medical man wished to be bled in a fit of exceeding drunkenness, and some one bled him—bled him to three pints. He became very ill, and next day both his feet were mortified from the extremities of the toes to the instep."

One of Mr. Swan's donations to the College Museum is the larynx of a man who, while in low health, cut his throat, and suffered so great a loss of blood that the nutrition became impossible in one of those parts to which blood is most difficultly sent, and before he died his nose sloughed.

Secondly, I will mention states of pertrophy and subtrophy arising from the actions of assimilation going on in a part, and I shall then show you the mechanical and chemical diseases produced from these altered states of nutrition.

I shall draw my examples here from enlargement of the uterus during pregnancy, because the first commencement of the increased growth does not depend primarily on the increased flow of blood, but on the changes in the uterus itself which determines that flow. The increased action in the uterus itself must be set up by the intense actions going on in the impregnated ovum, and by the internal mechanical pressure of the foreign substance in the uterus. As soon as the increased nutrition begins, the increased flow of blood follows, and keeps up the rapid formation of the different structures of which the uterus is composed. As soon as the pressure is removed, and more or less loss of blood has occurred, the structures cease to be nourished, and in a few weeks no trace of the increased nutrition can be found.

During the time of the greatest pressure very many different mechanical results may be produced, and thus mechanically very different secondary chemical diseases may arise. In speaking of tubular nephritis I have mentioned the obstruction of the renal vein in pregnancy, and the consequent production of Bright's disease and uræmia. Another most frequent chemical disease from the pressure is jaundice. More rarely gall-stones and all their tertiary mechanical agony occur. Another disease resulting from pressure is hæmorrhoids, and these inflame and cause great additional suffering.

When the pressure in the act of delivery reaches an extreme height, then many more chemical diseases are produced. Of these I may mention a few, as sloughing of the soft parts; inflammation of the perineum from rupture; inflammation of the peritoneum from rupture of the uterus; rupture of the air vesicles of the lungs and general emphysema of the cellular tissue; stoppage of the chemical action of respiration in the fœtus.

It is in the highest degree probable that by chemical agents the force of assimilation in the different textures may be increased or diminished in its action. Animal chemistry at present has hardly touched upon this subject, and I can only give you one or two examples, which, however, may serve to point out the vast and important field which is here open for future research. When I come to the classification of medicines I shall endeavour to show you that one grand class consists of those substances which promote or retard the chemical actions of nutrition—not by causing more or less blood to flow to any part, nor by hastening or retarding the removal of the used substances, but by increasing or diminishing the chemical actions which are concerned in assimilation.

The example which I will here mention of increased nutrition by the action of a chemical substance is for the chemist that invaluable fact that iron, even metallic iron, iron rust, or the finely-reduced metal itself, taken into the body produces an increase of blood globules. Where and how this chemical action takes place chemistry cannot yet make out. The iron, when taken, is probably acted on by acids in the stomach, and is absorbed into the blood and diffused into every structure; but whether the colourless corpuscles in the lymph, the spleen, and the blood itself by the action of iron and oxygen form hæmatocrystallin cannot be determined. We know that lymph reddens when exposed to the air, and that in the spleen transitions from white to red corpuscles may be observed, and coloured cells and nuclei, which appear to be disintegrated blood globules, may there be found mixed with products of oxidation—as uric acid, hypoxanthin, xanthin, leucin, tyrosin, inosit, volatile fatty acids (formic, acetic, bytyric), lactic acid, many colouring matters, an albuminous substance containing iron, and generally very many iron compounds. This tells us very little as yet; but chemistry will some day say how and where the increase of hæmatocrystallin occurs when iron is taken. A somewhat similar, but less important example exists in the action of phosphate of lime and of carbonate of lime in increasing the growth of the bones in cases of rickets; and a well-known and often-applied theory exists that phosphorus taken, not only in substance, but even as phosphoric acid, can increase the formation of nerve substance; but for this there is at present not the smallest shadow of foundation. It has also been said that zinc is to the nerves what iron is to the blood; but there is absolutely as yet no chemical evidence that zinc, or any salts of zinc, have any power over or take any part in the formation of nerve substance. Far more probable is it that zinc acts like lead, and perhaps silver, in retarding or stopping the chemical actions which are taking place in assimilation, and thus producing what I may be, perhaps, allowed to designate as a chemical disease.

One of the most striking instances of the action of a chemical substance in diminishing nutrition is lead disease. The poison may be seen in the gums, and felt in the bowels, and be got out of the muscles of the arm, and as three grains of sulphate of thallium, when given to a rabbit, could in six and a half hours show thallium distinctly in the aqueous extract of the lens, and as even two grains in six hours also gave there slight traces of thallium, there can be little doubt that the salts of lead pass everywhere—into the blood globules, into the muscles, into the gums, and even into the lens of the eye, and that according to their power and according to the actions going on in the parts, it exercises a greater or less influence upon the chemical changes which are taking place. In the voluntary and involuntary muscles the lead must either combine with the syntonin or be precipitated in it as an insoluble sulphuret, and so stop the chemical changes upon which the action of the muscles depends. It is highly probable that salts of lead act upon other textures; as, for example, on the young blood-globules, stopping the formation of hæmatocrystallin; and on the sympathetic nerve, causing the violent pain of colic; also on the muscular coat of the small arteries, lessening their increased action, as when applied as a lotion in inflamed skin; but on all these points chemistry must give us far more exact information than we at present possess. I might say the same for silver, arsenic, copper, and many other medicines.

The action of salts of silver in making the conjunctiva blue when applied as a lotion, and in making the skin permanently blue when it has been taken as medicine, shows how substances enter and act chemically in the textures. A grain and a quarter of sulphide of silver was given to a guinea-pig in twelve days. The silver was found in the ashes of the liver, kidney, and stomach; less distinctly in the bile and the urine, still less in the lenses of the eye. It was not detectable in the ash of the brain, probably because the quantity taken was too small.

The two diseases of repair which will best bring before you the origin of chemical and mechanical disorders are anæmia and lead paralysis, the one arising from the absence of iron and the other from the presence of lead.

The chemical diseases of subtrophy and suboxidation which are produced by anæmia are as opposite as dropsy and fatty degeneration. General debility, not only muscular and nervous weakness, but feeble growth and feeble production of heat, characterise anæmia. The pressure of the blood in the arteries becomes so feeble that the circulation stagnates in the capillaries and the effused lymph in the cellular tissue tends to accumulate, not only in the lowest part of the body, but even in the lowest part of different organs.

Local congestions are ready to produce obstructions, around which the lowest degrees of peroxidation are set up, and the most feeble inflammations give rise to a fresh resistance, which is often more than the heart can overcome. In every texture the want of healthy change from imperfect supply of oxygen becomes evident, not only in the function of many organs, but even in the fatty formation and deposition which in anæmia rapidly adds to the general weakness and contributes to the subtrophic action which the deficiency of oxygen occasions.

Thirdly, I will show you the relationship of chemical to mechanical disease in the results of errors of excess or deficiency in the process of the removal of the assimilated materials.

That removal of a product does exercise an influence on its growth is evidenced in shaving the hair, or cutting the nails, or taking away the milk teeth; and within the organs it is highly probable that some medicines hasten the formation and removal of disintegrated substances. Thus oxygen, mercury, iodine, and, indirectly if not directly, alkalies increase the changes in the assimulated material, and, as in the example of mercury, may set up so rapid an action that peroxidation, even as evidenced by all the phenomena of inflammation, may be produced.

Moreover, errors of deficiency of removal may give rise to chemical diseases, from which mechanical disorders may follow. Lead palsy, again, well illustrates this, and shows also the relationship that exists between the chemical actions of assimilation and removal, for the poison stops both processes, and thereby produces a loss of mechanical power, which is seen in the inability of the muscles of the forearm to support the weight of the hand.

(To be continued.)

# THE PHYSICAL AND CHEMICAL CHANGES IN LIVING BEINGS FROM A PHYSIOLOGICAL POINT OF VIEW.(a)

By Dr. LIONEL BEALE, F.R.S.,
Fellow of the Royal College of Physicians, Professor of Physiology and of General and Morbid Anatomy in King's College, London, and Physician to King's College Hospital.

If we look upon muscle as a mass of chemical material and regard the brain as a pulp, the modern chemical and mechanical theories may appear plausible. Accepting this, we might proceed to discuss the changes which take place in them, just as we might those occurring in a precipitate undergoing chemical changes in a beaker, a retort, or a crucible. And we might say that to facilitate chemical change the mass of brain or muscle is penetrated here and there by tubes which carry solutions of muscle and brain to those parts where new muscle or new brain is to be precipitated, while, at the same time, the circulating fluid carries oxygen to burn the wasted stuff and dissolves and carries away the substances resulting from the combustion.

Those who maintain that the process of nutrition as it occurs in animals and man can be studied from a chemical point of view only seem to forget that the tissues cannot be fairly looked upon as chemical precipitates, because each is composed of certain minute anatomical elements or cells, and each cell is an active agent, performing many parts. Some, however, admit thus much, but assume that each cell is provided with a certain peculiar *machinery* by which it is supposed to alter matter and condition force. Not one of the mechanico-chemical philosophers has, however, attempted to explain what really takes place in the cell, or demonstrate the *cell-conditioning machinery*. The advanced modern chemist summarily dismisses all cell considerations as if they were out of his province.

Moreover, the general conclusions upon the subjects of nutrition and growth, health and disease, life and death, arrived at by those who have considered these matters from the chemical point of view, are not in harmony with what has been ascertained by actual observation. It has been proved that in these minute bodies ("cells"), and through their agency alone, nutrient pabulum undergoes *conversion* into *new substances* characteristic of the particular being or texture of which they form a part. And it is therefore obvious that a thorough investigation of these cells as they live under different circumstances by careful microscopical observation with the aid of the highest powers, combined with a minute chemical examination of the various substances entering into their composition, is essential. The entire tissue or organ is but an aggregation of units. It is a mass composed of a number of these individual parts, and if we could learn the history of the life of one of them, we should be able to give a clear account of the entire tissue or organ; so that the facts of the case do not permit us to look upon tissues and organs as masses of chemical pulp in which mere chemical change is going on. Each constituent cell is a perfect working laboratory, but without apparatus or chemist, and a machine without the imperfections necessary to machinery, for it is self-forming, self-producing, self-regulating. The cell, therefore, is neither a laboratory nor a machine, for a room in which there is neither apparatus nor a chemist is not a *laboratory*, and no *machine* makes itself, but every machine is made by us.

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(a) Part of a lecture delivered in connexion with the physiological course at King's College, 1865.

Nor do these observations apply only to questions of structure and development of interest only to the minute anatomist. The same careful study of the individual cell is necessary for working out the nature of the phenomena of disease. We cannot hope to arrive at any general conclusions with reference to some of the most simple morbid changes until the phenomena occurring in the cells have been carefully ascertained and the differences resulting from the action of different external conditions, various kinds of pabulum, etc., demonstrated. Had chemists made a careful comparison between the cells of a tissue in a state of health and those of the same tissue in a state of inflammation, they would have seen differences which would have convinced them at once that the morbid state did not differ from the healthy state merely in the activity of oxidation or other chemical processes, and a very little reflection would have led them to doubt if there was increased oxidation after all. Simply because there is increased heat, the chemist at once jumps to the conclusion that there must be increased oxidation. Is it impossible that a high temperature can result in any other way, or is this only impossible to the chemist? Little real advance seems to have been made of late in purely chemical physiology. Crude and sweeping general observations, perhaps interesting and plausible enough at the time they were first advanced, have been revived and repeated till the mere repetition has made them ridiculous. In these days, even non-Professional persons desire to penetrate a little into the nature of the wonderful phenomena going on in living organisms, and do not accept as a satisfactory explanation the assertion that a certain homogenous plasma becomes *differentiated* into such and such elements of structure; that the lungs are a furnace, and the windpipe its chimney; that in inflammation the fire burns a little too fiercely, from the draught being too great; that fevers are fermentations, and fermentations catalytic actions. People want explanations, not dogmatic assertions and high-sounding but empty phrases and words of many syllables. Scientific men are bound to give simple explanations of those things which they can explain, and confess their inability to account for that which they do not understand. The wonderful phenomena which *sharply* distinguish things living from things inanimate can be explained far more clearly by referring to some simple organism than by reference to the most complex. That marvellous process of nutrition never has been and cannot be rendered intelligible by the many attempts to explain how the entire organism of man is nourished, because "nutrition" comprehends many departments of physiology. The case, however, is somewhat different if we try to explain step by step what goes on in the nutrition of a monad or single cell, and by confining the exposition to so limited an area an opportunity is given to those we are teaching to ask us questions as we proceed, and observers who think or interpret differently from us can express their disapproval of any statement made, every chance is afforded for free discussion, and any general conclusion arrived at may be analysed or minutely dissected by an opponent, and objections urged to every one of the many positions taken up, while the weak points of the arguments cannot escape being exposed and seized upon.

The recent very positive assertions of chemists concerning oxidation and the development of heat in living organisms will be justified only if it should appear that they really know very much more than they have stated. The physiologist is told that fat and starch are oxidised; but when he asks how and where, he gets no satisfactory answer. Perhaps he is told to look at a burning candle, and when he meekly suggests a little difference in the temperature, etc., he is silenced by "differences certainly, but only of degree!" The quantity of muscle consumed in providing the motor force necessary to take a man to the summit of Mont Blanc has been calculated to a nicety; but the chemist has not even inquired whether the removal and reproduction of the large amount of muscle he estimates be possible within the time. It is very well to assert roundly that the heart consumes half its own weight in the performance of every twenty-four hours' work; but before the chemist accepted such a view it would have been well to have inquired how so much could have been taken away and added within so short a time. To the chemist who knows nothing of structure, the *oxidation* of a little old muscle and the *precipitation* of a little new muscle may seem surpassingly easy; but the physiological student is not so easily satisfied. He inquires what goes on during the oxidation and precipitation. He knows that the muscle has a remarkable structure, and takes a much longer time for its formation than the new philosophy allows. Any one who has carefully considered these things, and has seen with his own eyes what can be seen, will have formed a very different estimate of the process. It may be profoundly satisfying to some who yearn for knowledge to be assured that the sun *forms* the heart, and that all our actions are mere attractions and repulsions; but to real students such meaningless dogmatising looks like a melancholy effort to obstruct or prevent inquiry. Any one attempting to force upon us these and other doctrines of the same anti-philosophical character gives us credit for the possession of but a very small amount of common sense. Oxidation and the heat-producing process have been much regarded of late from a physico-chemical stand-point. It may therefore be interesting and advantageous to look at these phenomena from a somewhat different point of view.

In some papers published in the *Medical Times and Gazette* last year I discussed the process of nutrition in the single cell, and I propose now to consider the subject of oxidation from the same point of view. I showed that nutrition might take place without oxidation, and that oxidation was not a necessary accompaniment or result of nutrition. Oxidation in living organisms involves the previous occurrence of nutrition. Life may exist without nutrition; but it cannot *extend* without this process taking place. Life may, however, exist and extend from particle to particle without oxidation. Life is no more a *result* of nutrition and oxidation, or the *consequence* of these processes, than the mind that designs the engine, or the workman who makes it, or the factory in which the manufacture has gone on, are results of the putting of coals into the furnace and their combustion after the machine has been completed.

## ORIGINAL COMMUNICATIONS.

## ON LOCAL ANÆSTHESIA BY DR. RICHARDSON'S METHOD.

By ARTHUR ERNEST SANSOM, M.B.Lond.

As soon as possible after Dr. Richardson's announcement of the details of his process, I endeavoured to follow in his steps. The narrative of my progress, my failures, and my successes, may not be uninstructive to those who come after.

My preliminary experiments convinced me that the anæsthesia which was produced by the ether spray was due simply to the low temperature caused by the rapid vaporisation. The very facts of the production of cold, the consequent contraction of the blood-vessels, and the paralysis of the nerves, render impossible any absorption of the anæsthetic.

The first case in which I employed the anæsthetic spray-producer was one of local hyperæsthesia. A patient had suffered from obstruction of the gall-duct. It seemed to be not from gall-stones but from gritty bile. The urgent symptoms had passed off, but there was exquisite tenderness over a small portion of the epigastrium. I directed upon this portion of the skin the ether spray for a considerable time. The temperature was reduced to zero. I am constrained to say that only small relief was afforded. I repeated the operation many days successively, but relief was very transient, and finally the hyperæsthesia was removed by large doses of ether internally administered. I think the sequel will show that this case brings no discredit on the local anæsthesia process, but simply indicates that the tenderness and pain were due to causes too deeply seated for the congelation method to influence.

The next case was a sebaceous tumour of the neck, just below the ear. I attempted its extirpation. I directed the spray upon the tumour for nearly two minutes. I then made an incision, which caused very little pain. On endeavouring to seize the cyst-wall, however, pain was experienced, so that I desisted and again applied the ether-spray. Some inconvenience was occasioned by the cold produced, and the wound smarted; and even then, on removing the cyst-wall, pain occurred. Altogether the patient (a Medical man) did not approve of the process.

A third case was a patient of Mr. Baker Brown's, at the London Surgical Home. An operation was intended for removal of an hypertrophied clitoris. I know by experience the exquisite pain occasioned by this operation; it is one which usually requires the most profound influence of chloroform. I therefore suggested to Mr. Brown that the patient should be narcotised to the end of the first degree of anæsthesia; that the ether-spray should then be directed upon the region whereon the operation was to be performed, and thus the patient should be spared the effects of a very deep narcotism. Mr. Brown, who is always willing to try the effect of any process which may promise to be an improvement upon the established state of things, immediately gave his permission, and the measures contemplated were carried out. The cut of the scissors, however, though the spray was applied for at least two minutes, caused very evident expressions of pain. Indeed, the effect of the local measure was almost *nil*. Soon afterwards I had the good fortune to meet Dr. Richardson, and I laid before him the narrative of my failures. He attributed these to my use of the ordinary ether of commerce, which is manifestly impure. I have, however, since been assured that the ether I employed was chemically pure; but then, on examining my spray producer, I found that by substituting for the fine wire in the centre of the exit tube another which was supplied by the manufacturers, I obtained a much more finely-divided spray. I determined to try again and employ the ether recommended by Dr. Richardson, and supplied by Messrs. Garden and Robbins.

On March 18 I saw a little boy who had a large subcutaneous abscess at the back of the neck. The child was very sensitive; he could not bear the pain of an incision, and the abscess required an immediate relief. I applied the spray gently at first, and the little boy complained slightly of pain. I desisted for a moment, and covered the whole part with olive oil. I then reapplied the spray, and suddenly, at the end of about forty seconds, the skin covering the abscess became as white as a piece of note-paper. I made an incision which was absolutely painless, and gave exit to a couple of ounces of pus. Not the smallest ill-effect was produced; the relief was complete and permanent.

Yesterday I again applied the spray in a case of abscess in the perineum. One knows how extremely sensitive these parts are. Suffice it to say that the white appearance was produced in about a minute. The process was completely successful. So contracted was the skin that the extrusion of matter was almost complete, and to-day I find that healing is taking place with more than ordinary rapidity.

"Honour to whom honour!" I have stated my failures that my successes by Dr. Richardson's process may stand out in more bold relief. The former teach certain lessons which it will be well for all to bear in mind.

1. Be careful that the instrument is so arranged as to produce an equable and very finely-divided spray.
2. Employ perfectly pure ether.
3. Never commence any incision of the skin until a perfectly white appearance has resulted from the application of the spray.
4. In sensitive persons do every step of the process gradually, cover the sensitive parts with a bland application, and nothing is so suitable as olive oil.

This process will be invaluable in operations which principally involve the surface of the skin. In those in which the more deeply-seated parts are concerned, I think that it may be with great advantage combined with general anæsthesia. But in cases of severe or capital operations, I think that the absence of consciousness induced by chloroform is all-important. These are most potent words written to Sir James Simpson by a patient of his own who suffered all the horrors of an operation before the days of anæsthesia:—

"The unconsciousness of the patient secured by anæsthetics is scarcely less important than the painlessness with which he permits injuries to be inflicted on him. To steep his senses in forgetfulness, and throw the intellectual machine out of action, when, if allowed to work, it only moves with a rapidity and irregularity which threatens its integrity and permanently injures it, is to do him a service second only to that of saving him from suffering."

29, Duncan-terrace, N.

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The subject of anæsthesia by the ether spray has again been under discussion at the "Société Impériale de Chirurgie." M. Marjolin complained of ill-success with Lüer's apparatus, though used by M. Lüers himself, and of the inconvenience arising from the vapours of the wasted ether. M. Leon Le Fort called attention to the necessity of using *rectified* ether only, and declares that this is sufficient for small operations. For capital operations he has no intention of proposing it.—*L'Union Médicale*, March 27.

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NOTES OF

# SOME CASES IN WHICH ACUPRESSURE WAS EMPLOYED.

By Mr. LAWSON TAIT.

Acupressure has now had a sufficiently lengthened trial by some of our well-known Hospital Surgeons to show that it is deserving of confidence; and that, while it is as perfectly safe and under the Surgeon's control as is the ligature, it is possessed of many advantages over it, and can be used in cases where the ligature fails. In no case is the last statement borne out more thoroughly than in those troublesome cases of wounds of the wrist. How often do we find that patients who sustain such an injury have to go through the painful and tedious process of dissection and ligature of both bleeding ends of one or more vessels, and this repeated perhaps two or three times; and may after all have to submit to tight compressing, with the resulting profuse inflammation and sloughing of the disturbed tendons; finally, an almost useless hand Recently, I saw a case of this injury where tight compresses had at once been resorted to, and in spite of them, the bleeding was still going on. I at once removed them, and on discovering that there were only two bleeding points, one on each side of the wound, I secured them both with one needle, passing it through the edges of the wound, and bringing them together with a loop of wire, thus making the needle act as a stitch. The needle was removed in twenty-eight hours without the recurrence of hæmorrhage, and the wound was healed in four days. In another case, where a young girl had the dorsal artery of the foot divided, both ends were secured with one needle, with a perfectly satisfactory result.

The above cases, and most of the others which I shall have occasion to mention, occurred while temporarily engaged in country practice; and I may here state my opinion that if the employment of acupressure has proved an advantage in the hands of the Hospital Surgeon, it will prove one of infinitely more consequence to the country Practitioner. The application of the usual form of ligature requires an assistant, save in the hands of the most expert manipulators; while a recently-suggested improvement (?) on the old method of application requires three persons for its performance. It is but seldom the case that a country Practitioner can secure the services of a competent assistant on short notice; and therefore the fact that acupressure never requires more than one pair of hands for its application is of importance.

Wounds of the scalp, from their frequent occurrence in persons of drunken habits, and consequently of unsound constitutions with great tendency to erysipelas, require to have particular attention paid to the absence of all irritation which can possibly be procured. Thus it is that many Surgeons condemn even metallic sutures applied to such wounds as bad Surgery. Here acupressure shows to great advantage by getting rid of the presence of setons, and by the fact that frequently wounds can be closed and flaps kept in their places by the same means which check the bleeding. A man, while in a very drunken condition, fell heavily on the floor of a public-house, his hand, which held an ordinary dram-glass, falling under his head. The glass gouged a large V-shaped flap out of his forehead, and then breaking, cut the neighbouring skin very much. On examination it was found that there were three bleeding points, which were secured by needles, and in such a way that when the operation was over the flap was retained in position and the large wounds closed by the three needles without any stitches. The needles were removed in twenty-four hours, and the wounds healed absolutely by primary adhesion. This man had but shortly before recovered from a severe attack of erysipelas of the head and neck, and the absence of this complication after the accident is remarkable.

Two other cases have occurred to me of scalp wounds, in one of which the temporal and in the other the occipital artery was divided; the bleeding points in both were secured as in the case of wound of the wrist, and the needles were removed in about twenty hours, with most satisfactory results.

Recently I assisted Dr. Kirk, of Bathgate, in removing a fatty tumour from a lady's neck, and this case is of extreme interest, as it enables us to contrast the relative advantages of acupressure and the ligature, when both were placed under precisely similar circumstances. The tumour was of considerable size, and situated under the sterno-mastoid, while the wound necessary for its removal was nearly four inches long, and in direction nearly parallel with the muscle.

No artery was divided which required to be secured, but two veins, one at either end of the wound, bled profusely. One of these veins was secured by a ligature and the other by a needle used in Knowles' method, and when the latter was removed at the end of thirty hours the wound was found perfectly glued together, and in this condition it remained for six days, when the track of the ligature began to suppurate, and continued to do so until it was forcibly removed on the fifteenth day after the operation. Now, in this case the wound was absolutely closed by primary adhesion until the seton action of the ligature re-opened the part where it lay embedded, and had no ligature been used there never could possibly have been a drop of pus. In this case the different hæmostatics had equal justice done them; the wound was large and deep, and remained, with the exception of its being closed by sutures, perfectly uninterfered with.

It has been urged by the opponents of acupressure that the presence of needles in the wound must give rise to great "pain and laceration," but I think the following case will convince any one that such is actually not the case. Dr. Kirk performed primary amputation at the upper third of the arm of a boy, aged 14, and had to secure five vessels, which he did by means of needles used in Knowles' method. The only kind of wire available at the time of the operation for attaching to the needles was of very bad quality, and on this account when the needles came to be removed two of them remained in the wound because their wires broke in the eye. No further attempt was made to remove them, and they remained in the wound for two weeks, and then making their appearance at the inner edge the patient removed them himself; while the fact of their creating no pain and no disturbance is borne out by the circumstance that the patient was unaware of their presence until he saw their heads sticking out. In this case the patient was a weakly, rather strumous-looking lad, so that union without the appearance of pus was not to be expected, but the amount of pus was marvellously little.

In another case of primary amputation of two fingers three vessels were secured by needles which were likewise made to do duty as stitches.

Since the above was written I have had a case of scalp wound caused by a tooth of a crown wheel which fell on a man's head. The tooth made a deep punctured wound, which bled very profusely from a divided artery. Had I applied a ligature (or more probably it would have been two ligatures) in this case, it would have necessitated a considerable extension, but by simply thrusting an ordinary sewing needle diagonally through the wound the bleeding was at once checked and the necessity for dissection avoided. Also in another case of amputation of a finger, when only one vessel bled, the needle did duty as a stitch, and was removed in twenty-four hours with a good result.

Thus, I think, it will be evident that while in the major operations of Surgery acupressure has advantages over the ligature, yet that it is in minor operative interferences where it is of most use—in such cases as every general Practitioner has under his care daily.

Since noting the above cases I have met with several instances of skin wounds, and in all of them, whether there was a bleeding point or not, I have used needles with the loops of wire instead of stitches, as I find that they are removed with less pain to the patient, and are preferable in many respects to the ordinary form of stitch.

Acupressure is, I am delighted to say, making a progress so rapid as to be in this respect almost unparalleled in Surgery. Dr. Stephen Scott, Surgeon to the Colonial Hospital at Demerara, who was in this country during last summer, and had opportunities of seeing acupressure employed, went home convinced of its practicability and advantages, and writes that he has now performed five amputations in which he employed it with perfect success.

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**DEATH OF DR. THOMAS DODGSON, M.D.—This well-known Physician in Craven died at the Union Workhouse, at Skipton, and was interred in the cemetery on Wednesday afternoon. The Doctor at one time had a large practice, and was much respected. In his effort to improve the town he erected private baths. These were not appreciated. For some time the Doctor's health has been failing; he had reached his 75th year. The Medical gentlemen of the town attended the funeral.**

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# PECULIAR AFFECTION OF THE INTERNAL CAROTID ARTERY IN CONNEXION WITH DISEASE OF THE BRAIN.

By PATRICK MANSON, M.B.,
Late Assistant Medical Officer in the Durham County Asylum.

ANY fact, however obscure its bearing on the subject, in connexion with disease of the nervous system is at present considered valuable. On this account, and also because circumstances prevent me continuing my observations on the subject of this communication, I have ventured to bring it in this imperfect form before the Profession, confident that it will receive the attention which its singularity deserves.

In the course of seventeen consecutive post-mortem examinations of patients dying in the Durham County Asylum, I have, under the direction of Dr. Smith, carefully dissected the large arteries of the neck, and with very few exceptions have found a peculiar dilatation of the internal carotid. This dilatation was usually about three-fourths of an inch in length, and invariably involved the first part of the vessel, the remaining portion of the artery being of normal appearance, at least as far as its entrance into the petrous portion of the temporal bone. In some cases the shape of this small aneurism—for such it was—was fusiform, in some pyramidal, the broader portion springing from the common carotid; in others, again, the bulging occupied only one side of the vessel. In several cases the dilatation had a diameter double of that of the healthy part of the vessel; in the majority it was quite as great as that of the common carotid. This I ascertained by measuring the vessels after injecting them with wax or plaster of Paris. The coats of the vessel where dilated were thickened, in most cases atheromatous, and in one instance a red body, like a granulation, projected into the canal of the vessel. No similar dilatation was detected in any other artery, although the vertebrals, subclavians, etc., were frequently examined; but this condition of the internal carotid always co-existed with more or less atheroma of other parts of the arterial system, and atheroma of the other arteries was almost invariably accompanied by this condition of the internal carotid. Both vessels were always similarly affected.

Of the seventeen cases examined, six were general paralytics, and in these, with one exception, the internal carotid was invariably dilated. In this one exception the absence of dilatation coincided with a peculiarity in the origin and distribution of the vessels, arising from the arch of the aorta. The first vessel met with in tracing the aorta from the heart was a thick trunk; this, after a short course in an upward direction, divided into the right and left common carotids, the course of which, and the distribution of whose branches then became normal; the second vessel arising from the aorta was the left subclavian, which pursued its usual course. Posterior to the left subclavian, and slightly farther removed from the heart, was the origin of the right subclavian; this vessel, passing backwards and inwards between the œsophagus and spine, gained the right side of the body, and thus reached its usual position. This peculiarity in the origin and course of these vessels, taken in conjunction with the absence of dilatation of the internal carotids in one of a class of cases in which this pathological condition was otherwise invariably present, is significant.

Of the seventeen there were four other cases in which dilatation was absent or only slight. The ages of these subjects were respectively 24, 23, 23 (?), and 17; three of these died of tubercular phthisis, the other, the youngest, of congestion of the lungs and exhaustion, after a prolonged series of epileptic fits. The general paralytic, in whom the dilatation was absent, and the distribution of some of whose vessels has just been described, was 24. The average age of those whose internal carotids were dilated was about 45, though one, a female general paralytic, who afforded a very marked example of the affection, was only 25.

**I regret that, from not having my notes beside me, I am unable to classify these cases, and give them a more detailed analysis; but as far as my memory serves me, the dilatation was most marked in general paralytics, in the old, or in any case in which there was considerable atrophy of the brain, or in which the patient during life had been subject to great and prolonged excitement. Excepting in general paralytics it was least marked in the young. Both sexes were alike affected, and although it always concurred with atheroma of the arterial system, there existed no fixed ratio between the amount of atheroma and the degree of dilatation of the internal carotid.**

I do not regard this lesion as confined to the insane, though doubtless it is most frequent among them, but consider it as likely to be met with in any case in which the two following conditions, which I look upon as its principal causes, concur:—

1st. A weakened state of the vessel as indicated by atheroma of that particular locality, and signs of degeneration in other parts of the arterial system. 2nd. An increase of the eccentric pressure of the blood in the affected vessel. This latter may be the result of any disease in the brain preventing a free onward flow of the blood; atrophy of the organ, from whatever cause, would have this effect; for a diminution in the size of the brain almost implies a diminution in the size and number of its capillaries, if not of its larger vessels, consequently a retarded flow of blood in the carotid and vertebral arteries; the heart continuing to propel the blood with unaltered force, or in cases of mania or of temporary excitement, so common among the demented, with increased force, a greater force is brought to bear on the walls of the carotids, and these being already weakened by atheroma or other degeneration, a dilatation results. Just as in cases of cirrhose-atrophy of the liver the obstructed portal circulation relieves itself by an ascitic effusion, or rupture of the intestinal capillaries, so the obstructed circulation through the brain relieves itself, or rather results in a dilatation of the internal carotid; the ascites in the one, and the dilatation in the other, both being the effects of mechanical pressure on the walls of the vessels. In the same way we explain the enlargement of the urethra on the vesical side of a stricture or the bulging of the gut on the gastric side of an obstruction. Again, in cases of mania, or in cases in which there is increased flow of blood through the brain, although the patency of the vessels in the brain may not be affected, yet there is an increased pressure upon the walls of the vessels in, and going to the brain, and if any part, as the origin of the internal carotid, is weakened by disease, it yields to the pressure, and an aneurismal dilatation is produced. The same explanation would hold good in other cases, provided there existed increased pressure of blood on weakened walls. It would be interesting to ascertain if in atrophy increased vascular action, etc., of other organs the supplying artery is similarly affected.

The hypothesis I have just advanced may serve to explain the occurrence of this lesion in those advanced in life, whose arteries are weakened and whose brains are atrophied; in general paralytics, the capillaries of whose brains are so much diseased, and in whom the brain is so frequently atrophied and the whole system degenerated; in the maniacal, in whom the encephalic circulation is so much increased; but it does not explain why this particular part, the origin of the internal carotid, should be invariably selected for dilatation, or why the vertebral artery does not become similarly affected. Possibly the origin of the internal carotid artery may be more liable to degeneration than any other part of the vessel; perhaps the unyielding envelope surrounding the vertebrals may counteract the injurious effects of pressure; possibly the vasa motor nerve supplying this part of the carotid may be prone to some form of disease, though the absence of dilatation in the case of the general paralytic with abnormal origin of vessels would almost disprove this supposition; perhaps the selection of this part of the vessel may be the consequence of mechanical laws, and of these alone. Whatever be the cause, the fact remains, that in certain forms of disease of the brain the origin of the internal carotid is dilated.

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Medical Society of London.—The following gentlemen have been elected at the ninety-third anniversary meeting as the officers and Council for 1866—67:—*President.*—Charles J. Hare, M.D. *Vice-Presidents.*—George D. Gibb, M.D.; Henry Smith, Esq.; W. R. Rogers, M.D.; and John Birkett, Esq. *Treasurer.*—Peter Marshall, Esq. *Librarian.*—Edward Head, M.D. *Secretaries in Ordinary.*—W. Abbotts Smith, M.D., and Walter J. Coulson, Esq. *Secretary of Foreign Correspondence.*—Julius Althaus, M.D. *Council.*—F. E. Anstie, M.D.; W. H. Broadbent, M.D.; I. Baker Brown, Esq.; Thomas Bryant, Esq.; C. Cogswell, M.D.; W. J. Coulson, Esq.; Victor De Méric, Esq.; C. F. Du Pasquier, Esq.; W. Tilbury Fox, M.D.; Samuel Day-Goss, M.D.; C. H. Rogers Harrison, Esq.; Ernest Hart, Esq.; James Jones, M.D.; Henry Lee, Esq.; Francis Mason, Esq.; J. W. Ogle, M.D.; James Palfrey, M.D.; J. H. Paul, M.D.; W. F. Teevan, Esq.; E. Symes Thompson, M.D. *Orator.*—F. W. Headland, M.D.

# REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

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## HOSPITAL FOR DISEASES OF THE THROAT.

### CONGENITAL CLEFT PALATE—OPERATION OF STAPHYLORAPHY.

(Under the care of Sir WILLIAM FERGUSSON.)

The notes of this and the two following cases were furnished by Mr. Wasdale Watson:—

Jessie R., aged 23, from Glengarry, applied at the Hospital January 4, 1866, very desirous to submit to an operation for the cure of a congenital cleft palate. The articulation was of the ordinary imperfect nasal character, and in swallowing liquids a portion was occasionally violently ejected through the nose. The malformation affected the whole of the soft palate, but not the osseous structures. Sir William Fergusson performed the operation in his usual way on January 11, first dividing the levator-palati, palato-pharyngei, and palato-glossi muscles; secondly, paring the edges of the fissure from above downwards; and, thirdly, bringing the edges together with sutures, passed on each side from before backwards. There was very slight hæmorrhage. The case progressed most favourably.

On the 15th the sutures were removed, and a week later the patient was discharged cured. At the time of her discharge the palate presented no trace of the defect beyond the cicatrices of the sutures.

### FALSE EXCRESCENCES IN THE LARYNX—TRACHEOTOMY—RECOVERY.

(Under the care of Dr. FRASER.)

George J., aged 28, a sailor, applied at the Hospital September 5, 1865, complaining of hoarseness and difficulty of breathing. He stated that, with the exception of having had yellow fever six years ago, he had enjoyed good health till 1862, when he caught a violent cold in the throat in the north of China, and was unable for some weeks to get any Medical treatment. Since then his throat had been steadily getting worse. He had lately been a patient at Guy's Hospital. A laryngoscopic examination showed a high degree of congestion of the mucous membrane of the larynx and numerous irregular out-growths presenting the appearance of excrescences. These out-growths of thickened mucous membrane projected from both the vocal cords and from beneath their anterior insertion.

October 30.—In spite of various kinds of treatment (including the local application of solutions of nitrate of silver and perchloride of iron, inhalation of steam, creosote, etc.), the patient had become much worse. The dyspnœa was now constant, and severe paroxysms of suffocation occurred very frequently. He could not lie down at night, but was obliged to sleep in an arm chair. At Dr. Fraser's request, Dr. Morell Mackenzie now examined the case, and with his concurrence removed several portions of the projecting mucous membrane with his "laryngeal forceps."

The next day there was a great improvement in the breathing, but the character of the voice was not altered.

Soon after this the patient felt so much relief in breathing that he without sanction discontinued his attendance.

December 5.—The patient returned to the Hospital in a much worse condition. The breathing was now stridulous and greatly embarrassed. The laryngoscope showed intense hyperæmia and some thickening of the mucous membrane of the larynx. The forced inspiration was accompanied with such strong movements of the epiglottis that it was difficult to make a very accurate examination.

A few days later he became much worse, and Dr. Fraser admitted him into the London Hospital on December 12. Though suffering from extreme dyspnœa, he refused to submit to tracheotomy, and it was not till December 17, when being in a delirious condition, that the trachea was opened by Mr. Dove, the House-Surgeon. "Previous to the operation," says Mr. Dove's report, "he could with difficulty be roused to answer questions, and his replies were quite irrational. Pulse exceedingly weak and rapid. Respiration carried on with great difficulty and attended with much noise." The operation was performed as a *dernier resort*, the patient's condition scarcely leaving a hope of his recovery.

The operation was performed in the usual way, though a rather freer opening than usual was made in the windpipe on account of the rapidly-increasing severity of the symptoms it was obliged to be done quickly; fortunately there was no considerable hæmorrhage at the time. Just as the operation was completed, the pulse and respiration both failed. Artificial respiration was vigorously employed. Brandy enemata were administered, and in an hour the breathing became regular and tranquil. For several days the patient suffered from severe venous hæmorrhage from the wound in the trachea; the bleeding, however, was controlled by the application of a strong solution of perchloride of iron. The pulse continued at 120, and the delirium did not wholly wear off for more than a week. At the end of December, the breathing being perfectly free, the tube was removed, at the urgent desire of the patient, who complained that it caused him a great deal of discomfort. The opening very soon healed up. The patient is again attending at the Hospital for Diseases of the Throat. There is an excrescence occupying about one-fifth of the area of the laryngeal canal, projecting from beneath the anterior insertion of the vocal cords, and there is also some thickening about the right arytænoid cartilage.

*Remarks by Dr. Fraser.*—This case seems to be one of chronic inflammation of the lining membrane of the larynx, which has resulted in the formation of irregular thickened projections of the mucous membrane. These presented the appearance in the mirror of warty growths, but as they do not possess the pathological character of epithelial tissue, containing merely the imperfectly organised products of inflammation, Dr. Mackenzie very properly called them "false excrescences." Though the same permanent benefit could not result from removing outgrowths that occurs in the case of true warty excrescences, the dangerous symptoms caused by their presence are of course at once alleviated by their removal, as was strikingly shown in this case. At a later period the operation performed by Mr. Dove had undoubtedly snatched the patient from the very jaws of death. He was quite insensible when the operation was performed, and retained no recollection of it afterwards. Some difference of opinion might exist as regards the tracheal opening having been allowed to close up. The mechanical impediment was only partly removed, though the urgent symptoms had quite passed off. The patient's own views were so strong on the subject that they in point of fact decided the question.

## ŒDEMATOUS INFLAMMATION OF THE EPIGLOTTIS—SCARIFICATION—RECOVERY.

(Under the care of Dr. MORELL MACKENZIE.)

John R., aged 30, applied at the Hospital on October 14, 1865, on account of difficulty of swallowing and pain in the throat, which had been gradually coming on for a fortnight. For a week he had not been able to swallow solids, and for the last thirty-six hours liquids could not be taken. Attempted deglutition now invariably resulted either in a violent paroxysm of coughing, or in the forced ejection of the liquid through the nares. A laryngoscopic examination showed the epiglottis to be of a bright red colour and enormously swollen. The normal contour of the epiglottis was completely lost, and the valve presented the appearance of three red, slightly projecting, semi-transparent tumours, the largest one being on the right side. The œdematous epiglottis covered the right half and the greater part of the left side of the larynx. The parts which could be observed were seen to be much congested. The appearance is shown in Fig. 1. The patient was ordered to inhale hot steam continuously, and blistering fluid was applied externally beneath the angle of the jaw.

FIG. 1.

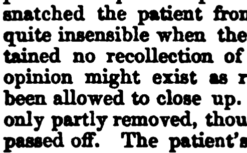
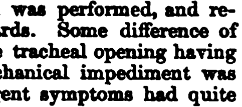


FIG. 2.



October 15.—Patient much worse. Completely unable to swallow, and so weak that enemata of beef tea and brandy were thought necessary. Dr. Mackenzie scarified the epiglottis freely with his laryngeal lancet, and afterwards the patient bled a good deal. Half an hour after the scarification the patient was able to swallow, though it caused him some pain. In the evening a laryngoscopic examination was made, and the swelling of the epiglottis was seen to have greatly diminished.

16th.—The patient was able to swallow without difficulty. The epiglottis was seen to be no longer swollen, though the marks of the punctures were visible as minute hæmorrhagic spots. The return of the epiglottis, however, to a healthy condition permitted a more general inspection of the larynx, and the right ary-epiglottidean fold was seen to be œdematous. The laryngoscopic appearance is shown in Fig. 2. The œdematous fold of mucous membrane was freely scarified.

17th.—The œdema had completely disappeared, though some congestion remained.

20th.—The patient was discharged "cured."

## KING'S COLLEGE HOSPITAL.

### MALIGNANT STRICTURE OF THE ŒSOPHAGUS, WITH ULCERATION AND PERFORATION OF ITS ANTERIOR WALL, COMMUNICATING WITH THE TRACHEA.

(Under the care of Mr. PARTRIDGE.)

THE following case is one of great pathological interest, and one in which Surgical interference could be of but little use. The operation of trachéotomy was performed, of course merely with a view of prolonging the patient's life for a short time; but it showed how far the disease must have progressed when so much of the nourishment taken found its way through the fistulous opening from the œsophagus into the trachea. From the post-mortem examination this opening must have existed for a considerable length of time. This condition we believe to be of somewhat rare occurrence, although cancerous stricture of the œsophagus is tolerably frequent.

We are indebted for the notes of the following case to Mr. E. Ireland, the dresser:—

R. G., aged 44, married, ostler, admitted February 21, 1866, into Fisk Ward, under the care of Mr. Partridge, with stricture of the œsophagus. Patient states that he first noticed any difficulty in swallowing in May, 1865, and that after every meal he vomited a portion of his food, and had to eat very slowly; he had no pain whatever. This state of things gradually got worse, and in October he was unable to swallow at all, taking no food whatever by the mouth for seven days; about this time he applied at Westminster Hospital as an out-patient, and attended as such till January, 1866, being there treated with bougies, but from which he says he derived no benefit. He was advised to apply at King's College Hospital, and was admitted on February 21.

Upon admission it was found that he could only swallow very small portions of solid matter, and that with great difficulty, although he can swallow fluids in small quantities with comparative ease; he has no pain, but spat up blood about three weeks ago, which he attributes to a cough which he is at present suffering from, attended with a good deal of expectoration. Patient has much emaciated since the occurrence of the stricture, as he is unable to take sufficient nourishment.

February 24.—Condition of patient much the same, with the exception of the cough and expectoration, which have increased. Ordered,—℞. Sp. chloroform, ♏ xv.; ammon. carb., gr. iij.; aquæ, ℥ j. ter die sumend., M. ft. haust, which partially relieved him.

26th.—Much the same. On the evening of this day he complained of difficulty of breathing, feeling as if there was a constriction at the upper part of his throat, which prevented him getting any air. Ordered steam inhalations, which for a time relieved him, but getting worse he had chloroform administered, which gave him temporary relief; but the dyspnœa afterwards becoming so urgent, the House-Surgeon, Mr. Howells, performed tracheotomy about 2 a.m. on the 27th. The operation was performed above the thyroid body, between that and the cricoid cartilage, only one ring of the trachea being divided. There was no hæmorrhage, and the tube, which was a large sized one, was easily introduced. The operation gave immediate relief to the dyspnœa, and the pulse, which before the operation was 140 and weak, fell to 120 and became stronger. Ordered wine, brandy, beef-tea, etc., *ad libitum.*

28th.—Can breathe with ease through the tube, but has occasional fits of coughing, and brings up a large quantity of purulent matter mixed with the expectoration; pulse 120.

March 1.—Can only swallow fluids, the act inducing spasmodic cough, portions of the fluid getting into the trachea and are coughed up through the tube; pulse 120; patient getting weaker.

2nd.—Condition much the same; pulse 120.

3rd.—Patient much weaker and very restless; cannot sleep. He can swallow better to-day, but portions of the food return through the tube. Can only take nourishment in the shape of fluids. To have injections of strong beef-tea every two hours, and continue the wine, brandy, etc. Has occasional flushes of heat, which appear almost to stifle him, and has great congestion of the vessels of the head. Pulse 120. Skin dry. Tongue moist, and slightly coated. Has no delirium. Bowels act regularly; stools small and fluid. Cannot breathe so well to-day, and coughs up a large quantity of muco-purulent fluid, both through the tube and by the mouth. His water is thick and muddy, and he has frequent desire to micturate. Complains of constant thirst and dryness of the mouth. To suck small pieces of ice. Patient gradually sank, and died quietly at 9.40 p.m.

5th.—*Autopsy Forty-two Hours after Death.*—Body pale and emaciated. The tongue, trachea, and œsophagus were removed intact. There was no œdema of the glottis. Upon slitting up the œsophagus it was found to be quite healthy till opposite the bifurcation of the trachea, where was observable on its anterior wall a large rugged ulcer (about the size of a florin and apparently of a scirrhous nature), with hard base and everted edges, perforated about its centre by an opening, through which the first finger could easily be passed into the trachea. The lungs, the right of which weighed 3 lbs. 0½ oz., and the left 2 lbs. 8 oz., were much consolidated at, and throughout, the whole of the lower lobes and lower portions of the middle lobes, and presented an appearance as if food had lodged in the air-cells, although some of the lobules were healthy. There was recent lymph effused on the surfaces of the lower lobes, and between them and the diaphragm. The other lobes were healthy, and there were no adhesions. The bronchial glands were not affected. The liver was healthy, and it and the stomach together weighed 6 lbs. 7½ oz. On the outer surface of the stomach there were several hard, enlarged glands, which, under the microscope, presented all the appearances of scirrhus. Kidneys apparently healthy, together weighing 13 oz. Spleen, 4 oz.; healthy. Heart, 15½ oz.; enlarged, but healthy. All the veins of the head were much congested, being filled with large clots of coagulum.

## SAMARITAN HOSPITAL.

### CASES OF OVARIOTOMY.

(Under the care of Mr. SPENCER WELLS.)

(Continued from page 307.)

*Case 77.—Multilocular Cyst, never tapped—Ovariotomy—Recovery.*

An unmarried dressmaker, 32 years of age, was sent to Mr. Wells in January, 1866, by Mr. Roughton, of Kettering, suffering from an ovarian cyst, which was increasing in size rather rapidly. She began to increase in size a year before, but had only altered her dresses during the last five or six months. For about six weeks past she had suffered much pain in both hips, but now only on the left side. The catamenia were rather excessive in quantity, and recurred every three weeks. The tumour contained one large cyst and several groups of smaller cysts. The uterus was normal, and no tumour could be felt by the vagina. As tapping could be of very little service, she was advised to come into Hospital for ovariotomy, and was admitted on January 27. The catamenia appeared on the 31st, and lasted till February 4. Ovariotomy was fixed for the 13th, but the catamenia appeared again on the 12th. At that date the girth was 40½ inches, and the distance from the umbilicus to sternum, 9 inches; to symphisis pubis, 8½; to right ilium, 11½; and to left ilium, 12.

Ovariotomy was performed on February 20. Messrs. Baker and Clay, of Birmingham, and Mr. Roughton were among the visitors. An incision, six inches long, reaching from just below the umbilicus to within two inches of the pubes, exposed a cyst which was adherent anteriorly, but the adhesion yielded very easily to the hand. One large cyst was emptied of sixteen pints of fluid, and the rest of the tumour (weighing four pounds and a half) was withdrawn entire, not a drop of fluid entering the peritoneal cavity. A very broad thin pedicle extended from the right side of the uterus to the cæcum. On measuring this afterwards on the cyst the extent was found to be nine inches; yet it was easily secured in a small clamp, and this was fixed outside the abdomen with some little traction. There was scarcely any blood lost. The left ovary was rather larger than usual, but appeared to be healthy. The wound was closed by silk sutures in the usual manner.

The progress after operation was most satisfactory. The pulse never rose above 88. Only two opiates were required. The stitches were removed on the third and fourth days. Uterine epistaxis came on on the sixth day, and lasted during the seventh and eighth days. The bowels acted on the tenth day, and the clamp came off on the twelfth. The patient continued to gain strength, and left the Hospital on March 14, twenty-one days after operation. She called on Mr. Wells on the 22nd, looking and feeling quite well.

*Case 78.—Multilocular Cyst—Embolism—Tapping—Suppuration of Cyst—Pyæmic Fever—Ovariotomy—Death in Twenty-five Hours.*

The wife of a domestic servant in Essex called upon Mr. Wells on February 6, 1866, by the advice of Professor Lister, of Glasgow. She was 26 years of age, had been married sixteen months, and had never been pregnant. The abdomen was filled as high as the ensiform cartilage by a multilocular ovarian cyst, which appeared to be free from adhesions. The uterus was rather far back, and its mobility was restricted by a tumour which could be felt between the uterus and bladder. The catamenia were quite regular. Increase in size had been first noticed about four months after marriage; but for nearly a year before marriage she had suffered from pain in the iliac regions, first on the right and afterwards on the left side. Both legs had been swollen and painful at times, the left more than the right, for the past five months. She was admitted to Hospital on February 8, the left foot and leg having become more swollen after her journey. She was flushed and feverish, and the pulse was rapid and feeble. On the 9th Mr. Wells tapped the largest cyst, and removed eighteen pints of fluid like thin arrowroot. Some groups of cysts were then found adhering above the umbilicus, nearly as high as the sternum. The swelling of the left foot increased after the tapping, and remained red, hot, œdematous, and extremely painful till the 13th, after which the pain and swelling gradually diminished. Pulsation in the anterior tibial artery, which had been imperceptible since her admission, returned. But for the next ten days she remained in a state of general fever, which Mr. Wells attributed partly to suppuration in the cyst, and partly to the clot which had obstructed the anterior tibial artery. He stated that he should rather regard the condition as one of *pyæmic fever* than of *pyæmia*. There was one rigor, but none of the recurring rigors with apyrexial intervals so commonly observed in acute pyæmia. There were also some pains in all the principal joints; but these passed off without effusion. The pulse was feeble, and excessively rapid, as in pyæmia (120—140); but the skin and tongue, instead of being moist, were hot and dry. The urine was scanty and concentrated. Abdominal pain came on, with increasing debility and emaciation, and the sac refilled rapidly. On February 24 Mr. Wells tapped again, and removed fourteen pints of fluid. That which flowed first was clear ovarian fluid, but the last three or four pints were nearly pure pus, not at all fetid. The next day she felt better, but had a smart rigor. Five grains of quinine were ordered every four hours. On the 26th Mr. Wells consulted Sir Wm. Fergusson and Dr. Greenhalgh as to the propriety of doing ovariotomy. Delay was advised by both, on the ground that in such a condition of fever the operation would be almost necessarily fatal. On the 27th and 28th she was quite deaf from cinchonism, and the quinine was omitted. She then improved a little. On March 3, rather a free discharge of ascitic fluid commenced from the seat of the tapping. On the strength of Polli's experiments, and of two cases communicated to Mr. Wells by Mr. Lister, in which patients with all the constitutional symptoms of acute pyæmia had recovered under the use of sulphite of potash, this substance was given in ten-grain doses every two hours. It was begun on March 4, and on the 5th and 6th she was in many respects better, although the rapid pulse, hot dry skin, brown tongue, and scanty urine, with hurried shallow breathing continued. Believing all this to be due to the presence of the suppurating cyst, Mr. Wells decided to remove it (after Dr. Jenner had ascertained that there was no solidification of either lung), although the hope of success was very small indeed.

Ovariotomy was performed on March 7. Sir Wm. Fergusson, and Drs. Donnet, Mackay, and Macleod, R.N., were present. On exposing the cyst by an incision five inches long, it was seen to adhere to the anterior part of the abdominal wall. The adhesions were rather vascular, but yielded easily to the hand. The tumour, when freed, was drawn forward, a large cyst was opened, and about five pints of curdy pus were pressed out of it, and carefully kept from entering the peritoneal cavity. By passing his hand into this empty cyst, breaking up some smaller cysts, and pressing out their contents, Mr. Wells was able to remove the whole tumour without enlarging the incision. A pedicle as broad as three fingers was secured between two and three inches from the left side of the uterus in a small clamp, and fixed outside with but little traction. The right ovary was healthy. Some four or five ounces of blood clot were removed from the peritoneal cavity after the cyst; but there was no separate vessel bleeding, only a general oozing from the surfaces where the adhesions had been separated. After the wound was closed, there was oozing of bloody serum beside the clamp, and firm pressure was made on the abdomen by pads of lint, straps of plaster, and a bandage.

The patient was very faint after being put in bed, and the pulse became very feeble; but after giving brandy by mouth and rectum, she rallied fairly. The pulse remained feeble, however, and very rapid. She was freely stimulated, taking brandy and milk by the mouth, and brandy with beef-tea being injected into the rectum on alternate half hours. There was neither vomiting nor tympanites. No opium was given, as there was no pain. The secretion of urine was very scanty. She was cheerful, and passed a quiet night; but gradually became weaker and died twenty-five hours after operation.

On examination, eighteen hours after death, the omentum and some of the small intestines were seen to be united to the abdominal wall by recent lymph. The peritoneal edges of the wound were well united. One ounce of clot and eleven ounces of dark red serum were removed from the peritoneal cavity. The pedicle was perfectly secured by the clamp. The liver was pale and fatty. The lungs and heart healthy. In all the cavities of the heart there were firm fibrinous clots. Those in the right cavities extended into the third and fourth divisions of the pulmonary artery. No purulent deposits were found anywhere.

Many may be disposed to doubt whether it was right to perform a serious operation upon a patient whose general condition was so bad as this woman's was. But it was felt that without operation death was inevitable, while with it there was a slender chance of recovery, and as the patient and her husband, after the case was fully explained to them, were anxious that an attempt to save life should be made, it was made. Probably, in nineteen out of twenty such cases, it would also be made unsuccessfully; but if it succeeded in one, that one, and the consciousness of duty done, would be a sufficient reward to most Surgeons for the anxiety and disappointment of the nineteen unavailing efforts to save life.

(To be continued.)

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Medical Times and Gazette.

SATURDAY, MARCH 31.

## EQUALISATION OF THE METROPOLITAN POOR'S-RATES.

The first or baby stage of philanthropy is, as we have often said, that of indiscriminate giving. "There is a poor man; give him something." Such is the cry of every child who sees a beggar; and it is through this propensity of grown-up children that our streets swarm with sturdy beggars, and the nightly wards of Workhouses with "casuals." But when children grow up, a little care of self comes to be added to love of doing good, and there is apt to spring up what may be called the "Robin Hood," or "picturesque" philanthropy,—that kind of feeling which so impressed a man at a charity sermon that he felt ready to pick his neighbour's pocket of a shilling to put into the dish! that which makes people delight in hearing how the bold outlaw plundered rich barons and abbots, and gave to poor widows and beggars.

A scheme which we venture to class with this Robin Hood philanthropy is brought forward from time to time under the name of equalisation of poor's-rates. It is a scheme for making the so-called "rich" parishes pay the rates of the "poorer" ones; and as numbers of our Medical brethren live in these so-called "rich" parishes, and as it is proposed to take from them an additional poor's-rate, varying from fourpence to nearly a shilling in the pound, it is just as well that their eyes should be open, and that they should hear what there is to say on the other side of the question.

In the first place, there is a transparent fallacy in the use of the word "rich." It really seems to be taken for granted that because people live in a rich parish they are rich. The Marquis of Westminster and Lord Portman live in rich parishes and are rich, therefore all others who live in rich parishes—Medical men, artists, tradesmen, and lodging-house keepers—are rich also. Rents are very high, and so because a man at the West-end pays a heavy rent, he ought also to pay poor's-rates for the East-end, where rents are low. Capital logic!

Let us look for a moment at this subject of rent. A house may be rented highly because it may be well placed for business or for pleasure, or because it is a good house in itself, able to accommodate a family, etc. Now, here it is that the highly-rented man at the West is rated and taxed out of all proportion to the lowly-rated denizen of the East. A house which in Marylebone or St. George, Hanover-square, would cost £120 per annum, may be had at Clapham for £50, and at Kennington for £30. Is it fair, then, that the West-end man, who is taxed so heavily in the item of rent, should pay the poor's-rate of a man who gets housed at a low rent, partly because rates are high?

Such a scheme, really to be logical, should aim at a general equalisation of property: that is, confiscation. Out of two Medical men, one who has his expensive house and plant in a "rich" neighbourhood is suddenly called on to pay a shilling in the pound, which his *confrère* in a cheaper neighbourhood pockets.

One argument there is which is sometimes heard—viz., that property at the East End is so bad that it *can't* bear the necessary rate.

If this were true, the poor working man could lodge more cheaply at the East End than at the West End. Is this so? Not a bit of it. We have made personal explorations of the working men's homes in St. George's, Hanover-square, in Soho, in Bethnal-green, and St. George the Martyr, Southwark; and find that the price which is charged for a lodging is the same throughout—half-a-crown, three and sixpence, five shillings. In fact, is it not a stock argument at philanthropic meetings that the face of the poor man is literally ground by the extortionist owners of small house property, and that the worse this property, the better it pays in proportion? Is this statement true? If so, and we appeal for its truth to the whole philanthropic world, ought not the persons who derive large profits from tumble-down property—which property is a perfect warren or preserve of human beings who are sure to come on the rates—to pay the poor's rates which are the necessary complement and consequence of the existence of this property? The existence of such houses is one cause of high rates; and we, forsooth, are to help keep up this system?

Then look at the quality of the houses. In Marylebone and St. George's, Hanover-square, they are, at the least, decent, weather-tight; there are signs of whitewash and of the visits of the sanitary officers; the ratepayers look after their poor, and such wretched shanties as those in Bull's Head-court and Fox's-buildings don't exist. But at the present rent Bull's Head-court and Fox's-buildings would be a better investment than Belgrave-square; and we are to help to pay the rates for them!

Then it is sometimes said that the inhabitants of the West-end parishes use the labour of the poor, and then send them in sickness and destitution to die in the East. How do they use their labour? Are the labourers not employed in factories and workshops in the East? Because the West-end people consume manufactures, ought they also to bear the burdens of the wealthy manufacturer, and discharge his duties towards the workpeople?

If the East-end parishes could point to a good sanitary state of things, they might well ask for help; as it is, they are asking for the power of spending other people's money without one sound pretext. The shilling that is demanded from the West would soon be doubled.

True, London is the visionary El Dorado of the destitute—the "needy casual's general home;" and there are hundreds of poor people who flock to it, and who are relieved by public and private charity on which they have no real claim. We really cannot see, as we have said before, why the mere fact of a man's hiring a house (*i.e.*, being a *ratepayer*) should make him liable to every sort of burden, reasonable and unreasonable. If there is a mass of floating poverty and sickness to be relieved, let all classes share the burden, and take part of the revenue derived from beer, spirits, and tobacco for the purpose.

## THE CONVERSAZIONE OF THE OBSTETRICAL SOCIETY.

As we are compelled to go to press on Wednesday this week, it is impossible for us to give more than a sketch of the arrangements for the *conversazione* of the Obstetrical Society of London, to be held (by permission) at the Royal College of Physicians, that evening, and the rich and magnificent display of obstetric instruments exhibited on the occasion. We must reserve till next week the pleasure of giving our readers a detailed account.

The collection of instruments is undoubtedly the largest of the kind ever brought together, the appeal of the Council of the Obstetrical Society having been responded to by the arrival of liberal contributions from the most distant parts—from Belgium, Sweden, Denmark, France, Austria, Prussia, Russia, and Italy, in addition to a large number of loans from the obstetricians and mechanicians of our own country. Instruments used in every branch of operative midwifery are exhibited, and also such as are used in the operations of ovariotomy, vesico-vaginal fistula, chloroform inhalation, and the like. The instruments are arranged, for the most part, according to the nature of the operations in which they are used. Thus, in one group, all those which are available for the purpose of destroying the child; in a second, those used for delivering the child alive, such as forceps and vectes, are placed. Moreover, they are grouped, as far as possible, in chronological order, so as to represent historically the modifications adopted at different times and in different countries. Necessarily this must have been a difficult matter. The object aimed at by the Society in this plan, however, was to show, as far as practicable, by the advancing improvements in the construction and simplification of the instruments, the progress of any given operation.

The forcipes, representing all kinds, sizes, and varieties, old and modern, numbered considerably above a hundred, and this without taking into account a single duplicate. Amongst the most interesting of the collection were the original forceps of Chamberlen, kindly lent for exhibition by the Medico-Chirurgical Society; the identical pair used by the celebrated Richter, sen., to bring into the world the present Emperor of Russia; a pair of Japanese forceps, of neat construction, brought home by Sir Rutherford Alcock, lent by Dr. Matthews Duncan; and also those of Denman, Smellie, Boers, Davis, Assalini, Torg (of Leipsic), Busch, Naegele, Saxtorph, Tarcitani (of Naples), and the long forceps of Baudelocque.

The cephalotribes, a most formidable set of child destroyers, were well represented, the original cephalotribe of Baudelocque being amongst the number, as well as those of Professor Braun (of Vienna), Nyrop (of Copenhagen), and Assalini, sent by Lollini (of Bologna), etc.

There was a large and valuable collection of instruments from St. Petersburg, sent through the kindness of Professor Hugenberger and Dr. Lazaréwitch, of Kharkoff.

The Council of the Obstetrical Society have determined to afford to those who may be unable to attend the *conversazione* an opportunity of seeing the valuable collection, and have issued a notice that by the kind permission of the President and Council of the Medical Society of London they will keep open the exhibition at the rooms of the Medical Society, 32A, George-street, Hanover-square, till Thursday, April 5. Members of the Medical Profession will be admitted on presenting their card at any time between the hours of 12 a.m. and 6 p.m.

As it would be simply impossible for any one to have made himself acquainted with half the interesting varieties of even one kind of instrument, during the short space of an evening, especially during a *conversazione*, the opportunity for examination at leisure afforded by the Council will be most valuable, and we have no doubt will be thoroughly appreciated.

Amongst the objects of general interest which we observed were the sphygmograph, Dr. Richardson's apparatus for inducing local anæsthesia, specimens of living trichinæ, the new patent binocular microscope of Powell and Lealand, photographs on opaque glass by Messrs. Moira and Haigh, Wheatstone's alphabetical telegraph, the micro-spectroscope exhibited by Messrs. Spence and Browning, and various works of art by the following artists:—Messrs. Raven, Knight, Solomon, Bedford, Holliday, Moore, and J. M. Richardson.

The Obstetrical Society have much reason to congratulate themselves upon the complete success of the arrangements for this unique *conversazione*.

## ORGANIC LIFE AND DISEASE.

The subject of the influence of minute life in the production of disease is acquiring to itself every day more decided importance, and there are not wanting indications that a more extended study of this branch of scientific inquiry may yield results of great moment, especially in so far as therapeutical operations are concerned. A careful examination of the literature and clinical history of parasitic diseases in general leads to the conclusion that we possess clearer and more precise knowledge of the part played by animal than by vegetable bodies; but although a less number of observers have been at work in regard to the latter, they seem to be rapidly rising to a very high position in the scale of significance, as producers of disease.

The past season has been characterised by a remarkable prevalence of forms belonging to both the animal and vegetable kingdom; and many men have felt disposed to revive the "animalcule theory of disease,"—a doctrine suggested by the coincidence of the invasion of localities by swarms of flies, and the outbreak of pestilences. It was strenuously upheld by Kircher, Linnæus, Hecker, Sir Henry Holland, and others, and accredits to minute insects of various kinds the power of generating or favouring the production, or at any rate the conveyance, of certain miasmatic and virulent poisons. Several instances have been recorded of late in which death even has followed from the bites of flies. A good illustration, perhaps, is afforded by the case of Egyptian ophthalmia.

which would seem to be inoculated from person to person by the same agency. This, however, is not our point.

Vegetable parasitism, which we especially notice now, demands careful examination and for its proper elucidation much special botanical and chemical knowledge, as well as an analysis of the facts and phenomena of diseased conditions of life in general are required. Firstly, there can now be scarcely a doubt of the truly vegetable nature of many parasitic bodies which live upon our surface. The mere action of liquor potassæ may fairly be allowed to set the matter at rest, for there is no known animal structure that will resist its action as fungi do; and Dr. Tilbury Fox's recent experiments have confirmed him in his original statement that the so-called spores and mycelium possess a capacity of independent existence and growth when removed from the influence of the structures of the body itself, and that fungus germs can be traced in the earliest stages of disease travelling from without inwards and not from below upwards towards the exterior. Every day appears to bring to light some new fact in proof of the identity of the various forms of fungi found on or in man. The most recent is that noted by Dr. Purser in the *Dublin Quarterly Journal*. He gives a description and plates of the nail fungus in its different appearances representing achorion, oidium, and even puccinia; but Dr. Fox believes that no true puccinia occurs on the human surface; that the so-called puccinia is only a form of oidial fructification—a terminal clavate thread. De Bary and Tulasne's admirable researches, lately referred to by us, have completely established the wide existence of polymorphism, one fungus actually possessing six different kinds of fructification, the uredo itself exhibiting four, most of these having been looked upon as distinct species.

Fungi would seem to be most active in their early stage of existence—in their spermatiferous form,—and to effect an entrance by various means: by outshoots or germinating processes that penetrate beneath the epidermal cells; through natural openings—*e.g.*, the hair follicles, or through traumatic lesions, as in podelkoma; whilst sometimes the germs are carried up by growing parts, as when sporules find their way to the spongioles or cotyledons of plants or the roots of the hairs. In other cases the cell contents alone become absorbed and appear sufficient to give rise to mischief, but it is not unlikely that the nucleoli are introduced into the internal parts of the beings subsequently diseased. Lastly, the carbonic acid given off by the terminal cells of the fungus may dissolve away the lime salts of a hard outer covering, and so allow progress into the interior by continuous budding. The general law appears to be that all germs are derived from without, and that fungi will not flourish on absolutely healthy surfaces, but that each requires its proper pabulum.

Having once effected a hold upon the system, fungi act not in one but several ways, and error has arisen from particular observers confining their attention to and arguing for one alone of these modes of operation. Fungi act (1) mechanically, giving rise to simple irritation, interference with function, and destructive change. This kind of action can be proved by experment. If a diseased hair containing spores be removed from the body and placed under favourable circumstances the spores will germinate and split up the body and shaft into ultimate fibres; in fact, you can produce the effects of ringworm out of the body. The action of fungi, then, in parasitic disease cannot be accidental; and loss of hair is a direct result of the influence of the growing fungus upon the formative papillæ. (2) By inducing local chemical change. Fungi absorb oxygen and give out carbonic acid, absorb water, and tend to give rise to fatty change. Many writers attribute much to the presence of fat as favourable to parasitic growth, but the latter would certainly seem in many cases to induce fatty change, well seen in artificial germinations out of the body. (3) As conveyors of poison, in the same way that the pus cell of variola or that of syphilis acts. The spore cells are ubiquitous, resist the action of heat and cold, are easily, prodigiously, and rapidly multiplied. That inoculation with fungi would seem to produce general before local symptoms, as in Dr. Salisbury's experiments, is undoubted, and very suggestive of the "conveying" property of fungi. (4) In virtue of their inherent virulent qualities. This action, however, must be slight in most cases. (5) In addition, fungi appear to be developers of various poisons, to induce change of a chemical nature in solids and fluids, the result depending upon the composition of the material acted upon, in each instance; the property of absorbing oxygen and evolving carbonic acid being especially concerned in this phenomenon. Such would seem to be the chief inference deducible directly from the experiments of Pasteur, Lemaire, Letellier, Speneux, Leplat, and others on fermentation and germination. A paper was read by M. Trècul, not long since, before the French Academy, on the phenomena connected with the growth of the torula, the author contending that the changes depended upon the nutritive processes going on in the vegetable structure, and not upon catalysis, whatever that may be; in fact, that the change known as fermentation was due to the act of nutrition. This kind of change may apparently go on inside the body when and where delay of food, moisture, heat, and torula are present, giving rise to irritation, the evolution of gas, etc., as in sarcinal disease, chronic diarrhœa, the green stools of the young, etc. Outside of the body, however, the larger number of illustrations are to be met with. Acute poisons may be produced, giving rise to measles (?), influenza, hay asthma, or phlebitic mischief. Dr. Collin, of Nievre, declares that he has recently observed very serious inflammation of the vessels of the arm follow wounds inflicted with the implements used to cut off vine shoots infested with the oïdium, and apparently caused by some condition of the juices of plants associated with the growth of the latter. Indeed, death has been affirmed to have resulted from this cause.

The effect of ergoted grain, as in pellagra, the late Russian epidemic, and some ulcerative diseases, illustrate the indirect action of vegetable fungi in the production of chronic ailments. Not only man, but animals, have been apparently poisoned by eating oats and fodder of other kind affected with fungi.

Now in all these cases, the influence of the fungus alone is wholly insufficient to account for the results seen; this was the theory maintained by Dr. Daubeny before the Ashmolean Society some years ago. Clearly there is a joint action of fungus and pabulum, the resulting product being the efficient cause of mischief. The exact nature of the poisons is doubtful: some think them alkaloids, but this view has as yet not been sufficiently criticised.

The inter-transmission of diseases of animals, plants, and man is now an undoubted fact, and is especially exemplified in the case of "mange" and ordinary "herpetic" ringworm, where the mechanical action of parasites is seen in contrast to other examples where their agency as "conveyers" is marked. There cannot be a question but that the most definite and certain results are likely to follow from the investigation of the particular subject under notice; in the detection and even isolation of certain poisons, not only of acute but chronic action; and in the recognition of the action of fungi as conveyors of disease. Knowledge of this kind suggests mechanical means to prevent the entrance of germs, and remedies, such as sulphurous acid, of power to destroy septic and other poisons. It would seem also not improbable that by experiment on living beings, in transmission of poisons from one to others of different kind, modified forms of poison may result which may be protective against the original malady. This is the case with vaccinia, and apparently rubeola is antagonised by the catarrh (?) produced from inoculation by the fungus of wheat straw. Just now an intense amount of interest attaches itself to the matter of syphilisation. Clearly we have a hint from pathology that we may discover a modified form of syphilis which may be curative of the original malady itself.

## THE WEEK.

### THE AMENDED MEDICAL BILL.

There is a report, which we believe to be well founded, that Sir George Grey has at length put the President of the Medical Council in communication with the counsel of the Home Secretary's Office in reference to drafting the Amended Medical Bill. It is generally felt that the Council has done good preliminary service by investigating and discussing facts, and that now the time has come for entrusting them with power, more especially as regards Medical education. The subject of illegal practice is environed with more difficulty; still it is felt that more may be done without violating the "liberty of the subject," especially with regard to the obscene crew who advertise secret remedies.

### DR. BENCE JONES'S DISCOVERY OF A QUININE-LIKE SUBSTANCE IN THE ANIMAL BODY.

At the last Friday evening meeting of the Royal Institution, Dr. Bence Jones gave a singularly lucid and interesting account of one of those discoveries which from time to time open up entirely new fields of research. It seems that Dr. Bence Jones some months ago desired to detect the presence of quinine in the animal body. For this purpose a test was essential, and the test he adopted was that peculiar influence (fluorescence) of this alkaloid on the refraction of light, whereby it makes the dark part of the spectrum beyond the violet ray luminous. Having fixed on this as a test, and prepared standard solutions of quinine so that he might be able to get something like a notion of quantity, by comparing the effects of solutions of various strengths on the spectrum, he set to work on a guinea-pig—gave the creature three grains of quinine, then tested the blood and crystalline lens and other parts, and obtained the most satisfactory evidence of the presence of quinine. Luckily, however, for science (though, as it may be imagined, it was a source of great perplexity at the time), Dr. Bence Jones, in order to complete the experiment, submitted the same parts of a guinea-pig which had taken no quinine to the same test, and out came the same reaction; every part of the *non-quinised* animal—heart, liver, kidney, and lens—when treated, like bark, in such a way as to dissolve out and purify any alkaloid that might be in them, gave the same spectral reactions as similar solutions did from the animal that had taken quinine. Here was a puzzle! Undismayed, however, Dr. Bence Jones set to work to make out the mystery. He soon convinced himself that the tissues of all animals contain a something which, if dissolved out like quinine, gives the same fluorescent reaction with light. One solution of quinine, interposed in the rays of light, cuts off the fluorescence of another; so does a solution of the quinine-like substance; and so does each upon each interchangeably. Common salt and hydrochloric acid also lessen the fluorescence of both. This quinine-like substance, too, can be demonstrated in the tissues (in the lens), fresh, or preserved in glycerine; and can be demonstrated in the living as well as in the dead. Mr. Bowman had shown it in the eyes of his dog; and Dr. Bence Jones sat down before the electric light, which Professor Tyndall adjusted so as to let the audience see the strange fluorescent gleams from the interior of his eye. It has been found impracticable as yet to isolate this substance, so rapidly does it undergo oxidation; but Dr. Bence Jones had carried out an interesting series of investigations which convinced him that this quinine-like substance was part of the natural constituents of the body; and that, judged by the quantitative reactions, the quantity of it was temporarily increased by giving quinine. It was shown by this means that quinine in a very few minutes after its administration passes into every tissue of the body; that its maximum effect is produced in two or three hours, and then decreases till it disappears in about seventy-two hours. The demonstration of its presence in the crystalline lens gave ground for hope that substances might be found hereafter to remedy perverted nutrition of the non-vascular tissues—as cataract, and even the deposits of gout in cartilages. Then, what a glimpse these investigations afford of the possible *modus operandi* of quinine in the cure of ague! We call quinine a "specific"—a term which indicates our notions—or want of notions—of its action, and nothing more. But is it not possible that ague may depend on the absence of a natural quinine-like substance from the tissues? that quinine may supply this want,—(thus, by the bye, showing the futility of all attempts to distinguish between food and physic)—and that arsenic, on the other hand, may act within the body as it does without, by preserving certain matters from decomposition? Such is a rough note of this very interesting address, which was as valuable for what it promised for the future as for what it showed at the present.

### LOCAL ANÆSTHESIA AT KING'S COLLEGE HOSPITAL.

During the last week there have been several carefully-executed attempts to produce insensibility to pain during the performance of Surgical operations. On Saturday Mr. John Wood operated upon two patients in the theatre whilst they were severally being subjected to the local action of the ether. In the first case the patient was a little boy with an obstinate hydrocele. The agent was first very carefully applied to the whole of the front of the scrotum, and a silver wire was passed through the sac by means of a large needle. The boy did not show the least evidence of having suffered any pain whatever. In the second case the operator removed a small scirrhous tumour from the breast of an old woman. The ether was first most carefully applied, and when the skin was thoroughly whitened the incision was made across the tumour, and whilst the knife was being carried over it the ether was still allowed to follow the course of the knife. The patient gave but little evidence of pain during this part of the operation; but whilst the dissection was being carried on in the deeper parts, she complained a good deal, although the anæsthetic agent was still injected into the cavity.

On the same day, and at the same time, Mr. Henry Smith operated upon a girl who had an encysted tumour on the neck about as big as a marble. Here the ether was carefully used for some minutes before the operation was commenced, and the patient not only gave no indications of pain during the incision through the skin and the dissecting out of the cyst, but afterwards she confessed she felt scarcely anything of the operation.

On Monday last Mr. Henry Smith twice used this agent very carefully on two patients,—one of them was a little girl with a very large abscess behind the ear; the ether was applied for some minutes over the whole surface of the abscess, and an incision fully two inches long was made. The girl made very little complaint of pain, except when the knife was being withdrawn, when she complained pretty loudly; but it was clear to the bystanders that the operation altogether was comparatively painless. The other was a patient, a young woman, suffering from extensive warty growths around the anus. The spray was applied most carefully for fully five minutes. During the period of its application the patient complained greatly of a burning sensation, which gradually subsided. Strong nitric acid was then applied, and the patient complained somewhat, but on questioning her afterwards she explained that her sensations during the time the nitric acid was being applied were those of extreme cold.

### THE BRIGHTON MURDER.

Recent trials prove that the plea of insanity has failed to exert the spell over our criminal law courts which a few years ago it seemed likely to establish. That there is a sense in which it is undoubtedly true that every great criminal is mad may be freely allowed; but that such "madness" implies or is connected with the abolition of responsibility is a figment of pseudo-philanthropy which the common sense of juries refuses to accept. We have always regretted the countenance which such an idea has received from a portion of the Medical Profession. We hold it neither to be founded in sober psychological science nor calculated to advance the safety and morality of society. We are glad to see that this plea, which was advanced by the defence in the case of John William Leigh, who has been condemned for the murder of Harriet Harton at Brighton, was unsupported by a single Medical witness. There were some facts, however, which seemed to lend countenance to the theory. The man had been a drunkard, and had been known for his reckless, violent conduct, had suffered from "delirium tremens," and been called by his neighbours "Mad Leigh;" and these were urged by his counsel in support of the plea of moral insanity. The Medical officer of the gaol where the prisoner was confined, however, stubbornly refused to accept such a conclusion. He said that Leigh, when deprived of spirits, was particularly intelligent and clear-headed, and had the entire use of his faculties. The justice of this opinion and of the verdict of "Guilty" returned by the jury received terrible confirmation from the prisoner himself, who, on being sentenced to death by Lord Chief-Justice Erle, said, "I have nothing to say, my Lord. I cannot justify myself. I was responsible for my acts."

### THE CASUAL POOR.

The revelations of the "Amateur Casual" in the *Pall Mall Gazette* have produced a certain amount of good. First, they have secured the inspection of the casual wards at the various metropolitan Workhouses by the police; secondly, they have caused the Poor-law Board to regulate, by an official order, the allowances to be given for the keeping together of soul and body. The order which has been issued on the subject directs that

> "The destitute wayfarers, wanderers, and foundlings admitted into the vagrant wards shall henceforth be dieted with the food and in the manner described and set forth herein, namely:—Supper: For all persons above 9 years of age, 6 oz. of bread and a pint of gruel; for children under 9 years of age, 4 oz. of bread and half a pint of gruel. Breakfast: For all persons above 9 years of age, 6 oz. of bread and a pint of gruel; for children under 9 years of age, 4 oz. of bread and half a pint of gruel. The pint of gruel for supper for all persons above 9 years of age to be withdrawn from the 25th of March to the 29th of September in each year."

Two or more copies of the dietary, legibly written or printed in large type, are to be hung up in the wards. The order applies to the following Unions:—Fulham, Greenwich, Hackney, Holborn, Lewisham, City of London, East London, West London, St. Olave's, Poplar, St. Saviour's, Stepney, Strand, Wandsworth and Clapham, Whitechapel, and to the Parishes of St. Matthew, Bethnal-Green; St. Luke, Chelsea; St. James, Clerkenwell; St. George, Hanover-square; St. George-in-the-East; St. Giles-in-the-Fields and St. George, Bloomsbury; St. John, Hampstead; St. Mary, Islington; St. James, Westminster; St. Mary Abbots, Kensington; St. Luke, Middlesex; St. Margaret and St. John the Evangelist, Westminster; St. Martin-in-the-Fields; Mile-end Old Town; St. Marylebone; Paddington; St. Pancras; St. Leonard, Shoreditch; St. Mary Magdalen, Bermondsey; St. Giles, Camberwell; St. George-the-Martyr, Southwark; St. Mary, Lambeth; St. Mary, Newington; St. Mary, Rotherhithe. As, since the passing of the Metropolitan Houseless Poor Acts, the various Boards of Guardians alike contribute for the relief of the casual poor, it appears but just that they should be compelled to give a uniform amount of fare.

### FROM ABROAD.—THE MEDICAL SERVICE IN THE UNITED STATES ARMY—PROFESSOR SCHÖNBEIN'S RESEARCHES ON OXYGEN.

The Medical officers of our Army may take what consolation the fact affords them that there is scarcely an army in Europe —if, indeed, there be one at all—in which the Medical Department is not calling for redress, or would do so did they not know that all complaints concerning their unsatisfactory position would pass unheeded. In the United States, where a little more equal justice might *à priori* be expected, matters seem to be on pretty much the same footing. In the last number of the *New York Medical Journal*, the editor, speaking of a new bill brought into the Senate for the reorganisation of the Army, in which the Medical Service is but scurvily treated, makes use of language which might with the greatest propriety be transported to our own columns, as descriptive of our own position:—

> "We have no hope that the public will ever adequately recognise the value of the services of the Medical Staff of the Army, or that Congress will cease to manifest indifference, and even impatience, when called upon to legislate in its behalf. The Medical officers of our Army have always had to contend against the prejudices and intolerance of the officers of the line and other staff departments. They were 'Doctors,' and nothing more—any pretension to be military officers was to be rebuked and checked. . . . This injustice and narrow-mindedness are born of the notion that 'the Doctor' is a non-combatant (during the late rebellion thirty-six Medical officers were either killed or died from wounds received in action)—a tolerated civilian in the Army organisation, with only nominal rank. This prejudice against the Medical officer is not peculiar to our service; it flourishes to the same degree in the British, French, German, and Russian. It prevails with greater intensity in the Navy, and the Naval Medical officer often receives gross insults from the quarter-deck autocrat. This anomalous and unfortunate position of the Army Surgeon, which exposes him to frequent indignities, is due simply to the absence of substantial rank, which it is not desired should confer any military command outside the Hospital, or beyond the specific sphere of duty, for no Medical officer would contend for an authority he is not qualified for. . . Tradition and fossilism have triumphed, and the Medical officer, after serving forty years, finds himself no farther advanced in rank than he might have been thirty years before. A majority, to which he is entitled after five years' service, is the limit he may reach. He sees all his brother officers who entered the service with him promoted as they advance in years; but he is met with the inexorable stay-law of 'Thus far shalt thou go and no farther.' Deprived of substantial ranks, debarred from promotion after arduous and dangerous service and its welcome and needed attendant, increase of pay, an ever-present sense of imposed inferiority keenly felt, with
>
> 'No spur
> To prick the sides of their intent,'
>
> is it to be wondered at that Medical youth of conscious ability hesitate before entering the Army, or, at the period when matured experience makes them useful to the country, have to resign, and seek in civil life more solid rewards? A Surgeon after ten years of active service in that grade should have the rank of Lieutenant-Colonel, and after fifteen years the rank of Colonel."

Various scientific journals having recently announced that Dr. Schönbein, of Basle, had succeeded in decomposing oxygen into ozone and antozone, the French Scientific Association addressed a request to him that he would repeat before it the experiments establishing this discovery. In his reply the celebrated chemist observes,—

> "You are perhaps aware that for the last 30 years I have been almost exclusively and uninterruptedly engaged in researches relating to oxygen, and in the course of this long series of investigations I have discovered, concerning this elementary body, a considerable number of new facts, from which I believe I am able to draw the following conclusions:

—1. Oxygen may exist in three different allotropic conditions. 2. Two of these states are active and opposed to each other; I designate them by the names ozone and antozone. 3. Equal quantities of ozone and antozone neutralise each other, forming inactive or neutral oxygen. 4. Neutral oxygen may be separated or transposed, one half into ozone and one half into antozone. But it is to be observed that the experimental demonstration of the justice of these conclusions is not as simple as, for example, that of the decomposition of water, and in order to apprehend their logical sequence, it is absolutely essential to become acquainted with a considerable number of facts relating to it. The exhibition of these facts by suitable experiments could not be accomplished at a single demonstration. The journals, moreover, have been in error in announcing that I had succeeded at isolating ozone and antozone in a state of purity. It is true for a long time past I have been engaged in attempts in accomplishing so desirable an end, but have not thus far met with complete success. Ozone and antozone are always mingled with neutral oxygen, which depends upon causes intimately connected with the generation of the two active modifications of oxygen. If the Association, after what I have said, continues to wish that I should visit Paris, and if the state of my health allows of my doing so, I shall have great pleasure in delivering a short course of lectures relating to the entire subject of my researches on oxygen."

We need hardly add how acceptable such a course would be from the distinguished discoverer of ozone.

PARLIAMENTARY.—STREET ACCIDENTS—FRESH IMPORTATION OF THE CATTLE PLAGUE—THE BRITISH MUSEUM—THE RIVER COMMISSION — THE VACCINATION BILL — THE LABOURING CLASSES DWELLINGS BILL—CONTAGIOUS DISEASES BILL—CAPITAL PUNISHMENT — THE CATTLE PLAGUE ORDERS IN COUNCIL.

IN the House of Lords on Thursday, March 22,

Lord Westmeath drew attention to the frequency of street accidents, and condemned the conduct of the Home Secretary, who, he said, had taken no steps to prevent the loss of life and bodily injuries which were daily occurring.

Lord Granville admitted the necessity of some steps being taken to lessen the number of accidents which occurred in the crowded streets of the metropolis, but pointed out the difficulties which presented themselves to all the plans that had hitherto been suggested. The Government were most anxious to act efficiently, and there were no grounds for the attack upon the Home Secretary.

The subject was then allowed to drop.

The Earl of Lichfield asked the President of the Council whether it was true that the cattle plague had been reintroduced into several parts of the metropolis by means of a cargo of animals imported from Holland.

Earl Granville: I am sorry to say there is no doubt whatever that within the last day or so a cargo of Dutch cattle have arrived, affected as the noble Earl has stated. I am told that the disease was not sufficiently visible, being only in a state of incubation, and that the Custom House authorities did not detect its existence, but admitted the cattle into the metropolis. I may add that information having been received yesterday by the Secretary of State for Foreign Affairs that proper precautions were not taken in Holland for the prevention of diseased cattle coming to this country, Her Majesty's Ministers have asked Her Majesty to appoint a council to be held this week with a view to the issue of an order prohibiting the importation of cattle from Holland until further notice.

Lord Denman urged the Government to establish a dead meat market. He was sure it would cause no inconvenience to the trade, and would tend much to prevent the spread of disease among cattle.

In the House of Commons, in answer to a question by Lord H. Lennox,

The Chancellor of the Exchequer said there was no correspondence between the Government and the trustees of the British Museum, and no decision had been taken as to filling up the post of principal librarian under the same conditions as it was recently held by Mr. Panizzi. In the view of the Government, the first step to be taken was to submit to that House the vote which they had given notice of their intention to propose for the erection of a building at Kensington; and they could take no other step of a definite character until the House had decided on that.

In answer to a question by Mr. Neate as to the report of the River Commission,

Mr. T. J. Baring said the report was now in the press, and would be presented to Parliament before the recess. That report related to the River Thames, to which the hon. member's question alluded.

On the order of the day for going into Committee on the Vaccination Bill.

Mr. Bruce begged to postpone the Committee until the Wednesday after the Easter recess, but he wished to take that opportunity to remove a misapprehension which had created a great deal of alarm, and that was, that re-vaccination was made compulsory by the Bill. That was not the case. The object of the Bill was to remove a doubt whether the public vaccinator could be paid for re-vaccination, and it would enact that if any person desired to be re-vaccinated the public vaccinator might receive two-thirds of the ordinary fee for his services.

The Committee was then postponed.

The Labouring Classes Dwellings Bill, which enables Government to advance money on interest for the erection of suitable dwellings for the artisan and labouring classes, passed through Committee.

Lord C. Paget, in moving the second reading of the Contagious Diseases Bill, explained that it was intended to renew an Act passed in 1864 for the health of our soldiers and sailors in the various ports, with additional powers recommended by a Committee of Medical men. It was proposed to refer the Bill to a Select Committee.

Mr. Henley and Mr. Ayrton objected to the Bill on moral and religious grounds.

The Chancellor of the Exchequer observed that it was hardly possible this subject could be discussed then with the fulness which would be desirable. His noble friend, in proposing the second reading of the Bill, had merely proposed the continuation of a system which had received the sanction of Parliament. Neither his noble friend nor Her Majesty's Government was desirous of flinching from a full consideration of the numerous difficulties by which this matter was surrounded; and the noble marquis had announced his intention, at the proper time, to propose that the Bill be referred to a Select Committee. It would be desirable that those gentlemen who had charged themselves with the painful duty of looking into this question should serve on that Committee. The object of the Government was to have all the assistance on the subject which the intelligence and impartial judgment of Parliament could afford. They wished the matter to be examined free from prejudice of any kind. He, therefore, hoped there would be no objection to having the Bill read a second time.

The Bill was then read a second time.

On Friday, March 23, in the House of Lords,

The Lord Chancellor, in moving the first reading of a Bill to amend the law relating to capital punishment, said that a few years ago Her Majesty appointed a Commission to inquire into this very difficult subject. The Commissioners had made their report, and he now proposed to lay on the table a Bill for carrying their recommendations, with some modifications, into effect. He intended to move the second reading of the Bill on April 17.

The Bill was read a first time.

Their Lordships adjourned until April 12.

In the House of Commons,

Mr. G. Hardy asked the Secretary for the Home Department what was the purport of the Orders in Council which were about to be issued on the subject of the cattle plague.

Sir G. Grey said that the purport of the new Order was the revocation of all the existing orders, with the view to the modification of the whole of the existing regulations with regard to the plague. Many of the conditions contained in the existing orders would at the same time be re-enacted, as for example those having reference to the appointment of inspectors, who would be required to give notice of the appearance of the disease in any particular district, and to see that the premises in which diseased cattle had been were properly disinfected. It was desirable that a good many regulations of that description now in force should be renewed, and the new order would contain provisions with regard to the proclamation of infected districts and the prohibition at certain times of all markets and fairs, except those held under the licence of the Privy Council. With respect to the removal of cattle, it was intended to extend the provisions of the existing Act until April 16, and to substitute a regulation authorising the removal of cattle by railway or by highway under certain licences, some of which would be left to be granted by the local authorities, and others would be provided for in the schedule. It was intended that the substance of this Order, or the greater part of it, should not come into operation until April 16, but part of it would come into operation immediately, and it would be in the possession of the Courts of Quarter Sessions in the week after next.

The House adjourned until Monday, April 9.

### SCIENTIFIC EXAMINATIONS FOR THE M.B. LOND.

*(From a Correspondent.)*

We must again say a few words on scientific examinations for the degree of M.B. Lond., and the late manifesto of the Senate. In doing so we cannot help stating our opinion that the University regulations might be modified with benefit.

We are informed that the thirty-nine candidates rejected in botany, "especially failed in their descriptions of the plants set before them;" and if we turn to the paper laid before the students, we find that of the six questions it contains only one refers to vegetable physiology, two to minute anatomy, one to morphology, another to the derivation and meaning of certain terms, and the last to descriptive botany. It is on this last question that the Examiners seem to place most importance, implying, as it does, according to them, more of accurate observation than the other departments of botany, and thus affording a better preparation for the exact study of Medicine. To part of this we give a hearty assent, but surely it is not the whole truth, seeing that be how accurate a man's observation may, if he do not describe what he sees in botanical language, it goes for nothing. Now, we humbly submit that the catalogue of names, which this implies, is both troublesome to acquire and burdensome after acquisition, as well as demanding in the process an amount of time which might be far more profitably spent in the pursuit of knowledge that will prove more lastingly beneficial. We have seen instances of men who, in other respects, knew very little of botany, yet could very readily describe a plant in scientific jargon, for it is really nothing else, this only implying, on his part, a considerable amount of exercise in the open air and the habit of examining the plants picked up in his rambles. Now to the London student this would doubtless be highly beneficial, but it also implies an expenditure of time and money that we do not care to contemplate. Considering that only four years are allowed to the entire study of Medicine, we consider that one year, which is the very least that could be put down, according to the standard of the University of London, to be rather too long a period devoted to such a subordinate subject as botany. Neither do we consider the descriptive department of botanical study to be the most important, so far as Medical students are concerned, nor do we think it the highest apart from all connexion with those engaged in its pursuit. To us it seems that an exact knowledge of the constitution, origin, growth, and organisation of those simple beings which botany offers for our investigation, of far greater value to one whose life is to be devoted to the regulation of that most complex of all machines, the human system, than an acquaintance with any number of technical terms and their exact application. It is true that the London Senate complain of deficiency here also, but we scarcely think that the questions, contained in the paper we refer to, can be taken as a good test of any one's knowledge of the subject.

If we turn to zoology, which follows next in order as a plucking subject, the objections above urged with regard to botany strike us with still greater force. If it is difficult to acquire a sufficient knowledge of botany in the time assigned for its study, this task must become still more grievous when an exact knowledge of zoology is required along with it. We are far from saying that a knowledge of these sciences is useless to a Medical student, yet their utility is so much subordinated to other subjects, that we would be inclined to limit the extent of ground to be gone over in their case to those departments most likely to prove useful in after life. Let exact knowledge in these be rigidly demanded, provided it can be acquired in a reasonable time, but as for other and minor points, let a general knowledge suffice.

P. P.

### THE PROMISED REPORT OF THE VETERINARY DEPARTMENT.

*(From a Correspondent.)*

It was announced at the beginning of the year that the Veterinary Department of the Privy Council would make public within two or three weeks a report which had been in active preparation as to the progress of Rinderpest up to December 31. Such report was intended to be a full account, based upon the weekly returns, of all that was known of the progress of the cattle murrain up to the date above named. It is not our custom to bring forward unnecessary complaints; indeed, we are only too ready to make allowance for difficulties, especially such as are inseparable from the conduct of all newly organised undertakings. We think, however, that it is high time the public should know something in detail of the doings and opinions of the various local inspectors, beyond the matter of the collective weekly issue of some half-dozen columns of figures. We desire information upon the different modes which have been adopted in various districts, both as to the attempted "stamping out" of the disease and the systems of treatment that have been tried. All these things are essential to a right judgment upon points which involve controversy, and it does seem not unreasonable to inquire how much longer we are to be kept on the tenterhooks of expectation. If it be true, as we have understood, that Dr. Williams's Report will deal only with the facts relating to the period from the first outbreak of the disease up to the 30th of December last, and will take no cognisance of what has happened this year, one would think he might have produced something long before this. If he delays much longer his subject will be matter of history alone, and all interest will have died out with the gradual decline of the disease. The "origin" and "nature" of Rinderpest have been pretty well determined already, and the only interest of Dr. Williams's promised Report would seem to lie in the "treatment" and "preventive measures" adopted. Was it not within the compass of official energy to supply the "comprehensive digest" of the information under these two heads, which was promised by the Cattle Plague Commissioners in their Second Report, before such information became stale—a relic of the past? This delay is the more remarkable, inasmuch as it is rumoured that during the preparation of this Report the customary periods of cessation from work for purposes of rest, and also for the observance of the Sunday, have been virtually abrogated in the Veterinary Department. Probably this rumour, like hundreds of others, has but a grain of truth behind it; yet it might be worth while for some right reverend prelate to inquire in Parliament whether the Government were setting a good example in calling upon their own *employés* thus to violate the fourth commandment. Fasting and humiliation will hardly work in harmony with Sabbath-breaking, and the unfruitfulness of such labour is best proved by its abortive results so far.

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**The Princess of Wales** visited the London Surgical Home at Notting-hill on Wednesday, March 21.

**Sir Dominick Corrigan** has retired from the position which he held as Physician to the House of Industry Hospitals. It was filled on Thursday, when Dr. Lyons, formerly Pathological Commissioner in the Crimea, Professor in the Catholic University, and Physician to the College of Maynooth, was chosen by a majority of one.

# UNIVERSITY OF LONDON—ALTERATIONS IN THE REGULATIONS.

The following is a summary of some important alterations which have recently been made in the regulations relative to the various Examinations and Degrees in the University of London. We call special attention to the matter in the belief that the changes are not sufficiently known to students in general:—

First, in regard to *fees*. Formerly, a candidate who failed to pass, was allowed, without the payment of any additional fee, to present himself for examination at any and every subsequent period. Now, however, such admission will be limited to *two* subsequent occasions, in the case of the Matriculation and Bachelor's degrees; and to *one* succeeding examination for the degrees of Doctor and Master.

Several important changes have been made in the lists of subjects in which the various candidates are examined.

At *Matriculation*, option is no longer allowed between the Latin and Greek grammar papers on the afternoon of the first day. Candidates are now required to pass in both of these. The Greek paper will contain passages to be translated into English, with questions in grammar, history, and geography. The paper in Latin will also contain passages to be translated into English, and questions in history and geography, as heretofore, but the grammar will be set in a separate paper, which will also contain easy sentences of *English to be translated into Latin*—that is to say, there will be one Greek paper, but two Latin papers, one of the latter, which has no counterpart in Greek, being devoted to grammar and the translation of English into Latin. It is well to know that special credit will be given for accurate answers to the grammar questions.

At the *First Bachelor of Science* an addition has been made to the subject of inorganic chemistry. Candidates are required to answer "*Questions on the Unitary System.*" The best information on this matter will be found in a series of articles, headed "Doctrines of Modern Chemistry," contained in the *Medical Times and Gazette* for the last half year—in the numbers 788, 798-9, 800-2-3-5-7. The series is, however, not yet completed.

In Botany, also, an acquaintance is demanded with the distinctive characters of *ten* in lieu of *six* large orders of Dicotyledons, the four additional being *Cruciferæ*, *Caryophylleæ*, *Umbelliferæ*, and *Scrofulariaceæ*. To the list of Monocolytedons, *Cyperaceæ* have been added; and to Acotyledons, *Lichens*. The Demonstration of the Botanical Characters of Plants, upon large and conspicuous specimens, provided by the examiners, is expected as usual.

At the *Second Bachelor of Science* the Scholarship in Biology has been done away with, and two others substituted for it, the one for Zoology and the other for Botany.

*Bachelor of Medicine.*—Some modifications have been made in reference to this degree.

At the *Preliminary Scientific M.B. Examination* the subjects of Inorganic Chemistry and Botany are the same as in the First B.Sc. just noted, and corresponding changes have been made in regard to the "Unitary System," and the inclusion of four additional orders amongst Dicotyledons, Cyperaceæ amongst Monocotyledons, and Lichens amongst Acotyledons.

At the Second M.B., in regard to the certificate "of having attended the Medical Practice of a recognised Hospital during two years, with clinical instruction and Lectures on Clinical Medicine," a modification has been introduced: attendance during three months in the wards of a lunatic Asylum, with clinical instruction, may be substituted for a like period of attendance on (may form part of the two years) Medical Practice. The Senate wish to encourage the possession of a knowledge of lunacy on the part of the M.B. candidates.

It has also been necessary for the candidate to produce evidence of having had, subsequently to attendance on Surgical or Medical Practice, six months' special charge of patients in some institutions. This certificate may now be given in *Surgery*, as well as in Medicine or Midwifery.

The Degree of *Bachelor of Surgery* shall be in future attainable by those who have taken the M.B. Degree, who have received instructions in operative Surgery, and who have operated on the dead body. It may thus be taken *immediately* after the M.B. No Scholarship in Surgery will in future be given at the second M.B., but at the Honours' Examination for the Degree of Bachelor of Surgery instead: the candidate who stands second in the list of honours will also receive a gold medal. The B.S. is, in fact, the second M.B. Honours Examination.

The Degree of Master of Surgery will in the future be obtainable by those only who possess that of the Bachelor of Surgery, with one exception to be mentioned directly. Instead of the certificate of attendance on Practical Surgery during six months with special charge of patients in a Hospital, Infirmary, Dispensary, or parochial union, the candidate will be required to produce evidence of having attended subsequently to having taken the B.S. (1) to Clinical or Practical Surgery during two years in a recognised Hospital or institution, or (2) to Clinical or Practical Surgery during one year, with three years' Professional practice, or (3) five years' Professional practice before or after taking the degree of B.S. In the case of those who have been placed in the first division at the B.S., one year's Hospital practice or two years' Professional practice will be dispensed with—that is to say, a B.S. first division may take the M.S. the following year if he attend in the meanwhile the Surgical practice of a Hospital.

The exception mentioned applies to those who have taken the degree of M.B. before 1866; these will be admitted to the M.S. examination without having taken the B.S, the commencement of attendance on Surgical practice dating from the passing of the M.B. Degree. A gold medal, value £20, will be awarded to the most distinguished candidate. The M.S. is thus placed exactly on a par with the Degree of M.D.

# REVIEWS.

## RECENT ANTHROPOLOGICAL PUBLICATIONS.

Waitz.—*Introduction to Anthropology.* Vol. I. Edited by J. Fred. Collingwood.

Broca.—*On Human Hybridity.* Edited by C. Carter Blake.

Pouchet.—*Plurality of Human Races.* Translated by H. J. C. Beavan.

Vogt.—*Lectures on Man.* Edited by James Hunt.

Blumenbach.—*Anthropological Works of.* Translated by T. Bendysche.

Gastaldi.—*Prehistoric Remains of Northern Italy.* Translated by C. H. Chambers.

*Memoirs of the Anthropological Society of London.* Vol. I. 1865.

*The Anthropological Review and Journal of the Anthropological Society of London.* Vols. I.--III.

Thirty years ago the students of the science of man in England at least were in the state of casual paupers at a modern charitable institution. They were only too glad of information at any price, and did not care from whose hand it came, or what was the value of it when acquired. We can only call to our mind two original English anthropologists who taught prior to 1840—one the late distinguished teacher of Surgery at St. Bartholomew's, whose writings were the first to interpret to our English public the facts which Blumenbach had previously taught in Germany; the other the illustrious Robert Knox, whose influence on the thoughts of his English disciples has led to the production of the works before us. In 1840 an English student of the science of man would have looked in vain for a text-book. Many of the causes which have retarded the advance of the science are due to a mistaken prejudice on the part of a large section of the general public; some are unquestionably the fault of anthropologists themselves. The public have three great objections to anthropological study. First, anthropology is a science which pledges man to the belief that his remote ancestors were baboons; and every anthropologist, before being elected a member of the society founded in England to advance his science, is solemnly pledged to promote the transmutation hypothesis. This theory is intensely popular, and consequently without a grain of fact to support it. The Anthropological Society is precisely the place where the hardest blows that the transmutation hypothesis has yet received have been dealt, and where those advocates of the ape-origin of man who elsewhere address sympathising audiences have hitherto failed to secure a hearing. Next, an anthropologist considers the lower races of men as "chattels," and much political obloquy has been launched against the London society by reason of the fact that some of its members have contributed papers which militate against sentiments generally popular amongst a large section of amiable philanthropists. The aborigines of Queensland have been shot down like dogs; half a tribe amongst them has been destroyed by a present of flour mixed with arsenic; the protecting ægis of "the humane classes" is not thrown over these victims of British colonisation. The Anthropological Society of London is, so far as we know, the only place where these facts have been announced before a British public audience. But the fact is evident that some races have a prescriptive right to be the victims of popular philanthropy; and while, if the Anthropological Society had, as has been charged upon it, introduced political discussion into its scientific field of inquiry, no one would condemn them more strongly than ourselves. We must recognise the fact that the time must come when a knowledge of the physical and mental characters of all the races of men must be imperative on every Medical officer on foreign service. Again, the students of anthropology are charged with being inimical to the Christian religion, and the same suspicion and obloquy which greeted the advance of astronomy and geology have resounded along the path of anthropological inquiries. We believe, however, that these have now almost died out; and it is highly creditable to the intellect, if not to the good feeling, of the educated public that they should now prefer to inquire what it is that the anthropologists are working at than to annoy the advocates of a science which they can neither retard nor destroy. There is no book so intensely anthropological as the Bible, and no work in which a knowledge of the varieties of man's moral and physical nature, according to race, is so important as it is in that of the minister of religion, at home or abroad. In the Old Testament, the inherent depravity of certain races is sternly insisted on; in the New, all races are declared to be subjects of Almighty love; the only bit of ethnology in its offensive sense is the quotation by the great Apostle to the Gentiles of the poet's dictum that the "Cretes are always liars." Such, however, have been the principal reasons why anthropology has been so little pursued in England. But anthropologists themselves have also been much to blame. The inexactitude of the terms they employ might have been excused in days gone by, but is out of place in the period of Welcker and Lucae. Modern anthropologists have not disclosed any truth bearing the aspect of novelty; centuries before the days of Knox, Virey, Desmoulins, or Carus, the problems of the science were discussed. The questions of anthropology have never been examined with the tact or discrimination which the students of "exact sciences" have practised. The terms "species," "race," "variety," are often used as convertible or synonymous, and the terminology of the science of man thereby stands out in unenviable contrast to that of the botanist or of the chemist. Anthropologists often use, perhaps correctly, the word "race" as implying a group of nations linked together by certain constantly observed characters, without expressing any opinion as to their origin, or the fertility of the hybrids who might be derived from them. "Species," on the contrary, implies too often a theory. The term "variety," as used in anthropology, is essentially vague, and the monogenist alone is entitled logically to use it.

Certain known facts demand some solution at our hands. We have such races as the English and the Australian, of which every physical and moral character are as distinctly opposed as can be conceived. As M. Broca has pointed out, the progeny of the white and the Australian rarely arises, and is scarcely ever prolific. Yet in the text-books of the day the white and the Australian, like most other varieties of man, are recognised to be of identical species with each other. Anthropologists have to inquire when or how were such races thus scattered on the earth. Are they the remains of primitive races of man, each originally produced in various localities; or have they all diverged from one common centre, the birthplace of the whole human race? Are the peculiarities which prevail amongst the various races of man such as we may suppose to be capable of being modified under various circumstances, and if such an assumption be granted, what may we suppose to be the range of such modifiability? But this whole question which involves the distinction between the monogenists and the polygenists rests on the metaphysical definition of "species" and "race," which any individual student of the science of man may think fit to adopt. The question of the classification of the races of man is one which has engaged the attention of anthropologists from an early period. The French and American naturalists have been inclined to adopt a more minute sub-division than either the English or Germans. The researches of the best informed anthropologists, and chiefly of Professor Broca, have distinctly demonstrated the fact, that if we take the hybrid progeny of any single two races of men, although their ancestors may have bred together with perfect success, nevertheless in the third or fourth generation of the intermediate mongrel progeny traces were visible of a physical degeneration, which ultimately, swiftly, and inevitably tends to the extinction of the hybrid race. Mulattos are the shortest lived of any class of the human race, and less capable of undergoing fatigue than either the blacks or the whites. Their females are peculiarly delicate, and subject to a variety of chronic diseases, whilst various causes tend to produce the early deaths of their children. But the whole question of hybridity is in its infancy. Even although it were granted that the balance of evidence at the present time may be against the unity of man as a species, we must recollect that we have not to decide the question upon the evidences of hybridity alone. So few philosophical observers have ever stated the true case in favour of monogeny, that we are perfectly content to suspend our judgment until some one may, as some one probably will, arise to answer the arguments or to demolish the evidence which the advocates of more than one origin for the human species have brought forward. The science is as yet quite young enough to permit an inquirer to wait with hope and patience.

The theory of the unity of the races of mankind has been advocated under several aspects; as a theological dogma, as a moral fact, and as a question of physical descent. With regard to the alleged moral unity, Waitz, the most intelligent advocate of the doctrine of unity, because he is the one most entirely emancipated from external prepossessions, suggests that such innate ideas as, *e.g.*, the belief in God or in a future state, are to be observed in all nations upon the earth. This statement, however, has met with positive denial. It is alleged that there are millions of people on the face of this planet to whom the metaphysical ideas of any religion are as foreign as are the conclusions of science or the beauties of art. Sir Charles Nicholson and Dr. Lang have told us that with respect to some of the aborigines of Australia, they "have no idea of a superior divinity, no objects of worship, no idols or temples, no sacrifices, nothing whatever, in the shape of religion to distinguish them from the beasts." The Andaman islanders, with their minimised cranial capacity, are alike destitute of any such generalisations as those which induce the Mohamedan to propagate a religion by force, or the American to endure tortures in the hope of future rest. In the words of one of our most truthful modern writers, the savage too often "dies the death of a coward and a dog, for whom the grave brings darkness and nothing more." The picture is indeed a melancholy one, but the European who may enjoy a belief in the existence of a moral law does not value his privileges the less for the knowledge that there are inferior races to whom the cherished aspirations of his own belief are incomprehensible; while there are races who are destitute (so far as present appearances go) of the conception of any supernal being as the Creator or Regulator of the Universe, others there are in whom the idea of a moral law is equally absent. The Kamschadale is sunk in the grossest depravity; offences against the property and person form the daily task and amusement of his life; his neighbour is loved only as a being whom it is possible to rob; but to scrape off snow from his own shoes, or to pierce coal with a knife, becomes a serious moral offence. Some tribes of savages have no word in their language, or conventional embodiment of an idea, to express the attribute of "honesty," except the negative quality of "not stealing." Again, it is alleged that a fear of the dead, and a honour shown to their memory are present in all uncultured nations. We can scarcely grant this. "Natural affection," as it is wrongly called, is no work of mere nature. Regarding this question as a physical one, we want facts. What is the extreme limit of moral and physical divergence amongst the posterity of one pair?

The subject of acclimatisation has been much discussed of late before the Anthropological Society of Paris. The French anthropologists are strongly inclined to endorse the opinions of Dr. Hunt and Sir Ranald Martin, that there is no such thing as true acclimatisation; that men, neither rapidly nor slowly (time being, it must be observed, no factor in the case), can be displaced from one region and located in another without physical degeneration. If the Government of England were to recognise these and other anthropological facts—if they could be induced to abstain from the unphilosophical and cruel sacrifice of human life which is perpetrated at their will, by the exportation of thousands of unhealthy English soldiers to India, where their constitutions are unable to maintain the vital power, and where they die out ere being acclimatised—a great economy of human life would result. The rulers of the English armies will hereafter recognise that it is vain to struggle against the plain dynamical facts of science; and we hope that eventually, by the judicious selection of individuals of robust constitution from our regiments, and their classification according to temperament, the fearful waste of the blood of Englishmen which now prevails in India may be diminished.

These and other considerations are now being pressed on the mind not only of anthropologists, but of thinking men in general. In the works whose titles we have placed at the head of our article they are discussed in detail. Anthropology is a science of exceedingly wide-spread ramifications. While it includes to a great extent much that the human anatomist should diligently study, its practical bearings recommend it to every educated man. We consider it, therefore, to be an excellent sign of the healthy progress of the science of man, that we have now flourishing anthropological societies at Paris, London, Madrid, and Moscow, while societies are now in course of formation at New York, St. Petersburg, and even at Rome. The anthropological section which has been formed at the Paris Universal Exhibition will, we doubt not, further accelerate the progress of anthropology; and we trust that the few practical results which the last few years' work has afforded may, in time, lead to the acquisition of new and important facts which may render the science of man especially interesting to the Medical Profession.

## GENERAL CORRESPONDENCE.

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### FRACTURE OF THE RADIUS AT THE STYLOID PROCESS.

Letter from Mr. Lawson Tait.

[To the Editor of the Medical Times and Gazette.]

Sir,—In answer to Mr. Barnett's note, I can now inform him that he can have Gordon's apparatus supplied at the price of five shillings and sixpence by Mr. Gardner, surgical instrument maker, 45, South Bridge, Edinburgh, to whom I have sent a pattern.

Another case of this fracture occurred here a few days ago in Dr. Kirk's practice, to whose kindness I am much indebted for the use of cases, which illustrated to a remarkable degree the diagnostic value of the fact of the patient falling on the palm of the hand. In this case the deformity was very slight, and there was no crepitus to be felt. Indeed, this latter point is a very remarkable feature in the diagnosis of this fracture, as it is almost the rule that crepitus is absent; indeed, in the seven cases that I have seen crepitus was only to be felt in one, and then only to a very faint degree.

Dr. Heron Watson writes me that he applied Gordon's splint to a fracture of the radius at the lower third some days ago, and that as yet the apparatus is giving every satisfaction; and I have no doubt but that it may be applied with advantage in fractures even higher up.

There are many objections to the habit of connecting lesions and anatomical structures with proper names. It often gives rise to great confusion, besides being frequently unjust. For instance, I question very much if many London or Edinburgh students being examined by a Dublin Board would answer the question "What is Colles's fracture?" in a manner to satisfy their examiners; and, again, in M. Trousseau's "Clinique Medicale," exophthalmic goitre and its attendant symptoms are christened "Maladie de Graves," while many think that the name might have been with equal, or even greater, propriety "Maladie de Begbie."

Thus it is that the fracture of the radius produced by the fall on the palm of the hand, and presenting the peculiar sigmoid deformity, is not entitled to have Professor Colles's name attached to it, as the fracture described by him in the *Edinburgh Medical Journal* for April, 1814, is stated as "taking place about an inch and a half above the carpal extremity of the radius," while the fact is that it is almost invariably confined to within half an inch from the extremity of the styloid process. I am, &c.

Bathgate, March 10. R. Lawson Tait.

### REPLY TO DR. G. JOHNSON.

Letter from Dr. Howard B. Montgomery.

[To the Editor of the Medical Times and Gazette.]

Sir,—May I solicit your permission to reply (as briefly as is consistent with the importance of the main question at issue) to the charge of employing undue personality in reference to Dr. G. Johnson's censure of Indian Practitioners in the treatment of cholera?

Dr. G. Johnson, by a question to which an affirmative answer was distinctly implied, endeavoured, in my opinion, to refer increased mortality from cholera to an alteration in practice. The circumstances under which this alteration occurred clearly constituted it malpraxis of a character that could only be accounted for on the supposition that those making it were of themselves either incompetent to treat disease on sound principles, ignorant of opposite views regarding treatment, or obstinately adherent to their own views, even though other and more rational ones were within their cognisance.

It appeared to me that the mere suggestion that increased mortality was due to malpraxis was a breach of Professional ethics; and, further, that the grounds upon which it was made were for many reasons insufficient.

My reply was simply a personal expression of my own opinion that Dr. G. Johnson had violated Medical ethics in a way which I did not think Indian Practitioners would imitate. In attributing to them "superiority in good taste," I was solely referring to the purely Professional view of this point in ethics.

Whether or not Dr. G. Johnson reflected on the abilities of Indian Practitioners I am willing to leave to the Profession and to abide by the result; but while I state that my own opinion on the point was unhesitating, I am also anxious to add that I did not, and do not, desire to make it a justification for any personal attack upon the author of the passage in question. It is, however, noteworthy that, although Dr. Johnson had an admirable opportunity of denying the supposed intention, he has, so far from availing himself of it, actually repeated it in his expressed adherence to his former views.

Had the supposed imputation proceeded from any person not holding a high Professional position, I should have passed it over in silence; but a censure pronounced by a gentleman of Dr. G. Johnson's known ability and high Professional standing would prove a grave cause of regret to all upon whom it fell.

These very attributes of the author of it (and I cordially and most sincerely recognise them) tended to render the more imperative an immediate refutation, if possible, of the grounds upon which it was based; and to disprove the latter was doubly important, for if in India Practitioners had been guilty of malpraxis in the treatment of cholera then, *à fortiori*, it was probable that we would prove unskilful in the management of other diseases not so essentially those of India, and in almost all of which we must of necessity have less experience.

In the facts submitted by me, when questioning the data relied on by Dr. G. Johnson, I endeavoured to prove, firstly, that we had no satisfactory data upon which to fix the *pro rata* mortality from cholera in 1818-19; secondly, that all investigations up to 1852 showed a rate of mortality that fell far short of that stated as now existing in Bengal; thirdly, that subsequent experience in Madras showed that in no single instance has it been reached in Madras (so far as my information at present goes); and, fourthly, that percentage of deaths to admissions is not of necessity a fair test of Professional ability as now existing in comparison with that which may be inferred from statistics compiled at a time when, from deficient arrestive measures, several minor cases were almost certain to occur, which, being rarely fatal, would tend to diminish the proportions of deaths to admissions. To none of these points does Dr. G. Johnson make any reply.

Dr. G. Johnson pleads that he is not responsible for the statistics upon which his query was based. This is, to say the least, a novel defence. I now, for the first time, learn that it is ethically correct to quote facts without being responsible for them; and yet to make them appear as confirmative of a foregone conclusion, and the grounds of laying (or appearing to lay) a serious imputation upon those who, of all people in the world, have the management of the largest number of cases of this the most fatal disease known.

Dr. G. Johnson says he has no reason to doubt the accuracy of the statement of the Bengal Sanitary Commission. But does even it justify a generalisation of any inference from it as applicable to India at large? I think I have shown that in Madras it does not hold good. On this point I shall gladly lay comprehensive facts before your readers on a future occasion, should you feel disposed to afford me an opportunity of doing so.

I also with pleasure accept the challenge to justify my expressed opinion of Dr. G. Johnson's theory, which I shall do at an early date. In any controversy that may arise thereon, and in any remarks I may make, it will be my particular aim to avoid personalities; and I am prepared to credit Dr. G. Johnson with every personal and Professional virtue known to mankind if he will kindly, in deference to the feelings of those concerned, avoid the use of language that (even though in error) may be fairly construed so as to expose us, in addition to the risk of loss of life in India, to the even greater loss of Professional reputation.

I am, &c., Howard B. Montgomery, M.D.,
Surgeon Madras Army.
16, Durham-terrace, Westbourne-park, W., March 20.

## REPORTS OF SOCIETIES.

## THE PATHOLOGICAL SOCIETY.

Tuesday, February 20.

Dr. Peacock, President.

(Continued from page 323.)

Dr. Murchison exhibited specimens showing

### PERFORATION OF THE BOWEL IN ENTERIC FEVER.

1. A case in which, throughout the fever, there had been constipation, scybala being found in the bowels after death. 2. A case of peritonitis, without actual perforation. 3. A case of three perforations of the large intestine, with extensive peritonitis. This patient lived fourteen days after development of symptoms of peritonitis. 4. A case of perforation of the appendix vermiformis; death from peritonitis. 5. Lastly, a case of much practical interest—viz., death from perforation on the forty-fourth day, the patient having got well enough to go to his work. He died on the fourth day of his second illness.

The President remarked that all the specimens exhibited by Dr. Murchison were interesting, but the last was especially so, showing, as it did, the late period at which perforation might occur in cases of typhoid fever, and the consequent necessity for care after all the symptoms of active fever had subsided. He had himself known perforation occur in a case after recovery was so completely established that the patient had been discharged from the Hospital. In a case which he had recently seen, the patient died with perforation on the thirty-fifth or thirty-seventh day, and yet the fatal event was evidently due to active disease, the perforation having been produced by a small slough, which had involved all the coats of the intestine, and which had separated on one side, so as to form a kind of valvular opening. In this instance there had been a partial recovery and then a recurrence of the fever. In a former volume of the *Transactions* he had described a case in which after complete convalescence a recurrence of febrile action had taken place and the patient died, and after death recent sloughs and old healing ulcers were found in the intestines.

Dr. Morell Mackenzie exhibited some

### SMALL PIECES OF AN EPITHELIAL CANCER REMOVED FROM THE LARYNX OF A WOMAN AGED FIFTY,

with the aid of the laryngoscope and an instrument of his own invention. This consisted of a fine curved rod terminating in a loop. The instrument was introduced into the larynx, and the projecting growth, which was attached just below the anterior insertion of the vocal cords, was jerked off and brought into the mouth. Dr. Mackenzie said that in cases successfully treated with the laryngeal écraseur, he believed the particles had simply been broken off, and that the wire of the écraseur had not been drawn through the eyes of the instrument—in short, that the instrument had not acted on the principle of the écraseur. The instrument now brought forward was simple, safe, and could be used by any

Dr. Andrew Clark had examined the specimen microscopically, and considered it to be the most typical and malignant specimen of epithelial cancer which he had ever seen as a small growth in the larynx.

Dr. Mackenzie also exhibited a specimen of Epithelial Cancer of the Œsophagus.

Dr. Conway Evans exhibited

### A RUPTURED SPLEEN,

removed from a patient who died in King's College Hospital, under the care of Mr. Partridge, from hæmorrhage into that organ. The patient, an old man, was accidentally crushed in the street between a cartwheel and the kerbstone, and sustained fracture of many ribs on both sides. On admission, shortly after the accident, he appeared to be suffering considerably from shock, but was much better the next day, and, indeed, presented no symptoms of serious internal injury until the fifth day, when he sank somewhat rapidly. On examination the spleen was found to be extensively lacerated, and surrounded by clotted blood in large quantity. Much of the blood was situate between the substance of the spleen and its capsule, and all the coagula were limited to its immediate neighbourhood. The chief points of interest in the case were the length of time which the patient had survived the accident, and the complete absence of symptoms indicative of internal injury; and the pathological explanation of these circumstances afforded by the autopsy, which tended to the conclusion that, although the substance of the spleen had doubtless undergone laceration at the time of the accident, it was not until late in the case that its capsule gave way, and permitted the outpouring blood to escape into the abdominal cavity.

Mr. Curling exhibited

### A LARGE TUMOUR OF THE LEFT TESTICLE

removed by operation from a healthy-looking man from Nottingham, whom he had seen in August last year. Both testicles were diseased and greatly enlarged. The right was removed last year, and the left the day before by Mr. Thompson, of Nottingham. who had forwarded the specimen to Mr. Curling. The tumour presented remarkable appearances, different from the ordinary diseases of the gland. It was referred for examination to Mr. Sibley and Mr. Hulke to report on.

Mr. Carr Jackson brought before the Society a patient who had an

### ENLARGED LEG—OBSTRUCTION TO THE LYMPHATIC CIRCULATION.

The patient was sixteen years of age. The left leg was much enlarged, the limb was in parts redder, and there was more hair on it. There was a dotted pustular eruption over the inside and front of the thigh, in the stage of crusting. Mr. Jackson pointed out "bunches" of enlarged lymphatics, on puncturing which a milky fluid exuded having, on microscopical examination, all the characteristics of lymph.

Dr. Brinton showed a specimen of a

### LARGE ABDOMINAL TUMOUR.

The specimen had been sent to him by Mr. Ikin, of Leeds. It had been removed from the belly of a child ten years of age, who had received an injury a year before, and who had been under Medical advice seven months. There was a precocious puberty, and the child became very stout. At length the child had pains, next paraplegia, and then coma and convulsions for fourteen days; after which she died. The tumour was cancerous, and contained a large quantity of blood. Dr. Brinton remarked on the frequency with which such tumours followed an injury.

Mr. Nunn exhibited a drawing, and remarked on the

### EFFECT OF DIVISION OF NERVES ON TEMPERATURE.

The ulnar and median nerves had been divided, and the temperature fell ten degrees. When sensation returned the temperature became normal.

Mr. Nunn also showed a photograph of

### TERTIARY SYPHILITIC AFFECTION OF THE SYNOVIAL TISSUES ON THE TENDONS OF THE DORSUM OF THE FOOT.

He said little had been written on syphilis of the synovial tissues. He felt quite sure that there was one affection of bursæ which was clearly syphilitic. Mr. Nunn then made further remarks on the subject.

Mr. Nunn next showed a specimen of

### GUMMY TUMOUR OF THE LOWER LIP.

In this case there was no history of syphilis; but there was evidence of it in syphilitic ulceration of the palate.

Dr. Cayley showed a specimen of

NUTSHELL FROM THE LARYNX.

The child was six months old, and was brought to the Hospital for stridulous breathing, and paroxysm of dyspnœa. Tracheotomy was performed by the House-Surgeon; but the child died.

Dr. Cayley also showed a specimen of

CANCER OF THE RECTUM OPENING INTO THE VAGINA.

The interest of this case was, that on the wall of the vagina opposite the actual perforation was a patch of cancer.

Mr. Barwell showed

PARTS REMOVED IN EXCISION OF THE HIP-JOINT.

The patient was a child, six and a-half years of age. The disease had been very severe, there being abscesses at the back of the trochanter and on the inner side of the knee. Mr. Barwell referred to another case in which, after removing the head of the femur, he had taken away the floor of the acetabulum, and had let out much matter from the pelvis. Both children were now walking about without crutches. Mr. Barwell spoke of the kind of splints he used after the operation. There was no shortening.

Mr. Nunn thought Surgeons hesitated too much in operating on cases of advanced diseases of the hip-joint.

Mr. Holmes said he thought it better to avoid the use of splints altogether. He used a weight to keep the limb quiet, and also a couple of sand-bags. That the limb should be restored to its normal length was neither probable nor desirable. If there was no shortening there would be a weak joint. Mr. Holmes agreed with Mr. Nunn in thinking the operation ought to be oftener performed, as when there were abscesses there was little hope of natural cure. Although he could not confirm Mr. Nunn's opinion as to the slightness of the operation, as several of his patients had died of inflammation following the operation, he had never regretted performing it.

Mr. Barwell said that when there were large abscesses the operation ought to be performed. He supposed the term trifling applied to those cases in which there was dislocation. He could not agree with Mr. Holmes as to the uselessness of splints, and he thought that the amount of shortening necessary was small.

Dr. Andrew showed a specimen from a case of

ACUTE ATROPHY OF THE LIVER.

The patient died jaundiced. He was three days violently delirious, and in this condition he broke two of his teeth. The liver was the only organ noticeably affected. It weighed thirty-one ounces, and contained crystals of tyrosine. The patient had been out of health five or six weeks.

Mr. Henry Smith showed a specimen of

CLOT FROM THE PULMONARY ARTERY.

A negro consulted Mr. Smith for pain in the left side of the back and left side of the abdomen. There was retraction of the belly. Next day the patient felt better, but had no pulse. Brandy was given. The day after he still felt better, but had pain in his joints, and his urine was of a dark colour, but no stone had been passed. There was a little pain in the chest. He died suddenly. A large firm fibrinous clot was found in the right ventricle, and it was continued into the pulmonary artery. There was another clot in the left ventricle and aorta. There was also one in the right auricle. Mr. Smith supposed these clots were the cause of the want of pulse. He spoke of the investigations of Dr. Richardson on the subject. The urine was small in quantity, but contained no albumen.

The President suggested that the clots might have been the effect rather than the cause—*i.e.*, that they were formed during slow death.

Mr. Henry Smith said this view had been suggested to him.

Dr. Brinton alluded to the singular way in which negroes die of slight causes.

In reply to Dr. Cholmley, Mr. Smith said the kidneys were healthy; he had not examined the bladder.

Dr. Semple said he thought coagula in the heart had not received due attention from the Society. He thought too great importance had been attached to them as causes of death. He agreed with Dr. Peacock in thinking that they were rather formed during the last periods of life. In connexion with the subjects of embolism and thrombosis, they were worthy of much attention.

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**St. Mary's Hospital, Paddington.**—The annual festival of this Hospital was celebrated on Thursday last at the Albion Tavern. The Duke of Grafton presided. Subscriptions and donations amounting to upwards of £1100 were announced.

## OBITUARY.

### JOHN SPURGIN, M.D.

John Spurgin was born at Orplands, in the parish of Bradwell, in Essex, in the year 1797, of a family which had been possessed of that small estate for many generations. He was educated at the Grammar School at Chelmsford, and in the year 1813, having chosen Medicine as his Profession, was entered as a pupil at the United Hospitals of St. Thomas's and Guy's. In 1815 he matriculated at the University of Cambridge, where he became M.D. in due course. He also studied in Edinburgh during several sessions, and then began practice in Guildford-street, London, in 1820. In the year 1853 he removed to Great Cumberland-street, Hyde-park, where he continued the active exercise of his Profession till his long and honourable career was cut short by the lamentable act of violence which we mentioned last week. On the 20th of last September, between 9 and 10 p.m., Dr. Spurgin was returning by the Eastern Counties Railway from visiting a patient at Wanstead. He set out to walk up Bishopsgate-street, but had only gone a few hundred yards "when he was suddenly (to use his own expression) 'butted' by a man, who threw himself head foremost at him, striking him on the chin and breast, and falling on him as Dr. Spurgin fell. The ruffian, placing his knee on the pit of the stomach, snatched at a gold chain and valuable gold watch, and, waving them hurriedly to some behind, rose and commenced running in an opposite direction. After lying stunned for a moment, Dr. Spurgin rose and attempted to follow the robber, whom he still had in sight, when a man suddenly appeared at the corner of an alley and exclaimed, 'Halloo! What's the matter?' 'Why,' gasped Dr. Spurgin, 'that man has just stolen my watch!' 'Oh, has he?' was the reply, and in an instant the unfortunate gentleman was tripped up, and fell prostrate on the flags, sustaining a second time serious injuries. Both miscreants got off scot free; there was no policeman near or in sight—no one to lend a helping hand till it was too late." So says a correspondent of the *Times*.

According to the evidence of his son, Mr. Walter Spurgin, at the inquest, which was held by Dr. Lankester, on Saturday, there were at least six or seven men around him when he was robbed, not one of whom was brought to justice, nor were the watch and chain ever heard of again.

From the injuries received in this encounter Dr. Spurgin never recovered; and, after six months of the acutest suffering, soothed but not remedied by the unremitting care of Dr. Owen Rees, who, with Dr. Watson, Sir W. Fergusson, Mr. Lane, and Dr. Stocker attended him to the end, he died on the 20th of March.

At the time of the accident he was thrown violently on his right shoulder. Immense ecchymosis was produced; but Sir W. Fergusson could detect neither fracture nor dislocation—simply contusion of muscles, and perhaps laceration. He suffered great pain at first for six or eight weeks, although he went out with his arm in a sling, and was even taken to the police-court to see if he could identify some men who had been apprehended on suspicion. After six or eight weeks pain ceased, but his appetite gave way, and he could take no food without dyspnœa coming on. It seemed as if the sympathetic nerve were involved, and with vital powers thus impaired, he gradually sank as it seemed, from inanition. There was no post-mortem; and in default of a better word, his death must be ascribed to "shock" of the nervous system.

The deceased never held any public appointment as teacher in any of the London schools; he was not a voluminous writer in early life, and he had no peculiar theory or speciality, such as is often the means of bringing a man prominently before the public. Yet he soon attained to a large and lucrative connexion. He was Physician to the Foundling Hospital for thirty years, Consulting Physician to St. Mark's and the Skin

Hospital, and to the Eagle Life Office. During the almost half century in which he practised there were few Physicians more widely known, in all ranks of society, or more thoroughly respected. He was a handsome, open-faced man, with a peculiarly kind and intelligent countenance, of middle height, stout, compact frame, and active habits; and his success in life naturally flowed from his peculiar combination of mental and bodily powers, in which good temper, shrewdness, great good sense and sagacity, and considerable power of endurance were prominent ingredients. His was a thoroughly English frame, and English character to match. He was an ardent sportsman, a good shot, and a perfect enthusiast of the rod and line. Besides this he was a man of a singularly ingenious and speculative turn of mind, and was prolific in mechanical contrivances, of which others reaped the benefit. He was inventor and patentee of that "endless ladder" which is now an appurtenance of the scaffolding of all large new buildings, for the purpose of hoisting and lowering materials. He was a capital Latin and Greek scholar, of the old and now almost extinct sort amongst Physicians, and his chief delight and recreation was Latin literature. He delivered the Harveian oration in 1851, and piqued himself with much justice on the classic elegance of its style. With the literature of France and Germany he was not equally familiar, though he had frequently travelled on the Continent. In practice he was himself all over, cool, sagacious, hopeful, never attempting a hazardous *coup de main*, never blindly following a pet theory, but, closely watching his game, he gained the greatest effects by simple, homely, every-day remedies. No wonder that he gained and deserved the confidence of his patients.

Spite of the calm practical exterior, Dr. Spurgin was in his innermost soul largely endowed with the gifts of imagination and philosophical speculation. He was a firm believer in the doctrines of that gifted man Swedenborg, of which the peculiarity is, if we understand them aright, that all the outward and visible creation is pregnant, as it were, with mysterious analogies; that recondite physical and physiological truths are veiled under the moral and religious teachings of the Bible; and that the visible creation is a pattern of moral truths. Hence, notwithstanding the extremely practical style of his Professional work, there was in his mind a deep stratum of meditation on abstract speculative subjects; and thus we are supplied with the key to much that otherwise would be misunderstood in his published works.

The work which most thoroughly requires this elucidation is one published in 1855, entitled "The Physician for All," and dedicated to Lord Palmerston. How odd, it was said, said, that a Physician should write a book, treating on the constitution of the blood and on the treatment of a large number of diseases, and should dedicate it to Lord Palmerston! Time and space fail us for anything like an analysis or epitome, but we may say that under the idea that moral and physical evil are one, Dr. Spurgin's text is, that selfishness is *the* great disease, and that enlightened legislation, and good moral and religious instruction, are the great remedies. "Correct principles of legislation are," he declares, "the chief means of maintaining a healthy constitution of the people." "Moral causes modify the internal organisation as well as the external visage and gait." "Conceive a nation constituted of individuals who, from the least to the greatest, observe God's commandments to do them. Who would say that perfection is not there? Conceive a living body with its innumerable parts performing their functions rightly, who would say that it was unhealthy?" The power of the Creator is to the world what formative force is to the body; animal heat and love of God are one; coldness of love to God leads to a low and cold state first of society, then of individual health. Leprosy disappeared under an improved moral and physical *régime*, so would scurvy if the hateful vice of selfishness could be wiped out of the hearts of shipowners and purveyors who deny their unhappy crews the lemon-juice required to keep them in health. Such, if we understand it aright, is the thread of Dr. Spurgin's work, although the arguments and facts want more lucid arrangement than he has given them. Some half-mystic notions on the value of salts to the blood induced him at one time to bring forward a liquid, called Dr. Spurgin's "Condiment," consisting of a solution of common salt and alkaline phosphates, which he persuaded his friends to take at every meal, under the idea that it would assist digestion and purify the blood, just as the great Lord Bacon believed in the efficacy of nitre. Something of the same speculative vein runs through his "Lectures on the Materia Medica," delivered at the Royal College of Physicians. In a pamphlet, "On the Drainage of Cities" (1858), he urges with great force the necessity of diverting filth from the rivers and applying it to agriculture. Lastly, the "Harveian Oration," 1851, is a truly eloquent description of Truth, and of the means whereby she may be sought.

One passage there is in it which harmonises well with sentiments to which our readers are no strangers. Of investigating truth, he says the method is two-fold—one synthetic; the other analytic. The synthetic descends from principles and causes to phenomena and effects;—"itaque à prioribus ad postrema. . . . a generalibus ad singularia progreditur; inde ad experientiam quæ priora confirmare possit, tandem pervenit.'

"Analytica contra, a phænomenis et effictibis ad causas adscendit, unde principia evolvt; itaque ab experientia singularium, generalia; ab exteroribus, interiora; a compositis, simplicia; a posterioribus, priora deducit." The "high priori" method springing from conjecture, is fruitful in controversies and evanescent theories. "Hinc undique errores, fallaces conclusiunculas, dissidia videmus." Would that these words could be pondered by the framers of theories about cholera!

We must not omit to mention that Dr. Spurgin was an original investigator of the temperature of the body in disease, and invented a handy "thermoscope," which he described in the *Medical Times and Gazette*, November 13, 1852.

Such was the active-minded and benevolent Physician who fell amongst the thieves of Shoreditch last September, at a time when, spite of 69 years, his health and vigour seemed to promise many years yet of health and usefulness. Truly such a man's life was too valuable to his family and to society to be lost through want of an efficient police force. On his own principles, we must regard his sufferings and death as evidence of vicious municipal regulations, and of that selfishness which allows the Eastern part of London to be covered with wretched, tortuous, fetid courts and alleys, where few but beasts of prey in human guise do congregate.

## THE LATE SIR ALEXANDER MORISON.

But a few days have intervened between the death of Dr. Conolly and the death of Sir Alexander Morison, two names pre-eminently distinguished in the annals of improvement in the treatment of the insane in this country. Sir Alexander Morison was the older man, having attained at the time of his death, on the 14th current, an age only six weeks short of eighty-seven years. Dr. Conolly was fifteen years younger.

Sir Alexander Morison was born at Anchorfield, near Edinburgh, on May 1, 1779. At the High School of Edinburgh he was in the same class with Lord Brougham. In 1798 he took the diploma of surgeon, and in the following year he obtained the degree of Doctor in Medicine from the University of Edinburgh. After a year's probation as a Licentiate he was elected a Fellow of the Royal College of Physicians of Edinburgh in 1801. In 1808 he became a Licentiate of the Royal College of Physicians of London, but not till 1841 did he obtain the rank of Fellow of that College. In 1809 he was appointed Medical Superintendent of a private asylum for the insane in the county of Surrey. About the year 1816 he delivered a course of lectures in Edinburgh on mental diseases, to the excellence of which some surviving members of the Medical Profession can still testify.

In 1816 he was appointed Physician-in-Ordinary to her Royal Highness the Princess Charlotte of Wales, and after her marriage he obtained the like honourable office from her husband, Prince Leopold, the late King of the Belgians, who was further graciously pleased to stand godfather to his infant son. He also held the appointment of Physician to the Duke of York.

In 1827 he was elected President of the Royal College of Physicians of Edinburgh, which office he held for the usual period of two years.

In 1832 he was appointed Consulting Physician to the Middlesex Asylum at Hanwell, and Visiting Physician to the Surrey County Asylum. In 1833 he gave his first course of lectures on mental diseases in London, which course was continued annually for a number of years. In 1835 he was appointed Physician to the Royal Hospitals of Bethlehem and Bridewell, and Consulting Physician to several other asylums for the insane in different parts of England, and in these he laboured assiduously to promote the comfort of the insane poor.

In 1838, soon after the accession of her present Majesty, he received the honour of knighthood.

After his retirement from the office of Physician to Bethlehem Hospital, he lived chiefly near Balerno, in the parish of Currie, visiting England occasionally in the performance of his duty as Consulting Physician to the Surrey and other asylums. This he did till within the last few years, when the effects of a severe illness rendered it more prudent to remain nearer home. Notwithstanding his great age, he retained his faculties to the last moment of his life.

Sir Alexander's works are numerous, the most remarkable of which is "The Physiognomy of Mental Diseases"—a very valuable book, in which, along with descriptions of the various forms of deprivation of mind, are illustrative portraits from drawings by eminent artists taken from patients in the several institutions with which he was connected.

In 1864, he instituted an annual course of six lectures on mental diseases, under the direction of the Royal College of Physicians of Edinburgh, the first course of which was given in Physicians' Hall last summer by Dr. Seller, appointed by him the first lecturer. He has also established an annual prize to the best recommended male and female attendant in the British asylums for the insane.

Sir Alexander was twice married. His sons have all died before him. He has left a widow, several daughters, and numerous grand-children, to lament him. He is buried in the churchyard of Currie.

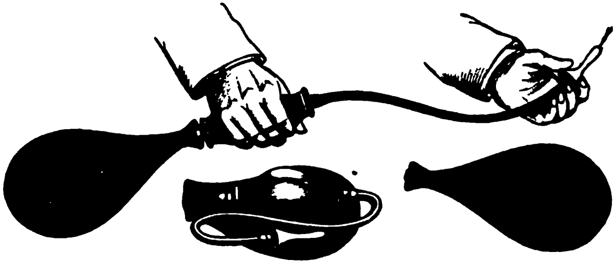
## DEATH OF DR. O'REARDON.

Dr. O'Reardon had reached the patriarchal age of 90, and was the oldest licentiate of the Irish College of Physicians. Under the patronage of his uncle, the late Most Rev. Dr. Sugrue, Bishop of Kerry, Mr. O'Reardon entered in 1797 the College of Maynooth, where he received instruction from Dr. De La Hogue, and the Rev. John Chetwode Eustace, author of the "Classical Tour in Italy." A pause in his speech having unfitted him for the pulpit, he relinquished theological for physiological studies, and in 1802 he became a Physician. During this year he published in Latin some Medical dissertations, dedicated to Drs. Clarke and Purcell. Sound sense, free from the theorising flights to which some young Physicians are prone, characterise these productions, while their Latinity is pure and vigorous. In 1803 Dr. O'Reardon proceeded to France, for the purpose of gathering experience at the Hospitals of that city, and of enjoying the advantages of a course of botanical instruction under the celebrated Baron Cuvier. Prolonged hostilities between France and England sprung up shortly after, and Dr. O'Reardon, together with his grand uncle, the General Count O'Connell, of the British service, with whom he resided, were detained in France until the restoration of the Bourbons, nine years later. The longevity of the family is remarkable, General O'Connell having attained the age of 91 at his death in 1834. In 1814 Dr. O'Reardon returned to Ireland, and became Physician to some public institutions, from which he received formal addresses of thanks; but it is in connection with the Fever Hospital in Cork-street with which he will be chiefly remembered. For thirty years he was, with the late Dr. Harkan, its zealous and efficient Medical attendant; but on the reduction of the Hospital grants in 1848 his services were relinquished. The Medical reports of the Hospital, of which many exist, from his pen, attest the unremitting zeal with which Dr. O'Reardon watched over the patients committed to his care. He was also the writer of a small memoir of Kirwan, the eminent chemist, whose friendship he possessed. He was the associate in consultation with Colles, Cheyne, Crampton, and Carmichael; and, although he did not hold quite as high a rank as those eminent men, he largely shared their friendship and high opinion. Dr. O'Reardon was first cousin of the illustrious Daniel O'Connell, whose family Physician he had been. The infirmities of age led to his retirement from the Profession, and a few years ago he removed to Mount Prospect, overlooking the Lakes of Killarney, where he tranquilly breathed his last, almost on the spot where he was born. He had been always remarkable for practical piety, and it may with truth be said that the whole tenor of his long life was one uninterrupted preparation for the next.—*Freeman's Journal.*

# NEW INVENTIONS.

## SAVORY AND MOORE'S "REPTILE HEART" SYRINGE FOR ENEMA, UTERINE INJECTION, AND BARNES'S DILATORS.

A short time since, when reviewing the Catalogue of Surgical Instruments issued by the Messrs. Maw, we spoke in terms of high commendation of that portable form of india-rubber enema which works by alternate contraction and dilatation, with a valve to direct the course of the current, like a reptile's heart. (We find, by the bye, that Dr. Leared claims the original idea of this instrument, which he says he designed some years ago, to illustrate the action and sounds of the heart.) Messrs. Savory and Moore have devised a new and very perfect form of this instrument, which is made for them by Messrs. Maw, in a very superior style of workmanship and very cheaply. In addition to the bulbed tube, which is the essential part of the machinery, there is an india-rubber bottle, holding about a pint, which can be affixed to the suction tube, so that any one provided with this can put it into his pocket and take a lavement conveniently, in a strange house or hotel, without the trouble even of carrying a jug of water. Then the delivery end can be fitted with a tube for ordinary vaginal injections, and with another longer tube, such as the accoucheur requires for injection of the womb in cases of flooding after delivery. It is also adapted to Dr. Barnes's india-rubber bags for affecting dilatation of the os uteri; and of course would be equally available for a water pessary or for a bag for plugging the vagina in order to check hæmorrhage before delivery. We will not repeat what we have said of the immense contribution to health and comfort effected by these improved india-rubber manufactures; but we will heartily recommend this cheap and compact apparatus of Savory and Moore as an essential part of the contents of every Accoucheur's bag.



# MEDICAL NEWS.

**Royal College of Physicians of London.**—At a general meeting of the Fellows held on Monday, March 26, Thomas Watson, M.D. Cantab., D.C.L. Oxon., was unanimously re-elected the President of the College for the ensuing year. At the same meeting, the following gentlemen, having undergone the necessary Examination, were duly admitted Members of the College:—

Edward Parson, M.D. Lond., 3, York-street, Portman-square; Robert Liveing, M.D. Cantab., 14, Harley-street; William Tilbury Fox, M.D. Lond., 43, Sackville-street.

## APPOINTMENTS.

⁂ The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

**Bracey**, W. A., M.R.C.S.Eng., has been appointed Surgeon to the Birmingham and Midland Eye Hospital.

**Budds**, W. T., L.R.C.S.I., has been appointed Apothecary and House Surgeon to the Cork South Charitable Infirmary and County Hospital.

**Crawford**, W., M.D., has been appointed to the commission of the peace for the county of Waterford.

**Divers**, Professor E., from Queen's College, Birmingham, has been appointed to the Chair of Natural Philosophy at Charing Cross Hospital.

**Dolmage**, Inspector-General, has been appointed Consulting Surgeon to the Pimlico and Westminster Institute for Diseases of Women and Children.

**Morris**, J. C., L.F.P.S.Glasg., has been appointed Assistant Medical Officer at the North Wales Counties Lunatic Asylum, Denbigh.

**Mucklow**, Mr. T. C., has been appointed Assistant Dispenser at the Queen's Hospital, Birmingham.

Owen, Mr. William B., has been appointed Surgeon to the Clergy Orphan School, St. John's-wood.

Sims, Dr. Marion, has been appointed Consulting Surgeon-Accoucheur to the Pimlico and Westminster Institute for Diseases of Women and Children.

Thomason, R., M.R C.S.Eng., has been elected Visiting Surgeon to the Hereford Dispensary.

Ure, Alexander, F.R.C.S.Eng., has been appointed Consulting Surgeon to the London Infirmary for Epilepsy and Paralysis.

## BIRTHS.

Elliott.—On March 21, at North-street, Chichester, the wife of George H. Elliott, M.R.C.S.E., of a son.

Gorringe.—On February 24, at Colaba, Bombay, the wife of Dr. Gorringe, 4th Royals, of a son.

Grace.—On March 10, at Chipping Sodbury, Gloucestershire, the wife of A. Grace, M.R.C.S.Eng., of a son.

Hyde, on February 2, at Aller-cottage, D'Urbans, Natal, the wife of Hyde Clarence, M.D., of a son.

Ryan.—On March 17, at Upper Leeson-street, Dublin, the wife of M. Ryan, M.D., of a son.

Walker.—On March 2, at Walsingham, the wife of W. Walker, M.D., of a son.

## MARRIAGES.

Woods—M'Causland.—On March 8, at Birr, Thomas Woods, M.D., to Charlotte Anne, daughter of the Rev. M. M'Causland.

## DEATHS.

Arnold, J., L.R.C.P.Edin., of Liverpool, on March 10.

Asbury, Benson V., M.R.C.S.Eng., at Enfield-highway, on March 20, aged 44.

Atkinson, T. P., M.R.C.S·Eng., at Kilham, near Driffield, on March 17, aged 51.

Blackmore, Edward, M.D., at Nelson, New Zealand, on December 6, aged 66.

Board, Walter, M.R.C.S.Eng., at the Rectory, Burnham, on March 9, aged 55.

Bullen, Denis B., M.D., at Ashton Lawn, Cork, on March 21, aged 64.

Crabbe, Benjamin, Surgeon R.N. at Strabane, co. Tyrone, on March 18, aged 32.

Davidge, M., L.R.C.S.Edin., at Clonmellon, co. Westmeath, on March 14, aged 40.

Dodgson, Thomas, M.D., at Skipton, Yorkshire, recently, aged 75.

Fairbairn, William H., Surgeon-Major H.M. Army, at 38, Jermyn-street, S.W., on March 23, aged 48.

Galton, Robert C., M.D., at Hadzor, Worcestershire, on March 22, aged 35.

Hall, David J., M.D., at Eastbourne, on March 23, aged 61.

Mitchelson, William, late Staff-Surgeon E.I.C., at 27, Castle-street, Dumfries, on March 25, aged 68.

O'Reardon, Dr. J., at Mount Prospect, Killarney, on March 14, aged 90.

Parker, John, M.R.C.S.E., at Wincanton, Somerset, on March 24, aged 59.

## POOR-LAW MEDICAL SERVICE.

⁂ The area of each district is stated in acres. The population is computed according to the last census.

### RESIGNATIONS.

*Builth Union.*—The Abergwessin District is vacant; area 68,480; population 3784; salary £42 per annum.

*Carlisle Union.*—Dr. Walker has resigned the Stanwin District; area 11,730; population 11,677; salary £50 per annum.

*Tonbridge Union.*—Mr. Dakins has resigned the Third District; area 3184; population 1158; salary £30 per annum: the Fifth District; area 4498; population 1411; salary £30 per annum: and the Workhouse, salary £80 per annum.

### APPOINTMENTS.

*Basford Union.*—Robert H. Sers, M.R.C.S.E., to the Calverton District.

*Cambridge Union.*—John Buckenham, M.R.C.S.E., M.D. Edin., to the Second District.

*Clifton Union.*—Joseph J. Evans, F.R.C.S.E., L.S.A., to the St. Phillip and St. Jacob North District; Shirley E. Woolmer, M.R.C.S.E., L.S.A., to the St. Phillip and St. Jacob South District.

*Hastings Union.*—Henry E. Herbert, L.S.A., to the Third District.

Charitable Bequest.—Miss Maria Renton Tufnell, of Bath, lately deceased, has directed that all her furniture, linen, plate, china, glass, and other effects be sold by auction, and the proceeds to be handed over to the Bath United Hospital, to which excellent institution she further bequeaths, free of legacy duty, the sum of £300.

Arrest of Cattle Importation from Holland.—The step taken by the Government in consequence of a recent reimportation of Rinderpest of stopping cattle traffic with Holland may be expected to produce serious inconvenience. More than half the cattle lately imported have been Dutch, and it is foreign importation alone which has controlled prices in the face of the stoppage of all inland transit of live stock. The *Times* urges on the Government the necessity of adopting measures for slaughtering foreign cattle immediately on their arrival. The great requirement is a dead meat market, which the Corporation of London seem no nearer providing than when, five years ago, Smithfield was voted for the purpose.

Union Chargeability.—The Act for the better distribution of the charge for the relief of the poor in unions has come into operation. It is enacted that from and after March 25, so much of Section 26 of the 4th and 5th of William IV., cap. 76, as requires parishes in unions to defray the expenses of their own poor, whether relieved in or out of the workhouses of the Union, should be repealed, and all the costs of the relief to the poor, and the expenses of the burial of the body of any poor person under the direction of the guardians or any of their officers duly authorised in such Union, thenceforth incurred, and all charges thenceforth incurred by the guardians of such Union in respect of vaccination and registration fees and expenses, should be charged upon the common fund.

Arnfield *v.* Walker.—This case, which was tried on March 22 on the Northern Circuit, is interesting as illustrating the scope of legal reponsibility in cases of injury to the person. The action was brought against a railway contractor to recover compensation for injury sustained through the blasting of rock, whereby a stone flew and struck the plaintiff. Mr. Justice Lush, in the course of the plaintiff's case, said that he should rule that if persons do dangerous work near a public road they are responsible for the injury that results, however carefully they do the work.—Mr. Quain submitted that, as the cutting was authorised by the Act of Parliament, and the blasting was essential to making the cutting, they were not liable if they did the work in a careful and proper manner. His Lordship held that the Act of Parliament made no difference. The jury returned a verdict in accordance with the judge's ruling, awarding heavy damages.

Poisoning by Methylated Spirits.—Dr. Lankester last week held an inquest in St. Giles's on the body of a man who had habitually, for the last two years, intoxicated himself with methylated spirit. This he used to purchase at a chemist's shop, at the rate of three quarterns for three-halfpence. He was also in the habit of eating opium, and had been seen to bite off a large piece of the drug and eat it like an apple. On Wednesday morning the deceased arose from his bed in a maddened condition, and, on the promise of getting him methylated spirit, was induced to walk in the direction of St. Giles's workhouse. On his way he dropped down dead. The evidence of Mr. Bennett, Surgeon of the workhouse, showed that the deceased died of pulmonary apoplexy and effusion of serum on the brain, caused by excessive drinking of methylated spirit. The Coroner remarked that the Government allowed this spirit to be imported free of duty, believing no one could drink it, but here the revenue had certainly been cheated. A verdict in accordance with the Medical evidence was returned.

Discharge of Sewage into Rivers and Brooks.—Goldsmid *v.* the Tunbridge Wells Improvement Commissioners.—The Lords Justices Turner and Knight Bruce have cofirmed the decision of the Master of the Rolls in this case. The facts of the case were that a bill was filed by Mr. Goldsmid, of Summerhill, Tunbridge Wells, to restrain the Sewage Commissioners of that place from permitting the local sewage matter to be discharged in a brook called Calverly-brook, or into the waters of the private lake and millstream of the plaintiff, so as to injure the health or otherwise injuriously annoy the plaintiff or his family, or the tenants living on his estate. The Court, after expressing an opinion that in these cases the interests of private individual were not only compatible, but identical with the interest of the public, and after having also explained that the plaintiff was not bound to wait until the nuisance became intolerable before he complained of it, held that the plaintiff was entitled to an injunction to restrain the Commissioners from allowing the sewage matter to be discharged in such a course as to injuriously affect the streams that flowed through his property.

Davison and Wife *v.* the London and North-Western Railway Company.—Northern Circuit, March 23.—(Before Mr. Justice Mellor.)—This was an action to recover damages for injuries sustained by plaintiff's wife on defendants' line. The principal plea was the acceptance of a sum of money, and a promise to pay the expenses of Medical attendance in full satisfaction of all claims. On September 27 Mrs. Davison was a passenger on the defendants' railway, when a collision took place near Preston; the carriage in which she sat was lifted up above the line, and came down with great violence, throwing Mrs. Davison upon the back, and injuring her leg severely. She was attended by a Surgeon, and for some time was doing well. Subsequently, however, serious injury to the spine developed itself, occasioning partial paralysis of the leg, and incapacitating her from exertion of every kind. It appeared that before the injury to the spine was known the Company's Surgeon prevailed on the plaintiff to accept £51 and the payment of the Doctor's bill, in satisfaction of his claim, and an agreement to that effect was signed. It was contended, however, for the plaintiff that the money had only been accepted "on account," and not as full compensation. His Lordship said the simple question for the jury was, did the plaintiff write the receipt with the full knowledge of what he was about, and did he expressly say at the time that he accepted the money on account. The jury returned a verdict for the defendants.

SCURVY AT SEA.—The Medical Officer of the *Dreadnought* reports that from January 1 to March 26 inclusive thirty-nine case of scurvy were admitted into that Hospital. This number represents an increase of more than 90 per cent. over the corresponding months of the last three years. Among records of this disease from the provinces, we have to record the case of a vessel that arrived lately at the port of Bristol, bringing eleven cases of scurvy out of a crew (all told) of twenty-two hands! and of a large ship that reached Hull with twelve cases of scurvy on board, her complement of officers and men consisting of but twenty-eight hands! Numerical facts such as these tell their own tale, and are a standing reproach to the Marine Department of the Board of Trade.

THE WORKHOUSE INFIRMARY OF ST. GEORGE, HANOVER-SQUARE.—The Governors and Directors of the Poor in St. George's, Hanover-square, have written by their clerk to the Archbishop of York, informing his Grace that the statements made by him at Willis's Rooms on Saturday last, stating the gross neglect of the sick poor and the entire want of any nurses for them in the metropolitan workhouses' infirmaries, having been brought before their Board, the Guardians request that his Grace will visit their infirmaries in Mount-street and at Chelsea, in order to satisfy himself of the falsity of the statements which he has been induced to make public. The Guardians will be summoned to receive his Grace at the infirmary, or, if his Grace prefers it, he can visit the infirmaries unattended at any hour of the day or night that his Grace may think fit.

THE QUECKETT MICROSCOPICAL CLUB.—The monthly meeting of this Society was held, by permission of the Council, at University College, Gower-street, on the 23rd inst., a removal from Sackville-street to more commodious rooms having become necessary from the rapid increase in the number of members. Mr. M. C. Cooke read a very practical paper on "Universal Microscopic Admeasurement," the object of which was the advocacy of the universal adoption of the French measurement, with the "millimetre" as the standard for microscopic objects. Mr. Cooke contended that as the French measure was used by the great majority, and that of the "inch" was adopted only by a marked minority of observers, the former was entitled to the victory, especially as it has been already adopted in most foreign countries. A very interesting discussion followed. The proceedings terminated with a *conversazione.* Eight new members were elected, and seven candidates proposed for admission. The offices still remain at 192, Piccadilly.

THE ROYAL COLLEGE OF PHYSICIANS AND THE COMMITTEE ON THE PUBLIC MEDICAL SERVICES.—The following resolution, proposed by Dr. Black and seconded by Dr. Sibson, has been unanimously carried by the Royal College of Physicians:—"The Royal College of Physicians of London, in acknowledging the receipt from the Lords of the Admiralty of the 'Report of the Committee appointed to inquire into the whole question of the Rank, Pay, and Position of the Medical Officers of the Army and Navy,' beg leave to convey to the First Lord of the Admiralty and to the Secretary of War the expression of their high gratification with the manner in which their Lordships have responded to the appeal of the College, by appointing a Committee to inquire into the subjects referred to in the Memorials addressed to their Lordships by the College, and by inviting the College to nominate one of themselves to represent them in the Committee. The College also desire to express their satisfaction with the Recommendations contained in the Reports of the Committee. They consider that these Recommendations, whereby the position and pay of Army and Navy Medical officers are materially improved, are well fitted to remove those sources of discontent which the College deemed injurious to the public interest, and will, if carried out, meet with the general approbation of the Profession; and so be the means of inducing a higher class of Medical candidates to seek admission into the Army and Navy Medical Services." Dr. Sibson, in seconding the resolution, said that the excellent part played by the College in this matter would reflect high credit upon the College, and proved it to be what it really was—the leading Medical body in the country. The College in this had looked beyond its own immediate interests, and showed that it had a regard for all members of the Profession, whether they were or not members of its corporation. This was the right and a proud position for the College to assume. The influence exercised by the College with the Government had produced the highest benefits to our Army and Navy Medical brethren. The recommendations contained in the Reports of the Admiralty Committee must meet with general approbation. Thereby the position of Army and Navy Medical officers was much improved, and, besides, a very considerable addition made to their pay. Surely it was no slight matter that an Assistant-Surgeon of the Navy should have his pay increased to the extent of £48 per annum, and that all grades of the Medical service upwards should have likewise a considerable increase of pay. Everything wished for by Medical officers may not be obtained; but certainly, considering the very great improvement made in their position and pay, all reasonable people must allow that a great boon is bestowed by these recommendations upon them. The tact and firmness shown by Dr. Markham in the Committee deserved the thanks of the College. In a settlement of highly conflicting interests, it was simply an act of wisdom to give fair consideration to both sides of the question. It was impossible to disregard the opinions of official minds; but, in any concessions thus made, the right interests and position of the officers have been duly secured to them. Dr. Armstrong, on the part of his Naval Medical brethren, begged sincerely to thank the College for the great services rendered to the Army and Navy by the intervention of the College on their behalf. He supported the resolution with pleasure, and had no doubt that the liberal recommendations contained in the Reports of the Admiralty Committee would be favourably received by Navy Medical officers. Dr. Burrows then, in warm language of approval, proposed, and Dr. Alderson seconded, a vote of thanks to Dr. Markham for the manner in which he had acted as representative of the College in the Admiralty Committee.

ST. PANCRAS WORKHOUSE.—On Tuesday Dr. Lankester resumed the inquest upon the child Elizabeth Thompson Greene, *alias* Adams, alleged to have been "laid out" for dead while alive in St. Pancras Workhouse. The Rev. Mr. Hillocks was examined on the first inquiry, as already reported, and he was not on this occasion submitted to any cross-examination. The pauper witnesses fully established that the child was considered to be dead by the paupers in the ward; that it was bandaged up alive, as described by Mr. Hillocks; and that it was not seen by any official person, even though it had been very ill for days, until Mr. Hillocks went and fetched the superintendent, Mrs. Sansom, who, however, did not even then send for the Doctor. One of these witnesses, a Mary Smith, gave in evidence that she had the deceased child to suckle in addition to her own, and this, she told the Commissioner, though she was ill and scarce of milk. The pauper nurse put the child with her, an milk was allowed the child. The Coroner recalled Dr. Ringer, the Physician, of the University College Hospital, who made the post-mortem, and asked him if he considered the treatment the child had received had caused its death. Dr. Ringer replied that the child was in such a wretched condition that its death was inevitable, but he thought it unquestionable that the bandaging the child up as described must have accelerated its death. At the suggestion of Mr. Ernest Hart, the Coroner asked if a child or any patient in witness's Hospital would be left without being seen by the Medical officer from Monday to Thursday, to which the witness replied in the negative, saying that every patient would be seen every day, and the Coroner emphatically added that in no Hospital in the country would a patient be open to such treatment as this child received in the Workhouse. Dr. Ringer then added that he believed the child had all the attention the Medical officer of the Workhouse could give it, for an Hospital Doctor did not have a tithe of the patients to attend to that the Medical officer of St.

Pancras Workhouse had. Some of the jury expressed their doubts of this, and Mr. Butt, the Medical officer, offered himself for examination. He said he was a duly qualified M.R.C.S., and that having visited the nursery on Monday, he did not find it necessary to go in again until the following Saturday, as he relied upon the superintendent telling him if any of the inmates required his attention, and she told him all were going on well. In reply to questions put by Mr. Hart, through the Coroner, important facts were elicited. The witness said there were at the present time 240 sick persons in the infirmary; 430 aged and infirm women, 212 infirm and aged men, 42 insane men, and 90 insane women, making a total of 1014 persons in the Doctor's hands, in addition to 32 lying-in cases, which made a total of 1042 under the Medical officer's immediate care, and his only staff was another qualified Practitioner. There were, in all, it was elicited, about 2000 persons in the Workhouse, and, in addition to those under the Doctor's immediate care, there were sure to be other cases. Dr. Ringer said a Medical officer of an Hospital would have no more than sixty or seventy cases under him at one time. The jury, on hearing this statement, said it was most important the public should know these facts, and some remarks were made to the effect that the Poor-law Board should not sanction such a state of things. Mr. Hart informed the Court that the Poor-law Board had no power in the matter, which a guardian present confirmed, by saying, "We don't ask the Poor-law Board to sanction what we do." The Coroner said a Medical officer could not be expected to attend to so many cases, and he could not be expected to see the child as it ought to be seen—every day. Mr. Butt said he might add that he did see the ward three times in the course of a week. He saw the ward on Monday, Saturday, and Sunday. Mrs. Sansom, the superintendent, was examined, and she gave the evidence already published—namely, that she did not call the Doctor, and she confirmed Mr. Hillocks's statement in several important particulars, one that the child had been bandaged, another that the pauper nurse had not called her, and that she had scolded the nurse for treating the child as dead, but she excused them on the ground that the child was "all but gone" when it was bandaged. In cross-examination she said she thought the rule to call the Doctor to a dying person or child was generally carried out. She candidly confessed that she was over-worked, as were all the officers, and her case was a sample, she having 156 people to look after, and not a single paid nurse under her. The room was then cleared, and when the court was again opened the jury returned a verdict to the effect that the child died of inanition, and appended the following special resolution:—"The jury are of opinion that great blame is to be attributed to the Workhouse attendants for tying up the jaws of the deceased and treating her as dead for some time before she had wholly expired; that they are further of opinion that there is not a sufficient number of paid Medical attendants and nurses to perform the duties of so large an establishment as St. Pancras Workhouse; and the jury beg to express their approval of the course taken by Mr. Hillocks in bringing the matter before the public."

TREATMENT OF FEVER BY ACIDS.—TREATMENT OF TYPHUS BY ACIDS.—In order to give a fair trial to the acid treatment, so highly recommended by Dr. Murchison and others, I prescribed the nitro-muriatic acid in a considerable number of cases. The theory upon which the use of the mineral acids has been so strongly advocated appears to be beautifully simple—viz., to neutralise the poison of typhus, which is supposed to be present in the blood as a peculiar compound of ammonia; since not only is there an increased quantity of ammonia exhaled by the lungs and the skin, but also the urine and the discharges from the bowels become highly ammoniacal. In the cases so treated, I must confess that I have not met with that very marked amelioration of the disease which many of the writers on fever have ascribed to the administration of mineral acids; and in not a few instances, when given in the proportions prescribed by Dr. Murchison—viz., 20 minims of dilute hydro-chloric acid, and 10 minims of dilute nitric acid, every third hour—I have frequently been obliged to discontinue their administration on account of severe griping and diarrhœa. When the acids are cautiously administered in rather smaller doses, in conjunction with a few minims of solution of muriate of morphia if the bowels be irritable, sweetened with syrup of orange peel, and diluted with water, the draught so formed is generally relished by the patient, and often produces a noticeable effect upon the fever—the most marked improvement being seen upon the tongue, which becomes moist and clean, from being very dry and hard, and covered with a brown fur. In a few cases I gave small doses of permanganate of potash, in order to ascertain if it exercised any antiseptic influence upon the typhus poison. In two of the cases with a very dark petechial rash, it seemed to hasten the disappearance of the eruption. The tongue also began to get clean and moist at an early stage; but as it produced no apparent diminution of the temperature nor of the pulse, and did not shorten the duration of the fever, and as no good results were observed to arise from its administration in the remainder of the cases, I was not encouraged to give it any further trial.—"*Observations on the Present Epidemic of Typhus*," *by Robert Perry, M.D., Physician to the Royal Infirmary, Glasgow.*

THE following are the last week's Cattle Plague Returns.

| Census Divisions. | 1. Attacked. | | | 2. Result of reported Cases from the Commencement of the disease. | | | | |
|---|---|---|---|---|---|---|---|---|
| | Week ending March 17. | Week ending March 10. | Week ending March 3. | Attacked. | Killed. | Died. | Recovered. | Unaccounted for. |
| 1. Metropolitan Police District . . | 34 | 14 | 12 | 7677 | 3262 | 3498 | 333 | 584 |
| 2. South Eastern Co. . | 12 | 13 | 23 | 5018 | 1581 | 2785 | 442 | 210 |
| 3. South Midland Co. | 584 | 616 | 573 | 15747 | 3983 | 9844 | 1509 | 411 |
| 4. Eastern Counties . | 233 | 313 | 241 | 9858 | 3947 | 4764 | 745 | 402 |
| 5. South Western Co. | 35 | 35 | 41 | 1534 | 503 | 761 | 198 | 72 |
| 6. West Midland Co. . | 831 | 405 | 1007 | 10476 | 2444 | 6109 | 1187 | 736 |
| 7. North Midland Co. | 873 | 910 | 1032 | 11817 | 4169 | 5981 | 1048 | 619 |
| 8. North Western Co. | 1504 | 2023 | 1544 | 51240 | 6937 | 33870 | 5208 | 5225 |
| 9. Yorkshire . . | 999 | 511 | 1193 | 30673 | 4137 | 18067 | 5657 | 2812 |
| 10. Northern Counties. | 547 | 522 | 697 | 6555 | 3021 | 2478 | 928 | 128 |
| 11. Monmouthshire & Wales . . | 160 | 90 | 113 | 7493 | 247 | 5852 | 1036 | 358 |
| 12. Scotland . . | 449 | 766 | 834 | 45262 | 5256 | 26825 | 10365 | 2816 |
| | 6261 | 6518 | 7310 | 203350 | 39487 | 120834 | 28656 | 14573 |

*Note A.*—The operation of the Cattle Diseases Prevention Act, 1866, is indicated by the return this week, showing 7220 cattle as "killed," compared with 6132 last week, 5197 the previous week, 1711 for the week ending February 24, and 980 for the week ending February 17.

*Note B.*—261 Inspectors have not reported this week in time for this return. Of these, 19 reported cases last week—viz., for the county of Chester, 2; Kent, 1; Lancaster, 5; Lincoln, 1; Norfolk, 1; Northumberland, 1; Nottingham, 1; East Riding of York, 1; North Riding of York, 1; and for Scotland, 5. These Inspectors returned 1468 cases last week.

## BOOKS RECEIVED.

On the Use of the Chloride of Zinc in Surgical Operations and Injuries, and especially in Operations for the Removal of Cancerous Tumours. By Campbell de Morgan, F.R.S., Surgeon to the Middlesex Hospital, Examiner in Surgery to the Royal College of Physicians. London: Savill and Edwards. Pp. 29. 1866.

⁂ The author treats his subject under a twofold aspect—as an application after the removal of malignant tumours, for reasons specially applicable to them, and after ordinary operations and injuries, to prevent the decomposition of tissues within the wound. Mr. de Morgan, in the first instance, argues that as "the *original* appearance of cancer in several organs can never be proved," it is at first a local disease, and recurrence is "due to the presence of minute cancer elements which have escaped the knife." That this is the case, he thinks, is "shown by the fact, that after removal of a voluminous breast with only a small tumour imbedded in it, the recurrence frequently takes place along the whole line of cicatrix." (Query, *frequently*.) Mr. Moore first promulgated this theory, and used solid chloride of zinc to the surface of a large wound left after extirpation of a breast. This did well, and led Mr. de Morgan to use chloride of zinc, but in solution, with a similar view, namely, to destroy any floating particles of the disease. He has since used solutions, varying in strength from gr. xx. of chlor. of zinc to xl. He has applied such even to the cancellated ends of bones, and finds they produce little irritation, are not causes of suppuration or sloughing, neither do they retard the cure. They prevent all animal odours and all putrescence within the wound.

The Danger of Deterioration of Race from the Too Rapid Increase of Great Cities. By John Edward Morgan, M.A., M.D. Oxon, Physician to the Salford Hospital, etc. Read at the Social Science Congress, Sheffield, Tuesday, October 10, 1865. Pp. 64. London: Longmans. 1866. 1s. 6d.

⁂ The author has "been much struck by the singular want of stamina which characterises the poor as a class. Men from whom either healthy offspring or sustained labour might be expected are remarkably rare." Dr. Morgan accounts for this by the excessive drain of the large towns on the agricultural population, by vitiated air, constitutional syphilis, the abuse of alcohol, and by mothers working until pregnancy is too far advanced. The author desires a more careful investigation into the atmospheric changes in the large towns *themselves*, not in some healthy place adjoining, such as Greenwich. He adds seven tables of statistics relating to the population of town and country.

On the Anatomy of Vertebrates. Vol. II.—Birds and Mammals. By Richard Owen, F.R.S. London: Longmans. 1866.

⁂ A review of this volume and of its predecessor shall appear directly.

The Alkaline Permanganates and their Medicinal Uses. By John Mutter. Pp. 48. London: Churchill and Sons. 1866.

⁂ This is a warm eulogy of the virtues of the alkaline permanganates which have been brought into use by Mr. Condy. After alluding to the various cases where they have already been found useful, the author suggests their inhalation by the aid of the atomisers of M. Sales-Giron, in cases of lung disease with offensive sputa, in diptheritic and scarlatinal sore-throat, etc.

Successful Removal of the Uterus and Both Ovaries by Abdominal Section, the Tumour, Fibro-cystic, weighing Thirty-seven Pounds. By Horatio Robertson Storer, M.D., of Boston, Surgeon to the New England Hospital for Women. Boston: David Clapp. Pp. 32. 1866.

⁂ This patient was unmarried, and 47 years of age. She had observed the tumour five years before she came under the care of Dr. Storer. The operation was performed when she was under the influence of ether. Wires were used for ligatures, and the mass was separated by the écraseur. The patient was out of bed on the twenty-eighth day. Dr. Storer adds a minute history of this operation.

Lectures on Animal Chemistry, delivered at the Royal College of Physicians. By William Odling, M.B., F.R.S., Fellow of the College, Lecturer on Chemistry at St. Bartholomew's Hospital. Pp., with Index, 165. London: Longmans and Co. 1866.

⁂ A course of six lectures delivered at the Royal College of Physicians, with some few additions. It contains a popular view of modern organic chemistry and its relations to physiology and pathology.

On Inhalation as a Means of Local Treatment of the Organs of Respiration by Atomised Fluids and Gases. By Hermann Beigel, M.D., L.R.C.P.L., Assistant-Physician to the Metropolitan Free Hospital, etc. Pp. 200. R. Hardwicke, 192, Piccadilly. 1866.

⁂ A treatise on the inhalation especially of atomised fluids.

Extracts from Braithwaite's Retrospect.

⁂ The Messrs. Braithwaite have published in a handy form extracts from their very useful "Retrospect of Medicine," relating to cholera, midwifery, and ophthalmology. Believing that cholera depends on spasm, they recommend chloroform as a remedy. Are they aware whether this remedy has a good reputation among those who have tried it?

On Winter Cough, Catarrh, Bronchitis, Emphysema, Asthma; with an Appendix on some Principles of Diet in Disease. A Course of Lectures delivered at the Royal Infirmary for Diseases of the Chest, by Horace Dobell, M.D., Physician to the Infirmary, etc., etc. Pp. 183. London: Churchill and Sons. 1866.

Observations on Crushing Stone in the Bladder. By George H. Porter, M.D., T.C.D., F.R.C.S.I. Pp. 11. Dublin: Fannin. 1866.

Supplement to the Monthly and Quarterly Returns of the Births, Deaths, and Marriages Registered in Scotland during the Year 1865. Also the Vaccination Returns for 1864. Pp. 44. Edinburgh: Murray and Gibb. 1866.

Memorandum for the Sanitary Committee of the Board of Police, showing the Relation of Epidemic Fever to Overcrowding in Glasgow. By the Medical Officer of Health. (Pamphlet.)

## NOTES, QUERIES, AND REPLIES.

◆

He that questioneth much shall learn much.—*Bacon.*

The *Nightingale Fund* must stand over till next week.

The very able letter of Dr. Bowerbank on cholera in Jamaica is delayed in consequence of the journal going to press one day earlier than usual.

Reviews of "A Treatise on the Principles and Practice of Ophthalmic Medicine and Surgery," by T. Wharton Jones, F.R.S., and "A Text-book of Mental Diseases," by Dr. Max Leidesdorf, are in type. A review of "Statistical Report on the Health of the Navy for the Year 1862," is in the printer's hands. The following papers and reviews will appear immediately:—"Clinical Notes on Diseases of the Nervous System," by Dr. Hughlings Jackson; "On the Mechanical Treatment of Talipes Varus," by F. Clowes, M.R.C.S.; "Notes on and relating to Cholera," by John Patterson, M.D.; "On Lithotomy," by J. McCraith, M.R.C.S.; "On the Occurrence of Amphoric Respiration in Pleurisy and Pleuro-pneumonia," by H. Fearnside, M.B.Lond.; "Comparative Immunity of Rabbits to the Poisonous Action of Atropine," by Dr. W. Ogle; "Cases of Tertiary Syphilis treated by the Zittman Method," by B. Shillitoe, F.R.C.S.; "Use of Opiates in Continued Fever," by Dr. N. G. Mercer; "Amputation at the Hip Joint," by J. Fayrer, M.D.; "Theory of Probability applied to Medical Statistics," by W. P. Hiern, M.A. Review of the last volume of the Medico-Chirurgical Transactions; Cockle, On Intra-Thoracic Cancer; Gamgee, On a Case of Amputation at the Hip Joint, etc.

We are very sorry to see that one of the Medical speakers at the Manchester and Salford Temperance Union meeting so far forgot the rules of propriety as to cast an undeserved slander on the reputation of an eminent Physician lately deceased. That was not a sober speech.

*A Novice.*—The opportunities are excellent; they only require to be used.

*Mr. J. H. Park.*—See our advertisement columns of this week.

*A Lady who Loves Horses.*—We doubt the application of the ether spray to the purpose mentioned. A cold douche of water would probably be better. The ether would hardly, we think, be worth trying.

*An Apothecary.*—Sir Hans Sloane presented the Gardens to the Society of Apothecaries in perpetuity.

*A Member, Greenwich.*—Professor Huxley brought his course of lectures to a close on Wednesday last. Professor Hancock will not commence his course until about June next.

*L.R.C.P.Lond., Chatham.*—Dr. Goulston bequeathed £200 to endow a pathological lecture at the College of Physicians, A.D. 1632. Lord Lumley and Dr. Caldwell founded a Surgical lecture in 1584.

*Bibliopole.*—The fine library of Dr. Francis Bernard was sold by auction in 1698, and produced £16,000. That of Charles Bernard, the Serjeant-Surgeon, was sold in 1711. The "Spaccio della Bestia Triumphante" alluded to in the *Spectator*, No. 389, was in this collection.

*Caius Coll., Cambridge.*—Skeletons of that *rara avis* the great auk are preserved in the British Museum and College of Surgeons, where also you can see the eggs. At a recent sale at Stevens's the eggs fetched £30 each.

*Tobias Smollet, M.D.*—The pay of the Director-General of the Medical Department of the Army is stated in a Blue-book as £1500 per annum. The Director-General of the Medical Department of the Royal Navy appears at £1300 per annum.

The *Staffordshire Advertiser* of March 24 contains a letter from Dr. Bury King, of Stone, complaining of the puffery of M'Dougal's Powder by high chemical authorities, some of whom are said to have a beneficial interest in the sale thereof. We believe carbolic acid to be a capital agent for keeping things sweet. Dr. King, however, wishes not to neutralise, but to destroy putrefaction. "There is only one true, positive disinfectant, and that is oxygen. Even chlorine acts by liberating oxygen from the hydrogen it was combined with (as in water, for instance), and *that* agent, therefore, must be the best disinfectant which contains the largest proportion of oxygen, and being itself susceptible of decomposition, most readily parts with and distributes it. To carry this principle practically out, I know of no agent which can compete with Condy's Patent Fluid."

### EARLY EXCISIONS OF THE UPPER JAW-BONE.

| | | |
|---|---|---|
| Period 1.— | *Acoluthus* (partially) | 1693 |
| | *Dupuytren* (partially ?) | 1819 |
| | M. Pillet pretend que la malade est allée mourir à la Salpêtrière et qu'une portion du maxillaire avait été conservée (but he is special pleading for Gensoul's priority). | |
| Period 2.— | Stevens, U. S. | 1823 |
| | Rogers, U. S. | 1824 |
| Period 3.— | *Lizars* proposed removal of upper jaw | 1826 |
| | „ performed it | 1827 |
| | *Gensoul*. | 1827 |
| | Lizars, August 1 | 1829 |
| | „ January 10 | 1830 |
| | Syme | 1829 |
| | It faut ajouter celui que M. Pièdagnel a recueilli en 1818 dans le service de M. Bauchène et celui que M. Lafont de Nantes vient de communiquer à l'Academies. | |
| | Velpeau, July | 1829 |

—*Vide Velpeau, t. 1, p. 547.*

### LOCAL ANÆSTHESIA.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Of course we must take the evidence for this local anæsthesia, but it seems to me that there is not one element of lasting success in it. Cold has been used for this purpose from time to time; the contrivances for its application of course improve, become handier, neater, etc., etc.; but the tissues are "averse to reform, or at least indifferent" (*vide* Horsman), and they are not able to sustain a degree of cold, except where reaction can be but gradual, as in the median line of the body, where both vessels and nerves are very small. No Surgeon will, as a rule, allow the materials he is to work in to be frozen, except in exceptionally healthy subjects, and those might surely have the double blessing of unconsciousness. Freezing so as to induce thorough insensibility in the centres to peripheral injury is only compatible with complete abeyance of life in the peripheral tissues; and if we dare not expose the patient (say his feet) with cardiac or arterial deficiencies to even moderate changes of temperature, how can we subject him in patches to freezing? As the old Scotch ladies say of any new thing, "Yes, sir, it's grand, but it's a havers." I am, &c. AN EYE WITNESS.

### THE REVISED EDITION OF THE PHARMACOPŒIA:

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Allow me through the medium of your excellent journal to offer some suggestions and remarks with regard to the forthcoming revised edition of the British Pharmacopœia.

It has been long known that the application of heat deprives most narcotic and sedative plants to a greater or less degree of their active principles, and that tinct. hyoscy. and tinct. and ext. conii are frequently almost inert. According, also, to a communication from Mr. Donovan which appeared in the *Dublin Medical Press* about eighteen months ago, the lin. aconiti, P.B. (and consequently the tincture also: his specimen, however, might not have been prepared from officinal aconite), is sometimes valueless, while an analogous liniment, prepared from fresh roots, possesses the full virtues of the plant.

In the face of these facts, it would be more satisfactory to the Physician, though perhaps not so convenient for the pharmaceutist, if the preparations of many of our indigenous narcotic and sedative remedies were made from the recently gathered instead of the dried plant.

The spiritus chloroformi is in the proportion of 1 to 19, while the other spirits are 1 to 9. It is weaker than the old chloric ether (which was 1 to 7), not so sweet, and contains too little chloroform to be of much service as a remedial agent.

It is advisable that such preparations as tinctura acteæ racemosæ, laricis, veratri viridis, and sumbul be admitted. They are often prescribed, and patients run the risk of obtaining them six or eight times stronger from one place than from another. If not considered worthy of unqualified recognition, they might form part of a secondary list, according to the plan of some foreign Pharmacopœias. A liq. opii sedat. and a good and cheap mist. sennæ co. would also be welcomed by many. Formulæ for approved new chemicals are not so much required, being articles of definite composition.

With regard to nomenclature, would not the terms "hydrargyri subchloridum" and "perchloridum," as applied to the two chlorides of mercury, be less open to objection than those which have been given? They would express their relative position, and could neither lead to mistakes nor inform nervous patients of the remedies prescribed for them. For the last-mentioned reason pil saponis is preferable to pil opii.

I am, &c. J. T.

### POOR-LAW MEDICAL REFORM AND VACCINATION.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I shall feel obliged by your allowing me through the medium of your columns to inform the Poor-law Medical officers—and I may say the Profession generally, for nearly all Medical men are vaccinators—that the Vaccination Bill will not go into Committee before the first Wednesday after Easter, time amply sufficient for every Medical man in the kingdom to communicate with his member of Parliament. I have sent a copy of the amendments mentioned by me in former communications to every member of Parliament, and have written private letters to about twelve gentlemen in the House. From communications already received, I believe it is intended to permit certain alterations to be made in the Bill, and perhaps Government may consent to pay a portion of the fees, but unless that portion be specially appropriated to the Medical men, it will only be relieving the poor's-rate without benefiting the vaccinator. The Bill will require careful watching, otherwise it will slip through Committee without being materially amended.

The general question of Poor-law Medical Reform must stand over until after the general Reform Bill has been disposed of.

Allow me to tender to Mr. Prowse, of Amersham, the best thanks of the Association, for the exertions he has made in raising the large sum of £92 18s. which he has forwarded to me, and it is now in the bank to the credit of the Association. I am, &c.

12, Royal-terrace, Weymouth, March 24. RICHARD GRIFFIN.

The following subscriptions have been received since the last publication:—Barton and Turner, Caistor, 10s.; Ray, E., Clerkenwell, St. James's, 21s.; Wyer, O. F., Nuneaton, 10s. 6d.; Greenwood, Major, St. Leonards, Shoreditch, 10s.; Willis, R., Tavistock, 5s.; Evans, M. G., Narberth, 10s.; Congdon, W. G., Penzance, 5s.; Smith, W., M.D., Weymouth, 21s.; Hanham, F., Bath, 10s.

COMMUNICATIONS have been received from—

OBSTETRICAL SOCIETY; MR. J. H. PARKS; DR. SMART; MR. DAKIN; DR. BREE; DR. FAYRER; MR. J. MILWARD; MR. R. GRIFFIN; A LADY WHO LOVES HORSES; MR. C. MITRA; DR. G. GRIFFITH; J. S.; MR. HARRY LEACH; EPIDEMIOLOGICAL SOCIETY; ROYAL COLLEGE OF PHYSICIANS, LONDON; DR. ARTHUR LEARED; MEDICAL SOCIETY OF LONDON; MR. R. H. BEALE; WESTERN MEDICAL AND SURGICAL SOCIETY OF LONDON; DR. E. FLEMING; MR. A. E. SANSOM; DR. FOTHERBY; HARVEIAN SOCIETY OF LONDON; MR. P. MANSON; MR. LAWSON TAIT; MR. F. CLOWES; DR. H. B. MOMTGOMERY; DR. LIONEL BEALE; DR. BENCE JONES; MR. E. BELLAMY; DR. TILBURY FOX; DR. HUGHLINGS JACKSON; MR. SPENCER WELLS; MR. J. CHATTO; DR. SYKES; MR. JOHN E. GROSS; DR. MARKHAM; DR. F. J. LILLEY; A NOVICE.

BOOKS RECEIVED—

The Sixth Annual Report of the Convalescent Society, Newcastle-on-Tyne—Journal de Médécine Mentale, Fevrier—The Australian Medical Journal, January—Brown's Comments on the Recommendations of the Committee appointed to inquire into the Position of the Medical Officers of the Army and Navy—Annual Report of the Devonshire Hospital and the Buxton Bath Charity—The British Journal of Dental Science, March—Baker Brown, On the Curability of certain Forms of Insanity, Epilepsy, etc.—Medizinische Jahrbücher—Local Museum Notes, No. 1—Moore, On the Cattle Plague—Cooke, On the Unity of Disease—Tenth Annual Report of the Nottingham United Lunatic Asylum.

NEWSPAPERS RECEIVED—

The Sunday Gazette—The Scotsman—Alliance News—The Indian Medical Gazette (Nos. 1 & 9)—Pall Mall Gazette—The Staffordshire Advertiser.

## VITAL STATISTICS OF LONDON.

*Week ending Saturday, March* 24, 1866.

### BIRTHS.

Births of Boys, 1150; Girls, 1069; Total, 2219.
Average of 10 corresponding weeks, 1856-65, 1938·9.

### DEATHS.

| | Males. | Females. | Total. |
|---|---|---|---|
| Deaths during the week .. .. .. | 854 | 795 | 1649 |
| Average of the ten years 1856-65 .. .. | 695·5 | 666·6 | 1362·1 |
| Average corrected to increased population.. | .. | .. | 1498 |
| Deaths of people above 90 .. .. .. | .. | .. | .. |

### DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

| | Population, 1861. | Small pox. | Measles. | Scarlatina. | Diphtheria. | Whooping-cough. | Typhus. | Diarrhœa. |
|---|---|---|---|---|---|---|---|---|
| West .. | 463,388 | 2 | 9 | .. | 1 | 6 | 7 | 1 |
| North .. | 618,210 | 9 | 6 | 4 | .. | 14 | 19 | 3 |
| Central .. | 378,058 | 3 | 9 | 5 | .. | 15 | 17 | 2 |
| East .. | 571,158 | 10 | 10 | 10 | 1 | 16 | 6 | 5 |
| South .. | 773,175 | 1 | 14 | 6 | .. | 32 | 15 | 6 |
| Total .. | 2,803,989 | 25 | 48 | 25 | 2 | 83 | 64 | 17 |

### METEOROLOGY.

*From Observations at the Greenwich Observatory.*

| | |
|---|---|
| Mean height of barometer .. .. .. .. .. .. | 29·290 in. |
| Mean temperature .. .. .. .. .. .. .. | 40·2 |
| Highest point of thermometer .. .. .. .. .. | 52·7 |
| Lowest point of thermometer .. .. .. .. .. | 30·1 |
| Mean dew-point temperature .. .. .. .. .. | 35·5 |
| General direction of wind .. .. .. .. .. .. | Variable. |
| Whole amount of rain in the week .. .. .. .. | 0·89 |

### BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, March 24, 1866, in the following large Towns:—

| Boroughs, etc. | Estimated Population in middle of the Year 1866. | Persons to an Acre. (1866.) | Births Registered during the week ending Mar. 24. | Deaths. Corrected Average Weekly Number.* | Deaths. Registered during the week ending March 24. | Temperature of Air (Fahr.) Highest during the Week. | Temperature of Air (Fahr.) Lowest during the Week. | Temperature of Air (Fahr.) Weekly Mean of the Mean Daily Values. | Rain Fall. In Inches. | Rain Fall. In Tons per Acre. |
|---|---|---|---|---|---|---|---|---|---|---|
| London (Metropolis) | 3067536 | 39·3 | 2219 | 1400 | 1649 | 52·7 | 30·1 | 40·2 | 0·89 | 90 |
| Bristol (City) . . | 163680 | 34·9 | 122 | 73 | ‡97 | 52·5 | 29·8 | 40·3 | 0·81 | 82 |
| Birmingham (Boro') | 335798 | 42·9 | 263 | 163 | 178 | 55·6 | 30·6 | 39·7 | 0·64 | 65 |
| Liverpool (Borough) | 484337 | 94·8 | 371 | 281 | 530 | 52·5 | 33·7 | 41·6 | 0·21 | 21 |
| Manchester (City) . | 358855 | 80·0 | 264 | 203 | ‡300 | 55·3 | 25·0 | 39·7 | 0·49 | 49 |
| Salford (Borough) . | 112904 | 21·8 | 81 | 57 | 77 | 53·5 | 21·9 | 39·8 | 0·42 | 42 |
| Sheffield (Borough) . | 218257 | 9·6 | 173 | 115 | 139 | 53·0 | 28·0 | 38·5 | 0·74 | 75 |
| Leeds (Borough) . | 228187 | 10·6 | 209 | 116 | 169 | 55·8 | 25·5 | 39·9 | 0·45 | 45 |
| Hull (Borough) . | 105233 | 29·5 | 72 | 49 | 48 | .. | .. | .. | .. | .. |
| Nwcastl-on-Tyne, do. | 122277 | 22·9 | 103 | 65 | 73 | 45·5 | 30·0 | 36·8 | 0·67 | 68 |
| Edinburgh (City) . | 175128 | 39·6 | 145 | 84 | 101 | 45·7 | 22·0 | 35·5 | 0·60 | 61 |
| Glasgow (City) . | 432265 | 85·4 | 381 | 252 | 250 | 47·8 | 25·9 | 37·4 | 0·67 | 68 |
| Dublin (City and some suburbs) . | 318437 | 32·7 | 154 | †156 | 197 | 49·5 | 29·5 | 41·5 | 1·76 | 178 |
| Total of 13 large Towns . . . | 6122894 | 34·4 | 4557 | 3014 | 3808 | 55·8 | 21·9 | 39·2 | 0·70 | 71 |
| | (1863) | | | | Week ending Mar. 17. | Week ending Mar. 17. | | § | | |
| Vienna (City) . . | 560000 | .. | .. | .. | .. | .. | .. | .. | .. | .. |

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·290 in. The reading rose to 29·77 in. on Thursday, and fell to 28·90 in. on Saturday.

The general direction of the wind was variable.

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* The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.

† Registration did not commence in Ireland till January 1, 1864; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in that city were the same as the averages of the rates in the other towns.

‡ The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

§ The mean temperature at Greenwich during the same week was 39·3°.

## APPOINTMENTS FOR THE WEEK.

### *March* 31. *Saturday (this day).*

*Operations* at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free Hospital, 1½ p.m.

### *April* 2. *Monday.*

*Operations* at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.

EPIDEMIOLOGICAL SOCIETY, 8 p.m. Dr. Mackay, R.N., "On an Outbreak of Dysentery among the Crew of H.M.S. *Conqueror*."

ODONTOLOGICAL SOCIETY, 8 p.m. Meeting.

ROYAL INSTITUTION, 2 p.m. General Monthly Meeting.

### 3. *Tuesday.*

*Operations* at Guy's, 1 p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; St. Peter's Hospital for Stone, 3 p.m.

ANTHROPOLOGICAL SOCIETY OF LONDON, 8 p.m. Meeting.

PATHOLOGICAL SOCIETY, 8 p.m. Meeting.

### 4. *Wednesday.*

*Operations* at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.

HUNTERIAN SOCIETY (Council, 7½ p.m.), 8 p.m. Dr. J. R. Bennett, "On Certain Derangements of the Nervous System occasioned by Shock, especially in Reference to Railway Accidents."

OBSTETRICAL SOCIETY OF LONDON (Council, 7 p.m.), 8 p.m. Dr. Battye, "On Certain Uterine Affections in their Relation to Phthisis." Mr. Robt. Ellis, "On a New Mode of Inducing Anæsthesia by Compound Vapours." Dr. Greenhalgh, "Case of Obstructive Dysmenorrhœa."

MICROSCOPICAL SOCIETY, 8 p.m. Meeting.

### 5. *Thursday.*

*Operations* at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.

HARVEIAN SOCIETY OF LONDON, 8 p.m. Mr. Haynes Walton, "On Detachment of the Retina, their Causes and Treatment, with Specimens."

### 6. *Friday.*

*Operations*, Westminster Ophthalmic, 1½ p.m.

MEDICAL SOCIETY OF LONDON, 8 p.m. Meeting.

WESTERN MEDICAL AND SURGICAL SOCIETY, 8 p.m. Mr. J. R. Lane, "On Some Points connected with the Pathology of Syphilis."

# ORIGINAL LECTURES.

NOTES ON

## SOME OF THE MORE RARE FORMS OF FRACTURES AND DISLOCATIONS,

BEING EXTRACTS FROM LECTURES (CLINICAL AND OTHERWISE)
DELIVERED AT
The London Hospital.

By JONATHAN HUTCHINSON, F.R.C.S.,
Surgeon to the Hospital and Lecturer on Surgery.

(Continued from page 304.)

Before we quite leave the shoulder-joint, I have yet a few remarks to make. The grouping which I have adopted is one intended for practical guidance, and I am well aware that I have neglected the distinctions which some very excellent authors have proposed. I have said nothing of fractures through the anatomical neck, excepting to doubt their occurrence. I have omitted to consider the supposed distinctions between impacted fractures external to the capsule and impacted fractures internal to the capsule, nor have we paid any special attention to the fracture so well investigated by Mr. Guthrie and Dr. Robert Smith (of Dublin), in which the greater tuberosity is broken off. Whilst we must admit the possibility of all these several forms of accident, we may be allowed to entertain doubts as to much of the clinical evidence on which they are supposed to rest. The difficulties are exceedingly great, and are such as to lead us to rely with great caution on any other kind of evidence whatever than *the dissection of recent specimens.*

And here, gentlemen, let me invite your co-operation, and let me beg of you to neglect no opportunity for procuring specimens of injuries near to joints. Get, if possible, an account of the symptoms during life, of the position of the fragments after death or amputation, and secure the bones themselves. When you have got your specimen, do not clean it too much, and, above all, keep it as a wet one, and do not cut away all the ligaments and bands of periosteum, and thus destroy half its worth. Specimens of this kind will prove of very great value. It is surprising how few such are to be met with in our Museums. Many of our best are old ones, in which the processes of repair have altogether masked the nature of the original injury, and in these, too, the history of the accident is almost invariably wanting. We need new and better facts before many debated questions of great interest both to the Surgeon and his patients can be set at rest. I am well aware that it is not often that opportunities in this direction occur, but that is only an additional reason why we should sedulously avail ourselves of them when they come. Such injuries are but rarely fatal, and when, perhaps in connexion with some complicated case, death does occur, it is rarely that we can obtain permission to remove the limb or injured joint. As a suggestion in aid of this matter, I may just remark that plaster of Paris offers us advantages which are not generally recognised. By its aid you may easily fill up the cavity left by the removal of a long bone in a way which will escape detection.

To return to our subject. Many of you are aware that year after year in this course of lectures I repeat my scepticism as to fractures through the anatomical neck. In consequence of this challenge, several recent specimens have been kindly brought to me, which were supposed to exemplify this form of injury. In all, however, the fracture was through the tuberosities. Yet I not unfrequently see in our wards cases in which this diagnosis has been given. We have come to believe in it, I think, chiefly through mistakes as to where the anatomical neck really is. Although anatomists are clear enough on this point, yet Surgeons are but too often very vague. Dr. Robert Smith has well pointed out the error of the author of the Surgical Dictionary on this head, who writes, "Indisputable facts prove the possibility of the anatomical neck of the bone being fractured," and then proceeds to record as an example the case of "a lad of 17, in whom the head of the bone was accurately detached from its body by a fracture which *had passed obliquely through the upper part of the tuberosities.*" I fully agree with Dr. Smith in the opinion that this was probably an instance of detachment of the epiphysis; at any rate, it is quite clear, on the writer's own showing, that it was not a fracture at the anatomical neck. I need not remind any one here that the anatomical neck encircles the head of the bone, and that only, and includes no portion of the tuberosities. It is intra-capsular, and the portion of bone so broken off would be left loose in the shoulder-joint. That a line of fracture should observe this precise direction, and not branch off anywhere into the adjacent tuberosities, is *à priori* most improbable. It is like Shylock's pound of flesh, very difficult to cut without taking either less or more. For this reason, therefore, I prefer to consider all fractures through the head of the bone, and therefore above the Surgical neck, as fractures through the tuberosities. Of these I am sure you will find great variety—scarcely any two quite alike. Even when the separation observes the line of the epiphysis, as in young persons it frequently does, this line is perhaps but rarely kept in every part. Frequently, and especially so in the aged, the tuberosities are fissured in various directions, and we have two, three, or more fragments.

It is not improbable that in some instances lines of fracture extend into the joint itself, and without much displacement of parts, and thus we may perhaps account for the stiffness and loss of normal motion which not seldom follow obscure injuries to this articulation. One such, I think, we had under our care a few weeks ago. A lad of 15 was admitted for concussion of the brain. When he had regained consciousness he could not use his right shoulder, and there was some swelling about it, though no evidence of contusion. I detected once or twice an indistinct crepitus close to the joint, but could not make out any displacement. When he left us three weeks later the head of the bone was certainly thickened, and although passive motions were quite free, he could not himself use the joint freely.

Dr. Robert Smith, in his excellent monograph, from which I have already quoted, has published a very valuable case in which the greater tuberosity was found separated from the rest of the head, which latter, still continuous with the shaft, was displaced under the coracoid process. The accident had occurred some years before the dissection was made, and the parts were found united only by ligament. I have not met with any case in which I felt certain that this had occurred, nor am I acquainted with any recent specimen of it, but I have seen several of obscure fractures through the tuberosities in which it is very possible that the greater one was detached. You will see that here, as in most other peculiar forms of injury, the practical importance of the lesion concerns rather the degree and character of the displacement than the precise direction of the line of fracture. I have insisted repeatedly that the knowledge of the latter does not necessarily give you the clue to the former. The direction of the violence is of far more importance as regards the displacement than is the line of fracture.

The diagnosis as to the precise direction taken by lines of fracture in any given case is most difficult. I am sure that those who have most frequently had opportunities for dissecting the parts after such diagnosis during life will be the first to admit the difficulties on this score. We can recognise the character and degree of displacement, and may be able to estimate fairly whether the fracture is high up through the tuberosities, or low down in the Surgical neck, but beyond a rough opinion of this kind I am sure we cannot safely go. For this reason, if for no other, then, I think we shall not do well to introduce needless refinements of classification into practice.

We have just remarked on differences of opinion amongst Surgeons as to where the anatomical neck is, but the discrepancy unfortunately does not end here. Different Surgeons apply also the term "Surgical neck" to different parts. In common usage, and I think in most anatomical works, this part is supposed to be that where the tuberosities cease and the bone narrows down to its shaft. But by some very excellent Surgical writers we have the term used as synonymous with the epiphysal line, which, as you know, passes through the base of the tuberosities, and on the inner side constitutes part of the anatomical neck. Thus this same unfortunate epiphysal line has been claimed by some Surgeons as the anatomical neck, and by others as the Surgical neck. I need not say that in using this term I have myself always intended to imply a part of the bone from a third to half-an-inch lower than the line referred to.

I must raise a protest also against the custom which prevails in books of assigning the displacement as a trustworthy guide to the diagnosis of the line of fracture. As I have already stated, the malposition assumed by the fragments depends far more usually upon the direction of the violence than upon the exact part at which the bone has given way. When, therefore, you are told that the characteristic symptom of separated epiphysis is displacement of the upper end of the shaft into the axilla under the coracoid, you must receive the statement with much caution. It is true that in fractures of the Surgical neck and in separations of the epiphysis this is a usual direction of displacement, but it is far from invariable. Many of these injuries are caused by violence which forces the upper part of the shaft of the bone in a direction upwards and outwards, and if once it have been driven outwards there it may very probably remain. In a case which we recently dissected of fracture through the Surgical neck the upper end of the shaft was displaced external to the upper fragment, and there it was held, so that we had even on the post-mortem table much difficulty in bringing it into position. The chief means of its retention seemed to be strong bands of periosteum and fascia, which crossed between the two.

*Compound Fractures of the Shaft of the Humerus.*—I have little to say as to simple fractures near the middle of the shaft of the humerus. They are easy enough to treat. We have, however, recently had some very interesting examples of compound fracture at this part. Their chief interest lies in the support they have given to the practical rule that excision of the end of a projecting bone should be always practised when feasible. In one instance a boy had a severe compound fracture near the middle of the bone, with projection of the ends of the fragments, at a large skin wound. I was called to him in the first instance, and before reducing, I sawed off the end of the upper fragment. I did not, however, take enough away, and subsequently we had great trouble with overlapping of the fragments. Finding that it was impossible to keep them in position, at the end of a fortnight I again turned them out into the wound, detached the periosteum from the end of the lower fragment, and sawed off three-quarters of an inch from its end. After this we had no further trouble, and the arm did remarkably well. I will give you this general rule, applicable not only to compound fractures of the humerus, but to those of all long bones. *Never be afraid to cut bone away. Whenever the ends are displaced into the wound so as to give you a chance, cut them off. You can scarcely take too much. The more you take within reasonable limits the easier will be the subsequent treatment, and the better the ultimate result. But you must leave the periosteum.* If you are careful to leave this wonderful membrane, you may be sure of plenty of new bone, and it will be formed just where it is wanted, and will allow itself to be moulded accurately into shape; whereas the projecting ends of the original bone, if left, are almost certain to be more or less displaced, and to give trouble by projecting into the wound, and to leave thickening and deformity after union is complete. You add nothing to the severity of the case by the free use of the saw; quite the contrary. For some years past I have never neglected a legitimate opportunity for the excision of the ends of the bone in compound fractures with displacement; and whilst I have often wished that I had taken more away, I have never regretted having taken what I did. The inflammation about the injury is usually much less if the ends of the bone be well cleared away in the first instance.

If the fracture occurs near to a joint, there is all the more reason to resect the displaced extremity of the bone.

About two years ago we had an interesting case in Richmond Ward. The patient was a lad of 14, whose arm had been crushed, with severe laceration of soft parts and compound fracture of the humerus just above the elbow-joint. The elbow was displaced backwards, and the lower end of the upper fragment projected into a large wound in the front. I detached the periosteum from about three-quarters of an inch of the end of the latter, and then cut it away. We could now easily retain it in position. The lad made a good recovery, and left the Hospital with the parts soundly healed and a fair amount of motion at the elbow-joint.

Another very similar case occurred four months back, but with the peculiarity that the line of fracture observed for the most part that of the epiphysis.

*Compound Detachment of the Lower Epiphysis of the Humerus.*—The subject of this case was a lad of 13, who was admitted with a large laceration in front of the left elbow, and the lower end of the shaft projecting into it. From the position of the fracture, and from the character of the exposed fractured surface, it was clear that the line of epiphysal junction had been almost accurately observed. There was no difficulty as to reduction; indeed, Mr. Dove had already replaced the bone before I saw it, but, feeling certain that otherwise we should have difficulty at a later stage, I decided to resect the end. This was done, and the fragment I show was removed. Its lower margin is capped with cartilage, that of the epiphysis. The removal of this portion did away with all difficulty as to extension of the limb. Had it not been removed the lower end of the upper fragment would have been certain to rest in front of the lower fragment and the elbow-joint, and deformity would have resulted. To effect efficient extension with such injury to the soft parts would have been impossible. After the excision we had no difficulty whatever. The lad now has his elbow bent at right angles, and quite stiff; but he can use his arm well. The anchylosis at the elbow was unavoidable, and must have occurred whatever the treatment had been. A compound fracture at the line of the epiphysis is necessarily a compound fracture into the joint. I show you a section of the lower part of the humerus of a boy of 15 (Fig. 2). You will observe that the line of cartilage between the epiphysis (or rather epiphyses, for there are three distinct centres) and the shaft is crescentic, and that at the convexity it passes very near to the joint. Thus, it is very much below the olecranon fossa, and it is barely possible that the joint should not be opened. As is the case in all detachments of epiphyses, the periosteum will be torn off from the lower end of the shaft and left as a sort of cup attached to the epiphysis itself.

FIG. 1.

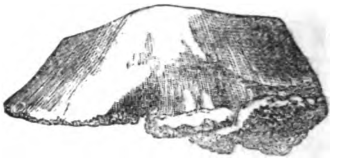

FIG. 1.—Portion of bone excised in case of compound detachment of epiphysis of humerus, natural size. Its lower surface shows the irregularities produced by the adhering fragments of epiphysal cartilage.

FIG. 2.

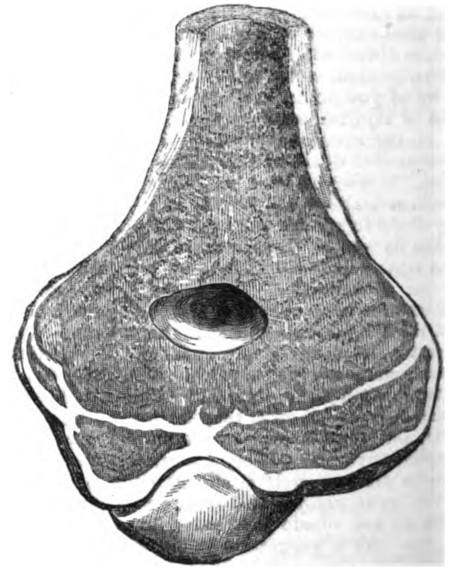

FIG. 2.—Section of the lower part of the humerus of a boy seen from behind. The olecranon is in situ, the elbow being bent to the utmost. The olecranon fossa is seen to be half an inch above the epiphysal line. The latter is continuous in a curved direction across from side to side, but the epiphysis is divided by vertical bars of cartilage into three, of which the outermost is the largest, and the inner one much the smallest.

I will now relate a good instance of what sometimes happens when the end of the lower fragment is allowed to remain. I have seen several more or less closely similar. In this instance I think it very possible that we may yet decide to resect the offending bone, as it occasions the boy considerable inconvenience.

*Compound Fracture just above the Elbow-joint, with Laceration in Front by the Lower End of the Upper Fragment—Recovery, with some Displacement of the Joint Backwards, and Impediment to Flexion from the Projecting End of the Bone.*—Master B., aged 14, fell from a plank about four feet from the ground, and struck his left elbow on a large flint stone. A compound fracture resulted, the lower end of the upper fragment sticking through a large wound just above, and in front of the elbow-joint. The bone passed through close to the outer side of the artery. The accident occurred in the country, and he was treated by a very able Surgeon. Things went on well as regards union, and at the end of six weeks he came up to his home, and was, on the recommendation of his Surgeon, placed under my care. The wound was now quite healed. There was at first a good deal of thickening about the parts, but this in time subsided.

Six months after the accident the swelling had entirely subsided, and he had good use of the elbow-joint. Pronation and supination were now perfect, and flexion and extension were free, excepting that the former was limited by a projecting piece of bone in front of the joint, which, sticking down in the direction of the biceps tendon, prevented flexion beyond a right angle. The elbow-joint and condyles of the humerus were placed too far backwards, so much so that a curve was distinctly visible in the lower part of the humerus, the projection backwards of the olecranon almost simulating a dislocation. The fragment above mentioned is clearly the lower end of the shaft of the bone. In explanation of its great length, I think there can be no doubt that it includes the internal epicondyle. In no other way could it obtain length enough to act as a prop in impeding the movements of the of the joint. It is clear, also, in comparing the two elbows, that the internal condyle on the injured side is much smaller than the other. The fracture has no doubt been an exceedingly oblique one, possibly with comminution. When the arm is extended, the projecting extremity of the upper fragment becomes merely subcutaneous—indeed, the skin is stretched on it. It is most tempting for removal. The brachial artery can be felt close to its inner side. He can extend fully. The humerus, from acromion to olecranon, is an inch and a quarter shorter in the injured arm than the other. It would appear that the lower fragment taking with it the elbow-joint has been displaced backwards and also rotated inwards.

# THE PHYSICAL AND CHEMICAL CHANGES IN LIVING BEINGS FROM A MEDICAL AND PHYSIOLOGICAL POINT OF VIEW.

By Dr. LIONEL BEALE, F.R.S.,
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> "Neither formerly nor at this time have men endeavoured to determine or discover the differences in the effects of the vital force and those of the inorganic forces, and their likeness or unlikeness."—Liebig, 1846.

I BELIEVE that all true scientific progress depends upon the temperate but free and open discussion of scientific questions upon which different observers have been led to entertain opposite and conflicting opinions. The very soul of true science is the continual testing of conclusions already arrived at. By this course alone can errors be corrected, and it is mainly by going over scientific ground which is by no means new, and repeating experiments which have been, perhaps, many times performed before, that new facts are demonstrated and new principles discovered. Some scientific men appear to dislike discussion, and are even offended if any one ventures to criticise their observations or to express any opinions opposed to their own. But surely every thorough student of science, so far from attempting to suppress discussion, should encourage it in every way in his power, for he must know that it is almost impossible that the truth of many complex scientific questions can be arrived at without long and patient discussion, in the course of which each statement may be carefully analysed by opponents, and the facts upon which his inferences are based carefully examined. How can science advance without free discussion and free criticism? If a man has honestly worked, he will respect the opinion of other honest workers, though it be opposed to his own; and if objections are raised to his conclusions, he ought to be glad of the opportunity of making his meaning more clear, or if need be, of correcting himself. A man who works thoroughly must feel far more hurt at the trumpery, laudatory, commonplace remarks appearing even in our best journals and reviews at this time than he would be at a good sharp critique, even though it spread out every one of his weak points in helpless nakedness before the world.

For these reasons I have ventured to criticise the observations of many fellow-workers upon matters which have always appeared to me of such very deep interest that it is possible that I may have formed an exaggerated estimate of their real importance, and have concluded their general bearing to be far more extensive than it may eventually prove to be. But however this may be, and however little attention may be given to the details bearing upon the matters in question, I am convinced that no thoughtful Physician or physiologist can accept in their present form the views, I may say, now generally entertained upon the subject of life, and the essential nature of the changes occurring in disease; and I am naturally anxious to show distinctly why these views cannot, in my opinion, be accepted, and to draw attention to the exact points in which they appear to me to fail. This, then, is my apology—if apology be needed—for writing in a manner which some will condemn simply because it is controversial. Those who read these pages must not consider my remarks as an attempt to *review* Odling's "Animal Chemistry." My observations apply only to a very small portion, and that, as regards chemistry, the least important, of my friend's excellent work; but he has from his chemical side called physiologists to account for some of their opinions, and has particularly attacked those who support the "fiction" of *vital force;* and I am desirous of replying to some of his observations, as well as to those of some other chemists and physicists from my physiological side. I shall try, perhaps without much success, to bring out clearly the points in which the observer who regards the question from a physiological and Medical point of view will agree with or differ from him who looks upon it from a purely physico-chemical stand-point.

Chemists and physicists are, and have been, I think, far too much in the habit of writing as if physiologists and Medical Practitioners obstinately refused to accept the views concerning the correlation and indestructibility of force. My friend falls into the same mistake when he states his regret that "certain principles believed by physicists to be fundamental as the laws of gravitation are not heartily and unreservedly admitted by Physicians." I am sure that it is needless to tell us that force is not created, and that, like matter, it is not destructible, and that neither in living nor in dead matter is there any *creation* of force; for no one has asserted that force was created, or that matter was destructible. These truisms have been so diligently and so impressively forced upon us, that it is only right to ask pointedly for references to any physiological or Medical work published during the last quarter of a century in which the author teaches that matter or any form of external force is created in living beings. The real question is, whether there is, in *addition* to external forces, a force or power at work in living things of a nature *distinct from* any form or mode of ordinary force. Heat, light, electricity, etc., manifested in a living organism are clearly of the same nature as heat, light, and electricity manifested out of the body. We know and admit that physical forces are at work in the living body, but ask is there not yet *another internal force* or *power* at work which is not physical or chemical? To which many chemists and physicists would reply "No!" while I would answer emphatically "Yes!" and say that there is evidence of its action, and that the actual phenomena have not been, and in the present state of science cannot be, explained by the action of physical and chemical forces only. We Doctors and physiologists are ready and willing to learn, and most desirous of being taught. We also freely confess our ignorance of much that we ought to know and long to know, but it is really quite unnecessary for chemists to impress upon us the fact that life cannot *create* heat, light, motion, and electricity. Will Dr. Odling point out a single living Physician or physiologist who teaches that life or a living thing ever generated external force?

It is true that some physiologists do speak of these external forces acting in living beings as the vital forces, and Dr. Odling himself says "we might apply the phrase, *vital force*, to the potential energy of so much fat or muscle capable by oxidation of being manifested in the form of external heat or motion;" but the word *vital* thus used is obviously useless, has no definite meaning attached to it, and might just as well be left out of the sentence altogether. If, therefore, the phrase, *vital force*, were thus applied, I think that it would be most incorrectly applied, for the potential energy of a given weight of fat and muscle is the same in a dead body as in a living one. Potential energy cannot, therefore, be the same as *vital force*, for the *vital force* or *power* ceases to manifest itself when a living thing dies. Dr. Odling says that some physiologists seem to infer that chemists and physicists are insensible to those *important distinctions* existing between living and dead matter, which they, on the other hand, "profess to explain by declaring the former to be possessed, and the latter dispossessed, of vital force." He believes "that chemists appreciate in its fullest extent what may be termed 'the mystery of life.' Chemists and physicists are well assured that, be life what it may, it is not a generator, but *only a transformer*, of external force." Again, what has been said to justify the inference that we supposed *external force* to be *generated* by life or any living thing? But my friend, unlike some who have written from the purely physico-chemical side, has not missed the point upon which some of us differ so entirely from the new school. From that which he advances as the opinion of chemists and physicists, I differ in the paramount importance which I attach to the living thing as a *transformer* of force, and as will afterwards appear concerning the *manner* in which it transforms, and the *principles* upon which the transformation is conducted. But many chemists and physicists, I believe, regard living things as *a result* of the action of ordinary energy upon inorganic matter. The sun "*forms*" the heart, is a formula which expresses this clearly and definitely. But notice the phrase, "*Only a transformer!*" Observe the force of the word "*only.*" In a living cell there is *only* a something which transforms external force and rearranges the elements of matter. In fever there is *only* a little peculiar matter deranging the normal chemical changes of the body. In cattle plague there is *only* a little albuminous matter which ferments—all very clear and simple to the chemist, but neither the Doctor nor the Physiologist considers this to be the slightest approach towards a solution of the question. In a laboratory there is "*only a*" chemist who performs operations *more or less (!)* like those in the living cell. The *only* difference is that the something in the "cell"—or rather, in transparent structureless matter—does, without any apparatus or machinery whatever, and at a lower temperature, and in a marvellously small space, and with marvellous speed, much that the chemist cannot achieve with all sorts of complex apparatus, space millions of times as great, and time millions of times as long at his disposal,—and communicates its wonderful powers to new matter into the bargain.

If the chemist admits that living matter possesses a something which dead matter does not possess, and that this something transforms force, and rearranges the elements of matter, he surely admits the existence of a power or capacity which he does not attempt to explain, and which *transforming capacity* was derived from a pre-existing particle of matter possessing similar capacity, and this from one before it, and so on. What is this transforming peculiarity? Whence is it derived? From the external force which it transforms?

If we discuss what is meant by "transformation of external force," and endeavour to ascertain how, and precisely where, the *external force* is transformed, the points to which I have often drawn attention will come out strongly enough. I will not be the one to dispute whether the something in the living cell shall be called the "matter-rearranging and external force-transforming or conditioning property," or "vital force or power." To me the mere words used seem of no importance whatever, provided only we define what we mean, and agree not to use the same word in more than one sense. The real question can be discussed just as well if we call the matter *a*, and the external force *b*, and the force-transforming peculiarity *c*, etc., as if we employ the most complex words and phrases. It appears to me that the whole subject has been much complicated, and the discussion of the various questions rendered much more lengthy and troublesome by the careless employment of ill-selected and often inapplicable comparisons. Chemists have been compared to plants, but it is incumbent upon those who have instituted the comparison to point out exactly in what particulars the chemist is like the plant. "The chemist, *like the plant*, is capable of producing from carbonic acid and water a whole host of organic bodies." "Like the plant!" and yet how different is the plant's way of working from the chemist's way. The more one thinks over the facts, the more one feels astonished that the chemist should not be convinced of the existence of some internal force or power in the plant which more than *supersedes* his intelligence and all his transforming apparatus.

The *plant* may consist of a minute particle of *living*, clear, transparent, structureless, soft, semi-fluid matter, which, under certain conditions, takes up the water and carbonic acid, and the complex organic bodies are *formed*, or form themselves!

Now, let us see how the *chemist* proceeds to form by the synthesis of its component elements such a comparatively simple organic substance as acetic acid. Dr. Odling tells us how Kolbe effected the formation of this substance from carbon by a series of inorganic reactions:—

"Disulphide of carbon, $CS_2$, was first obtained by the combustion of charcoal in sulphur vapour. This compound was acted upon by chlorine at a high temperature, whereby it was converted into chloride of sulphur and chloride of carbon, $CCl_4$. Then, by transmission through red-hot tubes, this last product *was transformed!* with evolution of chlorine, into the so-called sesquichloride of carbon, $2CCl_4 = Cl_2 + C_2Cl_6$, and eventually into the so-called bichloride of carbon or tetrachlor-ethylene, $C_2Cl_6 = Cl_2 + C_2Cl_4$. In the course of his examination of this tetrachlor-ethylene, Kolbe observed that by exposure to chlorine in presence of water it was decomposed into a mixture of hydrochloric and trichlor-acetic acids; thus:

$$\begin{array}{ccccccccc} \text{Chlor-ethylene.} & & \text{Water.} & & \text{Chlorine.} & & \text{Chlor-hydric.} & & \text{Chlor-acetic.} \\ C_2Cl_4 & + & 2H_2O & + & Cl_2 & = & 3HCl & + & C_2HCl_3O_2. \end{array}$$

Then, by subjecting this trichlor-acetic acid to the action of nascent hydrogen, he successively converted it into dichlor-acetic acid, $C_2H_2Cl_2O_2$, monochlor-acetic acid, $C_2H_3ClO_2$, and, finally, into normal acetic acid, $C_2H_4O_2$."

What can be more conclusive of the presence of some power in the plant, in obedience to which the elements combine with one another to produce the required compound? The highly complex substance is formed very quickly under conditions so different from those necessary for its production in the laboratory as to render it certain the synthetic processes must be effected in a totally different manner in the two cases. I should have concluded that the chemist would have been led to reflect upon the wonderful and mysterious agency at work in the simple living matter of the plant, by which the same compounds are produced in a manner *so totally distinct from* that in which he is able to produce them. When the chemist has succeeded in forming a little clear, transparent stuff like that in the plant, which will take up water and carbonic acid, and *transform* organic compounds, it will be quite time enough for him to call the plant a "machine" or a laboratory, and talk of the "fiction of vital force" and *artificial processes* of oxidation "more or less similar to the *natural processes* taking place in the animal body." Ought we not for "more or less similar to" to substitute "*totally different from?*"

(To be continued.)

## ORIGINAL COMMUNICATIONS.

# LOCAL ANÆSTHESIA IN A CASE OF CÆSARIAN SECTION.

By BENJ. W. RICHARDSON, M.A., M.D., F.R.C.P.,
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In recording the practical progress of the method of anæsthesia, which I had the pleasure to announce first in the pages of this journal, I could scarcely have a more agreeable task than that which falls to me on this occasion. I have to report the absolute success of the process in a capital, and in some senses the greatest, operation in Surgery—Cæsarian section. As every case of Cæsarian section becomes historical in the widest sense of the word, and as this case will possibly take, even amongst its fellows, an exceptional history, I shall give some attention to the details, in so far as my own part in it is concerned.

On Wednesday, March 28 last, Dr. Greenhalgh asked me if on the following morning I would produce local anæsthesia in the case of a woman whom it was absolutely necessary to deliver by the Cæsarian operation. Dr. Greenhalgh had come to the determination of asking me to make the attempt, after much consideration, and for many reasons based on an able and thoughtful study of the operation. He argued that if the superficial long incision could be made quite painless, and if the closing of the incision with sutures could also be made painless, the patient would, in fact, feel nothing more than is experienced in an ordinary labour of very brief duration. He argued that the local anæsthetic process would prevent hæmorrhage. He argued that the effect of the cold would produce rapid uterine contraction. Lastly, he felt assured that by the local process the occurrence of vomiting, so frequent after the administration of chloroform, and so troublesome and dangerous, would be avoided. At the same time, the patient herself wished *not* to have chloroform, and expressed that she was in no dread of any degree of pain that did not exceed the pain felt in an ordinary labour. Appreciating the force of Dr. Greenhalgh's arguments, I undertook, therefore, to endeavour to meet his views. I constructed hastily for the occasion a large double spray producer, using a double-necked eight-ounce bottle for holding the ether. I provided a perfect ether, and I employed two hand-bellows to work the spray. With the kind assistance of my friend Dr. Sedgewick, I tested the capacity of the instrument thoroughly. I found that in thirty seconds I could render the whole of the front part of my own arm insensible from the elbow to the hand, and that the same effect could be produced in even a little shorter time on Dr. Sedgwick. We provided for the introduction of the sutures a separate small spray.

The operation was performed on Thursday morning (29th) at 9.30, in the presence of a large number of Obstetricians and Surgeons. On visiting the patient previous to the operation, I found her to be a rather short, stout woman, and apparently about thirty years old. She had had an indifferent night, and her stomach was irritable. She feared, she said, that she should vomit. Her tongue was white and her countenance pale, but her pulse was 74, firm, and steady. Her bowels had been very freely relieved.

She was placed on a short, broad table, and covered with an oilskin sheet or garment, which had an oval opening in it sufficient to expose the front part of the abdomen freely, but no more. This covering was not passed over the face, but was folded neatly over the chest. At her own request a pocket-handkerchief was passed lightly over her eyes as a bandage. The lower limbs were separated, and were allowed to bend over the edge of the table, and were supported by two assistants, who were seated. Dr. Greenhalgh stood in the centre, his assistant in the operation on the left side, and I and Dr. Sedgwick, who assisted me, on the right. The body of the patient was laid in a semi-recumbent position, the head firmly supported with pillows.

Dr. Greenhalgh having indicated to me the line of his proposed incision from the umbilicus towards the pubis, I commenced to narcotise locally in the centre of the space, making the ether tubes bend a little towards each other, and directing the brush of spray about one inch and a half from the skin. In a few seconds I found that the ether was telling on a space full four inches long and two broad; I, therefore, widened the spray by bringing the spray tubes parallel, and I made a gentle movement upwards and downwards, treating the spray as though it were a brush. Whitening of the skin was perceptible at the twenty-fifth stroke of the bellows, but Dr. Greenhalgh wished to widen the line of insensibility a little to the right side, so I lost a few seconds in doing this. At forty-five seconds the insensibility was perfect, and Dr. Greenhalgh made his incision down upon the uterus, dividing the skin and a deep layer of fat with one sweep. I moved the spray in company with his knife, and the uterus was laid bare. During the time the patient reclined absolutely unconscious of the incision; she neither winced nor spoke, her countenance was perfectly placid, and her pulse, which was being observed by Dr. Wilson, of Glasgow, underwent no variation. A breath of ether spray was directed upon the uterus after it was exposed, but, according to our preconcerted plan, the ether was now withdrawn from the open wound, and was directed on the skin surface that had not been divided, on the right side below the level of the umbilicus. The uterus was thus prompted to contract readily.

Having made, also painlessly, his incision into the uterus, Dr. Greenhalgh began to introduce his hand, but was somewhat impeded by the uterine contraction. At this point the patient first showed signs of uneasiness, and she asked of me "What is he doing?" Soon afterwards Dr. Greenhalgh had hold of the feet of the child, and delivered very rapidly and easily. As the child was being expelled—for, in fact, there was an act of uterine expulsion—the membranes gave way, and the liquor amnii escaped freely with some noise. The proceeding caused the patient a start, and she said, in the same voice as women usually speak in labour, and in the same phraseology, "I am sure I shall die." A word from me that she was quite safe, and that the child was born, reassured her; but after the child was removed, and at the moment of the extraction of the placenta, she again complained; she also complained somewhat of sudden pain, evidently from the uterine contraction. The uterus contracted at once so firmly that Dr. Greenhalgh, supported by the opinion of Dr. McClintock, of Dublin, who was present, determined to put no sutures into the uterus. For my part, I do not think the uterine wound could have been found, for the uterus had disappeared below the lower edge of the skin wound, and its muscular fibres were closely knit from contraction.

We waited twenty minutes, or nearly, for any hæmorrhage that might come on in the course of reaction. During this time the patient talked to me as calmly as possible on various subjects, told me of her symptoms, of her previous confinements, of her two children, of the part of Essex she came from, of the distance of her home by rail, of the time it took to make the journey, and the like. Once or twice when the sponge in the wound was pressed a little downwards she said "it was sore," and she thought, as it was all over, she was kept a long time. This expression was rather that of fear that something was wrong than of uneasiness or pain. In inserting the sutures I narcotised for Dr. Greenhalgh with a small single jet, point by point for each needle, and she felt no pain. After the sutures were brought together, however, I having left her, a single fine suture was passed through a part that slightly projected, without narcotism. This suture she felt, and she called out as the needle passed through the skin.

The infant, which seemed to be a little over the seventh month, died about an hour after its birth; but the mother from the time of the operation until now has progressed towards recovery without one untoward symptom. Dr. Greenhalgh's report to me to-day (Wednesday, April 4) is as follows:

"76, Grosvenor-street.

"My dear Richardson,—You will be pleased to hear that our patient is progressing most satisfactorily. She eats, drinks, and sleeps well, is free from pain, is very cheerful, and has had her bowels relieved naturally on more than one occasion. She passes water freely and healthily. The wound has healed by the first intention, and I have this afternoon removed four of the sutures. It would be impossible for any case to do better. Believe me, sincerely yours,

"R. GREENHALGH."

## NOTES.

In this case local anæsthesia by the ether spray process offered everything that could be desired, and I think was in every sense preferable to general anæsthesia from chloroform or ether. Indeed, Dr. Greenhalgh's foresight in respect to these advantages is not less conspicuous than the skill and precision with which he performed the operation. I say this, not in any way to disparage chloroform in cases where it is really demanded, but as a matter of fact and experience. The advantages of the local method were these:—

1. The operation was painless: the pain that was felt was the pain of labour, and that in the lightest and shortest degree.

2. The patient, prior to operation, was disposed to vomit. Under chloroform she would almost certainly have vomited during the operation; the intestines would thus have been brought into the wound, and the operation would have been prolonged and made more serious. There might also have been after-vomiting. The tendency of the local anæsthesia was to check vomiting.

3. The action of the cold checked hæmorrhage. I do not think three ounces of blood were lost.

4. The action of the cold in producing uterine contraction was in every sense beneficial.

5. The patient was not subjected to shock. I have often, even in deep sleep from chloroform, seen symptoms of shock as the knife entered the flesh, and have felt the heart stop as sharply as though a blow had been inflicted on it. By the local anæsthesia the patient, in her full natural power, was subjected to no kind of cardiac embarrassment.

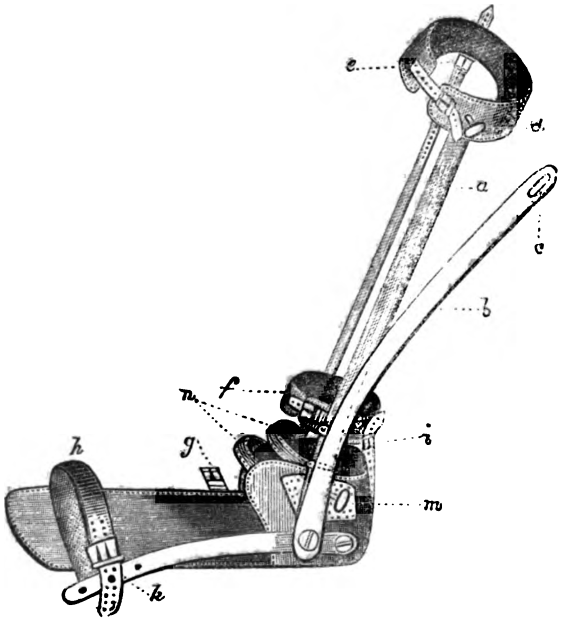
6. The consciousness of the patient was an advantage to the operator. She never was restless, she never moved her body for a moment, and when she was once asked not to bear down with the diaphragm, she obeyed immediately.

7. During the operation there was not the remotest anxiety that the patient would die from anæsthesia.

# NOTES ON THE MECHANICAL TREATMENT OF TALIPES VARUS.

By FREDERIC CLOWES, M.R.C.S. Eng.

The treatment of talipes varus has been described so often, so fully, and by so many skilful and experienced orthopædic Surgeons, that it would seem unnecessary to occupy the columns of a Medical Journal with any remarks on the subject. My motive for taking such a step is chiefly for the purpose of assisting the inexperienced out of a difficulty which I have myself felt regarding the choice of the best instrument for carrying out the mechanical treatment of this complicated and obstinate deformity. Any one who has access to the various works on club foot will find that each author advises the use of his own instrument, or at least some modification of a well-known one. But as such apparatus are somewhat expensive, it is of no little importance that the Surgeon should select the most effective as well as, if possible, the cheapest. Practised orthopædists cure their cases with any or every instrument; but the inexperienced Practitioner will often fail for want of one which combines simplicity of construction with perfect capability of fulfilling all the requirements of the case. After some experience of other apparatus, I can confidently advise the use of Dr. Little's double hinged upright lever shoe to any one who has an obstinate case of the kind to deal with; and as I have not seen a good figure of this instrument, except in Holmes's Surgery, which may not be in the hands of all my readers, it is here represented. Any one who has treated such affections knows, and he who attempts their cure for the first time will soon find out, that the most important matter in every stage of treatment is always to gain as much as you can, but never to cause greater tension of a part than it will bear; and the want of appreciation of either of these maxims may make the difference between success and failure. Now, this instrument enables us to know exactly, after it has been applied, the degree of power it is exerting in every direction. The twisting of the foot on itself and its adduction at the ankle-joint, are overcome by the upright and horizontal springs and toe-strap, and the degree of tension here may be of course readily felt, as in other instruments. The inverted sole is turned out by the perpendicular spring, and the degree of eversion can be regulated with the greatest accuracy by the strap on the inner side of the leg, so as to take off the spring's action entirely when requisite, converting it into a simple lever. And here you have the same advantage as in the foot-spring of trying the degree of tension after the instrument has been applied. The same power of eversion is obtained in other apparatus by the ratchet-screw, but when applied it is impossible to tell what degree of force is acting. In the last and often most important and obstinate contraction, that of the tendo Achillis and other structures which prevent flexion of the foot, this instrument is peculiarly serviceable. By means of a free joint and a thumb-screw, which fixes the upright at any required angle, the heel may be gradually brought down, and during the early stage (after operation), in the more easily curable cases, too rapid flexion is easily prevented by simply tying it to the thumb-screw to prevent its going forward, or by inserting an additional thumb-screw in front of the lever. In the later stage, when flexion requires to be actively promoted, the free joint allows of motion in the right direction either by the manipulations of the Surgeon or attendant or by the efforts of the child in walking, etc. Indeed, by the systematic use of gentle exercises in this instrument, and inducing the patient to walk in it, some cases may be perfectly cured which would seem to require operation or re-operation, especially when aided by another means suggested by Dr. Little—a wooden or cork wedge under the fore part of the sole of the shoe, so as to raise the toes when standing or walking. The thickness of this may be gradually increased until the natural angle is obtained. Throughout this stage the degree of tension which the thumbscrew is effecting may be readily known, as the free joint allows of motion in the right direction, and thus the orthopædic rate of *arte non vi* can always be carried out. The last, and, perhaps, most important, characteristic of the instrument is the "double-hinged lever," by means of which it can be accurately adapted to the deformed limb without any action on its structures. In every stage of treatment this is useful, as in the application of all apparatus of the kind it is important to get the heel and the whole of the sole of the foot, in close contact with the sole of the instrument. The double-hinged lever allows this to be done perfectly; subsequently, eversion of the foot can be effected to the required extent by bringing the spring to the calf-band and fixing it there, the degree of eversion controlled by the regulating strap, as before described. But it is in the later stages of treatment of obstinate cases that I have found this part of the instrument peculiarly valuable. The thumb-screw remaining in a particular hole in the series, marks a point gained which must not be lost, and the foot can be taken out of the apparatus and replaced, without altering the angle of the upright lever, by simply detaching the spring at the calf-band by means of the swivel when it is taken out, and refixing it thereto when returned to its proper position in the instrument.



*Description of Dr. Little's instrument, double-hinged lever, as made by Ernst, 19, Calthorpe-street.*—*a*, the double-hinged lever; *b*, the long lever spring with *c* (the slot), receiving *d* (the swivel) by the long spring being brought towards the calf plate; *e*, the buckle of regulating strap; *f*, the ankle bandage; *i*, the buckles for adjusting the latter; *n*, the instep straps; *g*, extra buckle for instep strap to vary its position; *h*, the toe strap fastened to stud in *k*, the toe spring; *m*, the thumb screw fitting a series of holes for the regulation of the uprights from an obtuse to an acute angle.

Some years ago I was induced to try this apparatus for the cure of a very obstinate case of double talipes varus in a child about four years old, which had been more or less under mechanical treatment by different means from the age of three months.(a) At that time the error was committed of dividing the tendo Achillis before eversion of the feet had been effected, and the consequence was the failure of all subsequent efforts to cure the deformity. In consultation with Dr. Little it was decided to divide all the contracted structures, and this was skilfully and effectually done by Mr. L. S. Little, Surgeon to the National Orthopædic Hospital. But, notwithstanding the use of free tenotomy, considerable time, skill, and patience were required to obtain perfect form of limbs and motion of joints. By the aid of this instrument, however, all this was perfectly effected, and the young gentleman has now acquired such strength and voluntary power in the formerly lame and distorted limb as to well repay all the trouble and expense which has been incurred. In other words, he is cured. Since this case several others have come under my care in which this double-hinged lever instrument has been the most important agent in effecting their cure. Of these I give a short report of the two last.

*Case* 1.—J. D., aged 18 months, double congenital talipes varus of medium degree. The contracted structures are slightly more rigid in the left than in the right foot. On August 12, 1865, divided tendons of tibialis posticus and anticus in left leg, and afterwards gradually obtained full eversion of foot, etc., by bandage and splint on outer side of leg. On September 27 divided tendo Achillis in each leg; and by means of the instrument obtained perfect flexion of feet on November 26. In taking the photograph from which Fig. 1A was engraved, the legs were allowed to hang free, so that the feet assumed their best position, instead of exhibiting that exaggeration of the deformity which is obtained by resting the toes on the ground. In Fig. 1B the feet are represented in a position in which they are readily placed and as readily remain.

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(a) By the kindness and courtesy of Mr. Barwell I was enabled to try his plan of using India-rubber springs, but I failed to do any good by this means.

Fig. 1.—A.

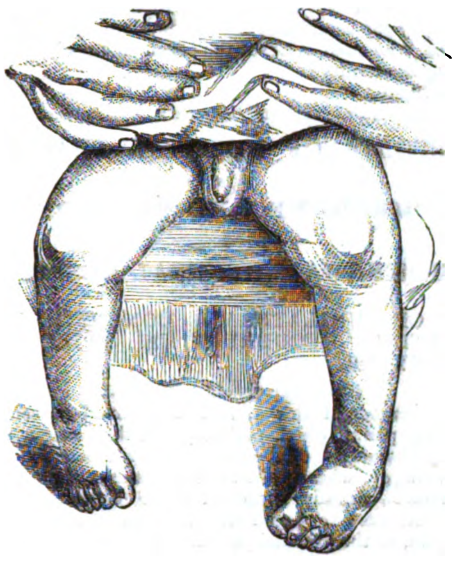
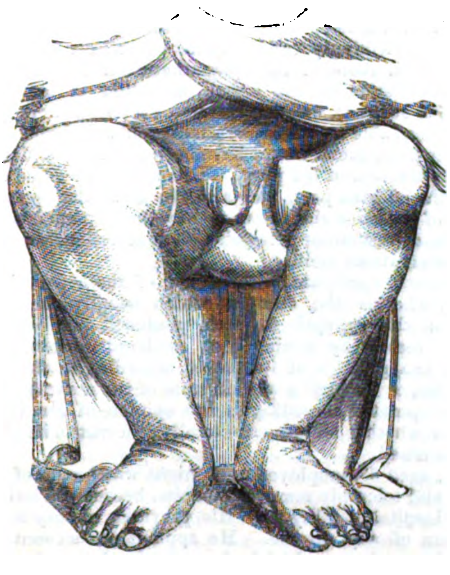


Fig. 1.—B.



*Case* 2.—G. R., aged 3 years and 3 months, double congenital talipes varus. Right foot scarcely flexible to right angle with leg, and slightly inverted. Left foot: Heel much retracted, and the foot twisted on itself and inverted, so that the child walks on outer side of dorsum. November 26, 1865.—Applied splint and bandage on outer side of both legs and feet. December 28.—Complete eversion and restoration of form of the feet having been effected, divided tendo Achillis in both legs. On January 28, 1866, flexion of foot was complete.

It will be observed that in Case 1 the tibial tendons were divided in one leg, but not in the other. It so happened that in dividing the tendon of the tibialis posticus of the left leg, the posterior tibial artery was divided; and during the delay occasioned by this accident the adductors of the right leg were perseveringly stretched. They yielded so well as to render the section of their tendons unnecessary; and after the cure was completed this foot was in every respect as completely restored as the other. Profiting by this experience, I tried fully and perseveringly the use of the outside splint in Case No. 2; and although the structures were rather rigid from long-continued walking in such an abnormal position, they yielded so as to allow of perfect eversion and restoration of form in little more than four weeks! I cannot but fear that I may have sometimes performed some of those "unnecessary operations" which Dr. Little many years ago so well treated of. At any rate, the inexperienced tenotomist may well try extension before he determines to divide the posterior tibial tendon—the one which is undoubtedly the most liable to non-reunion and other accidents, and the *bête noir* of all incipient orthopædists. I may be allowed to tell this class of Surgeons (of which, perhaps, I am one) that in the latter part of this stage of treatment most power is obtained by first bandaging the foot as far as the malleolus; then applying the splint on the outer side of the leg, and by taking a turn with the bandage over it (and thus preventing its slipping forward over the dorsum of the foot), it is kept rather to the back of the leg, while being firmly bandaged to it, and thus great leverage on the foot is gained. This can, of course, be increased to any extent by bending the (well-padded iron) splint outwards, and the use of pads in any required position. This much is certain, that no harm can ever be done by attempting to evert the foot without tenotomy, if only the orthopædic rule be followed of always effecting this eversion

Fig. 2.—A.

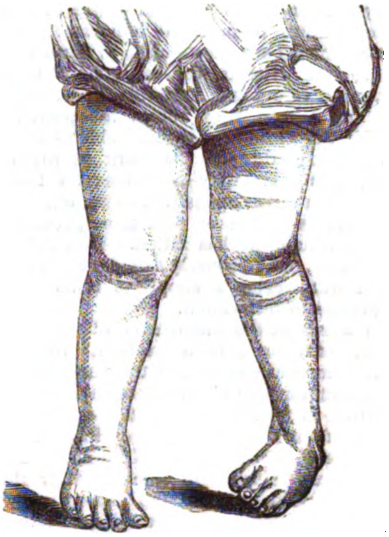
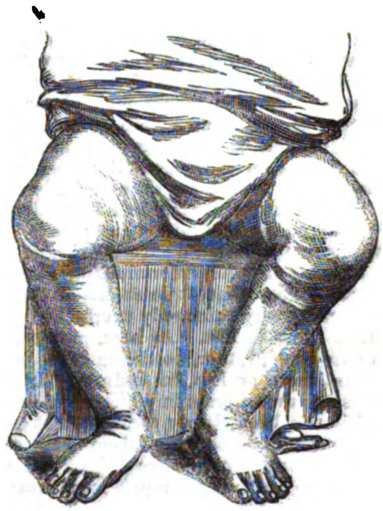


Fig. 2.—B.



perfectly before dividing the tendo Achillis to bring down the heel. And here it may be remarked that the natural angle of flexion of the foot is often spoken of as if it were a right angle. With the exception of Dr. Little's article in Holmes' Surgery, I can scarcely find in any work any statement of the importance of obtaining (if possible) the full degree of flexion which belongs to a child *of the same age as the patient*, with the necessary caution not to lose the power of *extending* the foot. Another subject of practical importance is the proper use of retentive means after restoration of form and mobility. Few cases are safe without well-made irons from the hips downwards, with free joints at ankle, knee, and hip, well-made boots, and a firm hoop round the pelvis, to prevent inversion until the child has become able to walk correctly. The varus shoe should also be worn at night until the varoid tendency is completely overcome; for here all efforts to cure are made in direct opposition to nature, whose powers, if left to themselves, will ever tend to perpetuate or increase the error into which she has fallen. How different to that large class of cases, more properly called recoveries than cures, in which our duty really is simply to remove impediments to nature's process of restoration.

And a few words on the importance of "early recognition and treatment" of deformities in children. In the first of the above cases, the mother was told by the Surgeon who attended her (a good Practitioner in a country town) that nothing could be done for three or four years, and the case was afterwards rejected at one of our largest provincial Hospitals. The other was taken in hand in infancy by a Liverpool Surgeon. The tendo Achillis was divided, and mechanical treatment used, but imperfectly carried out, and the patient was deserted in the condition represented by the engraving. I have had charge of other cases which have experienced similar treatment, and within half a mile of me is a case of talipes varus in a girl about 12 years old, in which the limb is hopelessly atrophied, who was sent, some years ago, when in a curable state, to one of the largest Hospitals in the North. There she was operated on, but she returned so much the worse for treatment that her parents have determined never to let her be "cut again." A still worse case is that of a young man, about 21 years old, who lives near me. He has a limb so entirely destitute of muscle as to be of little, if any, more use to him than a wooden peg. This is also a case of congenital talipes varus. There can be no doubt that these cases were perfectly curable a few years ago. How much suffering and loss might have been prevented by their early recognition and cure!

More important still (because affecting organs on which life and health depend) are such deformities as curvatures of the spine; and yet I fear that at least one of these deflexions, lateral curvature, is very commonly overlooked in youth, and thus invaluable time is lost. As here, prevention is indeed better than cure—nay, rather, not being cured early, the consequences must, more or less, be endured. In the last few years I have seen several cases in which obscure symptoms of various kinds have been clearly owing to this cause; but the mechanical condition producing them has been entirely overlooked. Among other cases I can call to mind, is one of a lady who has suffered much from many Physicians, and is rather the worse. She is living in London "in the midst of the doctors;" she has consulted obstetricians and chest doctors, and much has been done for the organs they respectively and specially treat; but her symptoms are all caused by lateral curvature, and for this nothing has been done. While writing these notes I was consulted for habitual slight dyspnœa and other symptoms in a child about 10 years old. When undressed, such a decided and severe degree of lateral curvature was manifested as unmistakeably accounted for the symptoms; and yet the Surgeon who had had charge of her (a most competent Practitioner in Scotland) assured the parents that nothing but rest and proper exercises were required to cure her; and it was only by getting the opinion of the orthopædist whose name I have already mentioned more than once, and whom I cannot but call the first in knowledge and skill as well as the founder and earliest promoter of the art and science of orthopædy in this country, that efficient means of cure were resorted to.

When such cases as these are met with in a comparatively small field of observation, proving that in town and country alike such serious causes of suffering and disease are overlooked, I cannot but echo the words of Mr. Brodhurst in his valuable work on curvatures of the spine—"Few subjects in Surgery are perhaps less understood than this of curvature of the spine. It is a subject full of interest, and one which is worthy of much attention." Without exaggeration, indeed, it may be said that the importance of the cure of deformity in youth is *incalculable*; for how great is the influence of such affections on the health, not of the body only, but also of the mind? Many a temper has been soured, many a gentle spirit has been made sad, by infirmities of this kind; and, therefore, who shall say that by curing a physical deficiency the Surgeon may not lessen or prevent a moral failing or vice? And so mysteriously blended and united are physical and mental phenomena—so *certainly* do they mutually influence one another that the healthy education of the soul may be promoted by the sound and normal development of the body, and, if so, who shall say that the effects of our efforts may not be lasting as eternity?

Windermere.

# REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

## BIRMINGHAM GENERAL HOSPITAL.

### CASE OF UNILATERAL CONGESTION AND SWEATING OCCURRING IN EPILEPTIFORM PAROXYSMS.

(Under the care of Dr. RUSSELL.)

In a late number of this Journal I prefixed to some cases of skin complaint, which probably had their origin in some change in the nerves of the affected part, a brief notice of a case of epilepsy, wherein the state of tonic contraction of the blood vessels, usually supposed to be associated with the epileptic fit, was exchanged for one of paralytic distension, so far, at least, as the external vessels were concerned. Flushing of the face took the place of the pallor which had previously ushered in the epileptic attack, and existed alone without any other epileptic phenomena.

In the following instance similar phenomena were witnessed, but on a far more extended scale, and were united on two occasions with true epileptic symptoms. The whole series of phenomena strikingly call to mind the effects which follow division of the roots of the sympathetic on one side of the body: congestion of the vessels, elevation of temperature, (subjective at least), and exaggerated secretion were present. Had we been able to witness an attack, probably hyperæsthesia and other phenomena would have been observed and not unlikely contraction of the pupil. It is also to be noted that the skin of the affected part, and also the glandular apparatus of the eye of the same side, seem to have been permanently in a state of semi-vasomotor paralysis; their secretions were excited with preternatural facility.

I forbear to speculate on the cause of these peculiar phenomena, whether the stimulus which usually contracts the vessels in the epileptic fit, had produced paralysis of the external vessels by having been rendered inhibitory, either through exaggeration of its power according to the views of Mr. Lister, or through a morbid state of the nervous tissue on which it operated according to the opinion of Dr. Handfield Jones, or whether an influence totally different in its character was concerned.

R. S., aged 38, employed as a night watchman, of healthy family, and tolerably temperate habits, became an out-patient of the Hospital on May 28. His previous history reveals no indication of any disease. He applied on account of two epileptiform seizures which had occurred—the one four months ago, the other a fortnight. In the first seizure he was suddenly attacked with a sense of burning in his left arm, so intense that, as he had just been feeding his engine fire, he looked in his sleeve, not doubting that it had caught fire. At the end of about an hour the sensation "fled up the body," affecting the left side of the face and of the trunk, and also the lower extremity of the same side, and a profuse perspiration broke out over all the hot parts. He walked home; but on his arrival it was found that speech was impaired. He stammered, could not get his words out, and was unable to utter an articulate sound. At the same time, the left side of his face was contracted, and his head was drawn down to his shoulder. It is uncertain whether his left arm and leg were affected with tonic spasm; but most probably they were. Some difference of opinion, too, exists as to whether there was any perspiration on the right side on this particular occasion. He says not. He then became unconscious, purple in the face, and rattled in his throat; but did not bite his tongue. The second seizure was of a milder character, though he would have fallen had he not been supported. He did not then lose consciousness; but in the purple colour of the face, and in the preceding heat and sweating, the attack precisely resembled the former one. He had, however, experienced frequent recurrence of the heat and perspiration, confined on every occasion to the left limbs and left side of the face and body. The recurrence happened first a month after the first fit, and has been repeated often three or four times a-day for several days in succession, but continues generally only for about five minutes; but since the last fit the attacks have been of longer duration—never, however, exceeding a quarter of an hour. He may be free from the attacks for two or three days, and once or twice has been so for a fortnight. The sense of heat has commenced and extended precisely as described above. As the heat reached the face the cheek became much flushed, so that his wife frequently became aware of what was happening by this circumstance alone. The perspiration which accompanied the heat and affected all the left side was most profuse; the moisture poured off him. At the same time, his speech was slightly affected, and he experienced a sense of suffocation which compelled him to spring upright. Generally the attack subsided rapidly on his walking into the fresh air. A slight amount of watering of the left eye accompanies the perspiration, with a little dimness of vision; but he adds that since he has been subject to this affection the left eye is exceedingly apt to water when exposed to chill air, even so much as that tears trickle down his cheek. Moreover, any exertion produces sweating of the left side with preternatural facility. The right side has no share whatever in these phenomena. There has not been any salivation.

He is a healthy, well-nourished, vivacious man. Pupils perfectly normal, vision healthy, surface of skin presents no abnormity, and all of his organs are healthy. The temperature of each axilla is alike, and quite normal. He has greatly improved since he has been treated. The remedies employed have been strict dieting, abstinence from stimulants, the application of a blister to the nape, and alkalies, with bitters, subsequently steel, with aperients.

## NATIONAL HOSPITAL FOR EPILEPSY AND PARALYSIS.

### SWEATING ON ONE SIDE OF THE FACE IN A PATIENT WHO HAD EPILEPTIC FITS.

(Under the care of Dr. RAMSKILL.)

In connexion with the last recited case we may give another illustration of sweating of one side of the face. This patient was under Dr. Ramskill's care for epilepsy. Dr. Ramskill drew our attention to the odd circumstance that there was sweating on one side only of the patient's face when he exerted himself. To test the truth of the patient's remark he had been sent out to walk briskly round the square. On his return the perspiration was profuse on the right side, and was abruptly limited at the middle line of the nose and lip, but extended very slightly to the left of the middle line of the forehead. On the outer part of the cheek, near the angle of the jaw, the part supplied being a branch from the cervical plexus, there was no perspiration; but the lobulus of the ear, supplied by a branch from the same plexus, was much hotter than that of the opposite side. To see if local stimuli as well as general exertion would produce the same effect, statical electricity was used to each cheek in turn. This was done by Mr. J. N. Radcliffe. It caused profuse perspiration on the right side, and not on the left. The patient looked a healthy man, but we have no details as to nature of his fits; but Dr. Ramskill tells us that the epileptiform seizures did not differ from those of many other patients in whom this symptom was not present.

It is not easy to make out the meaning of this symptom. In some cases it occurs, as Dr. Gairdner has pointed out, with paralysis of the cervical sympathetic from pressure of an intra-thoracic tumour, which tumour is generally an aneurism. In this instance there was no evidence of any such cause. Moreover, the pupil on the side of the sweating was a little larger than on the other side, whereas in Dr. Gairdner's case it was contracted. Some time ago we saw a patient at The London Hospital, under Dr. Andrew Clark's care, who had sweating of one side of the face, along with symptoms of thoracic aneurism. In this case the pupil was contracted on the sweating side. At the same Hospital we saw a healthy-looking woman, 35 years of age, who had this symptom to a well-marked extent, but there was no other discoverable deviation from health. She know nothing of it, and attended for the illness of a child.

Dr. Anstie, in his work on Narcotics and Stimulants, records a very interesting case of sweating on the left side of the face in a child who had epileptic fits. In this case the sweating occurred just before the paroxysm. The child had partial paralysis on the same side of the body, and this side was the one convulsed, or chiefly convulsed, in the fits. In this instance, as in Dr. Russell's case, the symptoms had definite relations, and therefore it has more value than it usually has. The case shows, Dr. Anstie thinks, that the condition of the nervous apparatus is one of paralysis rather than, as would be generally held of such a case, of stimulation. Both fits and unilateral sweating were clearly, Dr. Anstie considers, dependent on distension of the colon with fæces.

## THE HOSPITAL FOR CONSUMPTION, BROMPTON.

### CASE OF LEFT PNEUMOTHORAX FROM AN OPENING IN THE RIGHT LUNG.

(Under the care of Dr. HAMILTON ROE.)

The following rare case of pneumothorax occurred at this Hospital in a patient of Dr. Hamilton Roe's, with whose permission these notes of it are sent for publication:—

Samuel S., aged 32, admitted July 28, 1865. An ordinary case of chronic phthisis, with a cavity at right apex; harsh breathing, left. The patient slowly got weaker, and in November was much pulled down by diarrhœa, and was confined to bed.

On Wednesday evening, November 29, at 7 p.m., he was suddenly seized with pain in side and dyspnœa; had recently got out of bed. The left side was tympanitic on percussion, and respiration almost absent, anteriorly and posteriorly. Heart displaced; beating under right nipple—(but an imperfect examination could be made, from great distress of patient). Pulse very small, weak, and rapid. Patient died at about 8 p.m.

*Autopsy.*—A small incision was made through the skin between the fifth and sixth ribs, and a narrow scalpel thrust into the pleura. A current of air escaped, which immediately extinguished a lighted lucifer match held to the opening. The thorax and abdomen were then opened in the usual way, the median incision being extended upwards to the chin. On opening the thorax, the left lung was found to be imperfectly collapsed. At the apex there were some firm adhesions, and about the mammary region there were some longer ones, stretching between the lung and the parietes. The pleural surfaces were glistening and moist. No trace of recent inflammation. The right lung was extensively adherent to the parietes by old adhesions, especially at the upper half. The lungs were raised with costal pleuræ, and removed, with laymx, trachea, œsophagus, heart, and great vessels, *en masse*. The left lung was then cautiously detached with its bronchus. It was but partially collapsed; posterior lobe most so. A few solid nodules were felt at the apex. This lung was placed in water, and forcibly inflated through the main bronchus by Mr. Williams, my fellow clinical assistant, who was making the post-mortem with me; the whole lung, which was but slightly affected with tubercle (a few nodules only at apex), was perfectly expanded, but no air escaped from any part of its surface. The right lung was then carefully detached from the heart and trachea and found to be extensively solidified; being placed in water, and an attempt at inflation being made, the air was instantly found to escape with great freedom from a point close to entrance of bronchus; the experiment was repeated several times with great care and uniform result. Examination of Lung.—Lung small and tough to feel; at the posterior part of the apex of the upper lobe is an irregular cavity the size of a small orange which communicates externally through the pleura by a well-defined aperture, the tissue and pleura having been, as it were, bored through by a circular canal; the opening is close to the upper division of the right bronchus, but posterior to it. The pleura covering the lung is considerably thickened, the two layers being inseparable; between the perforation and the bronchus the pleura is not thickened, but there is some loose cellular tissue. There were two smaller cavities in lung, which was more or less tuberculised throughout. From the lungs having been separated previously to being inflated, it was impossible to trace the adhesions which had determined the perforation from one lung into the pleural cavity of the other side; but the facts of the air being in the left pleura and the perforation in the right lung were perfectly ascertained. The position of the aperture was in the posterior mediastinum, above the arch of the aorta, in front of the œsophagus and behind the right bronchus, and in this situation the pleura approach so nearly that they might readily become adherent in a state of disease. The lung is preserved, at request of Dr. Alison.

For this communication we are indebted to R. Douglas Powell, M.B., Resident Clinical Assistant.

Dr. Powell adds—"This is probably not an isolated case, though I know of no other on record, some of those cases in which the aperture has not been found having been, very likely, of similar nature, but remaining undiscovered, from both lungs not having been inflated. This would be more likely in cases where death has occurred soon after attack."

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# Medical Times and Gazette.

SATURDAY, APRIL 7.

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## THE MEDICAL COUNCIL RE-ELECTIONS.

The members of the Medical Council, it is well known, are appointed to office for a term of five years, and at the expiration of that time are eligible for re-election. The Council is composed of representatives chosen by the various examining bodies, and six additional ones nominated by the Crown. The Crown nominees are supposed to represent especially the interests of the public Services, the higher scientific grades of Professional position, and the maturer views of those actively engaged in the more ordinary Professional and civil duties.

Now, a vacancy has recently occurred by the expiration of the five years' term of office of one of the Crown nominees. We believe we are correct in stating that the retiring member has been re-appointed. At any rate, the probability of this step being adopted seems to have given rise to discussion as to the advisability of the Crown exercising its power of re-election.

We apprehend that no fixed rule is applicable to the case in point. It is manifestly desirable that any member of the Council rendered unfit for duty, either in consequence of advancing years or failing health, or by neglecting to give a proper amount of attention to the duties demanded of him, and thus disqualifying himself, should retire, and make way for some one more fitted for the post. But, on the other hand, the retiring member may be capable of rendering the most valuable services to the Council; he may have made himself acquainted with all details, which can only be mastered by time, and his compulsory exclusion from the deliberations of the Council would be a very serious loss.

We are, then, of opinion that it is essential to the best interests of the Profession that the Crown hold the power of re-electing the members retiring in rotation from the Medical Council. It is only necessary that Government should be judiciously advised when it is called upon to exercise the prerogative. Our contemporary, the *Observer*, has been very ill-advised, and in the remarks it has made upon the matter has taken (as is the case with most of the political journals when they trespass upon Medical matters) a very superficial glance at the real state of things. It has remarked that, as Medicine is progressive, a succession of new members in the Council is calculated to represent more perfectly the current wants of the time being, and that five years is quite a sufficient time in which to exhaust the stock of advice which any one man is able to give. This supposes that the actual members of the Council are incapable of progress; that they have certain bigoted ideas which they hold once and for ever. Again, the Council meets for about a week once a year, consequently during the five years' term of office each representative has altogether thirty days' attendance, and therefore a working member will, about the time he should retire, be just becoming qualified for further usefulness. Such a man—it may be the best that could be selected, very possibly—should not be lost to the Council.

Our remarks are made in reference to Dr. Sharpey, whose term of office has just expired. He has probably no equal in regard to general acquaintance with all that relates to Medical education, and the amount of sound judgment that he is capable of bringing to bear upon all questions which are entertained by the Medical Council. It will be acknowledged on all hands that his retirement would be an almost irreparable loss.

It has been affirmed that the re-appointment of Dr. Sharpey establishes a precedent which may probably at some time fetter the freedom of the President of the Council or the ultimate usefulness of the latter. This, too, is not true. We call to mind the fact that both the Irish and Scotch representatives are now serving a second term of membership, having been re-elected on a former occasion.

Re-election, however, is a matter entirely beside the question of precedents. If any given member be a useless one, then the sooner he ceases to belong to any executive the better; but if, on the other hand, he be hard-working, judicious, and valuable, it would be suicidal indeed to annihilate his influence by a piece of absurd red-tapeism. No arrangement could be better than that which at present exists. We are as anxious as anybody that the composition of the Medical Council should be keenly debated, and one of the best ways, as far as the Crown nominees are concerned, of securing the most desirable men, is to proffer to the Crown judicious advice when vacancies occur, and such advice has been given on the most recent occasion.

## THE THIRD REPORT OF THE CORONER FOR CENTRAL MIDDLESEX.

Dr. Lankester has published a third Report, with statistical tables, by his deputy, Dr. Hardwicke (a). Nothing can be more interesting than these serious histories of our own times, so short, so closely packed with the sins and sorrows of the very people among whom we live. Dr. Lankester has the happy knack of making his reports readable, and yet so admirably arranged that they are handy as pocket dictionaries. There has been a slight decrease in the number of inquests, which may be fairly attributed to a decrease in the crime or culpability which renders them necessary. The decrease was most marked in the months of April, May, June, and July; not from fewer deaths connected with the respiratory apparatus, as might have been anticipated, but owing to fewer cases of nervous diseases and effusions on the brain. Inquests on deaths from natural causes are most frequent in the cold autumn and winter, accidental deaths and suffocation of children in bed most common in winter, suicides in the first three months of the year, homicide and infanticide twice as common in winter and spring as in summer and autumn. Section III. contains some excellent remarks on the law of *felo de se;* and it is pleasant to see how, even in the ghastly business of investigating suicide with the reasons for self-destruction all too plain, the kindly English natures sympathise with the relatives, and give the gentler verdict of insanity. A marvellous number of infants are smothered in bed. Out of a list of 330 verdicts, we find the result that 113 had died, generally on Sunday mornings, from the pressure of bedclothes or parents sleeping the heavy sleep which follows their weary week of toil or their Saturday night's libations.

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(a) Third Annual Report of the Coroner for the Central District of Middlesex, including an Analysis of Inquests held from August 1, 1864, to July 31, 1865. Read before the Social Science Association, March 21, 1866. Dr. W. Farr, F.R.S., in the chair.

Above 200 *fatal cases* were caused by vehicles in the streets of London alone! and it is calculated that for every *one* fatal there are 48 persons injured, who do not immediately die. "The money value of the injury to life and limb in London annually cannot be much less than a quarter of a million." It does seem almost time to prevent "the proud ones who roll along the highways" from crushing pedestrians, who are, however, themselves much to blame, as they behave at crossings as if they were there on sufferance. If they gave up the timid and apologetic behaviour when passing from one pavement to the other, it would make drivers less indifferent and more respectful.

We would especially direct attention to Dr. Lankester's remarks on infanticide. There is one child murder in 20,000 of the population of Middlesex *generally*, and one in 12,000 of the population of the central and western districts. It is calculated that of the mothers many die who have borne and destroyed children undiscovered. The perpetrator of the crime is, "in the great majority of cases, the mother, who is usually employed in domestic service." The conditions necessary for concealing pregnancy can only generally be secured when women are in domestic service, and the crime is seldom committed or attempted when women are sleeping with others. Dr. Lankester adds that "there is no doubt that the kindly and sisterly superintendence of young women living in domestic service by their mistresses would often prevent the concealment and the temptation to destroy their offspring—a crime most frequently perpetrated, not in the homes of the poor, but in the homes of the middle and upper classes of society in England."

Dr. Lankester and his coadjutors seem to have already made considerable progress in carrying out the great objects of the Coroner's Court—the prevention of criminal and culpable death, and arresting the spread of preventible disease.

## OZONE.

We promised last week an article on ozone; we proceed to fulfil our promise. For the past few months our Continental neighbours have been making known some valuable additions to the knowledge of this body, to the more interesting of which we shall call attention.

Our readers are probably all aware that the existence of a substance, called by its discoverer *ozone*, was made known to the scientific world by Schœnbein. He did not then isolate it as hydrogen, iodine, magnesium, or other substances have been isolated; nor has he or the other workers at the subject succeeded in doing so since, although more than the quarter of a century has elapsed since its nature first became matter for investigation.

To form it there must, all are agreed, be *oxygen*, but we can hardly say that all are also agreed that there must not likewise be hydrogen, or rather, perhaps, water. On the whole, however, the experiments of Andrews and Tait may be considered as setting the question at rest, at least, so far as this:—From oxygen alone some of the phenomena indicating the presence of ozone can be obtained. The question is not so satisfactorily answered as to whether the substance that is formed in presence of water-vapour, and answering to the tests of ozone, is formed from oxygen only, or from a combination of oxygen and water.

But we must not say more of its nature until we have stated some of the means of obtaining it, or, more correctly speaking, obtaining indications of its existence. If perfectly dry and pure oxygen gas be electrified by passing a series of sparks through it, or, even better, according to Dr. Andrews, by silently discharging machine-electricity through it, ozone is produced. That is to say, the oxygen acquires new properties. It acquires a peculiar smell, such as is observed on standing near a large electrical machine in action, or much like that of a dense fog. It diminishes in volume. It becomes capable of *oxidising* bodies in a way that it could not do before, so that it becomes corrosive, destroying most organic substances, such even as caoutchouc, and acting on metals, even silver, oxidises and decomposes salts ordinarily stable, such as sulphate of magnesia and iodide of potassium, and even combines with the inactive substance nitrogen (in the presence of moisture). It is practically insoluble in water, but is absorbed by it if the water contains a material quantity of organic matter. If the oxygen which has been thus changed is treated with some of the substances affected by it, these active properties disappear, and a great part of the original oxygen employed is left unchanged. But Frémy and E. Becquerel have shown that by electrifying the oxygen in contact with moist metallic silver, or a solution of iodide of potassium, all the oxygen can be so changed as to be absorbed by these substances.

Other methods of forming ozone in the presence of water are by gently heating a mixture of air and ether vapour, or by exposing clean moist phosphorus to the air. In these cases the formation of the ozone seems to be simultaneous with the partial oxidation of the acting substance. It is also formed during the electrolysis of dilute sulphuric acid, or, as it is the fashion to say, of water acidulated with sulphuric acid. And also by the action of sulphuric acid on peroxide of barium, and by other laboratory methods.

It has been shown to be formed during fermentation and the growth of moulds, and it is believed to be very generally produced during oxidation at ordinary temperatures. It, however, can hardly be said for certain that oxidation is a cause of the ozonisation of oxygen, as we know that all the oxidations that do take place are producible by ozone itself, so that it may be that ozone is produced by the contact of oxygen with these bodies, or in other ways, and that then these bodies begin to oxidise under the action of the ozone.

Now, with regard to the test of its presence, there are several, but there is hardly one of them which cannot be challenged as an uncertain indication of it. One of the earliest tests employed, but seldom used now, was a white paper impregnated with sulphate of manganese, an almost colourless salt. This paper is turned brown by the formation of hydrated peroxide of manganese. Another test, proposed by Schœnbein, and the one most in use at present, is white paper impregnated with starch-paste and iodide of potassium. This paper is turned blue, or a colour approaching it, by ozone, potassa being produced and iodine liberated, which then forms the blue compound of starch and iodine. M. Houzeau has introduced, and for a long time employed, strips of wine-coloured litmus-paper, half of each of which only is impregnated with iodide of potassium. This he does because there are other substances that are liable to change the iodised starch-papers by liberating iodine which will not affect these papers. For these other substances liberate the iodine by forming a neutral salt with the potassium, such as acid vapours, chlorine, etc., but ozone does so by forming potassa, which is alkaline. This alkalinity his papers indicate by the part charged with the iodine becoming, under the influence of ozone, blue from the action of the potassa on the violet litmus, and then contrasting with the unchanged colour.

We have already indicated the most striking properties of ozone, but there are still some things requiring notice. By its powerful oxidising action on organic matter, it quickly purifies air or water charged with organic matters, removing smell and taste from them. Indeed, the most offensive masses of putrid matter lose their offensiveness to the senses by the action of this body. Its active chemical properties render it a powerful irritant to mucous surfaces. By heat ozonised oxygen loses all the properties of ozone, and regains its own; among others, its proper volume.

We have also to say a little concerning the density of ozone. Since oxygen converted, or partly converted, into ozone, contracts in volume, it is evident that ozonised oxygen must be denser than ordinary oxygen. Attempts have recently been made to determine its density, by M. Soret. We must mention that when ozonised oxygen is exposed to the action of iodide of potassium or moist silver, it loses its peculiar properties, except that it does not reassume its original volume, as it does when heated. Further, that the loss of oxygen is accounted for, and the absorption of ozone proved, by the fact that a quantity of iodine chemically equivalent to this oxygen or ozone is set free from the iodide of potassium. It is just possible, it seems to us, that ozone may be a vapour of very low tension, of a highly volatile liquid, which we have not yet been able to get in sufficient quantity in a given space to make it reach the point of maximum density, when formation of liquid would take place. For, then, the slight loss of elastic force by the absorption of it from its mixture with oxygen might well escape observation. However, chemists do not seem to hold this view. The one which has for some years been suggested is that ozone is half as dense again as oxygen. On this hypothesis, iodide of potassium is considered to absorb one-third of the matter of ozone, and to liberate the other two-thirds as ordinary oxygen. This, of course, requires the further admission that the ozone behaves as if formed of two kinds of matter, two kinds of oxygen, and that it is an oxide of oxygen having the formula $O_2,O$. We shall not pretend to criticise this hypothesis. We refer to it here, partly because M. Soret has attempted to determine the density of ozone, and he finds his experiments confirm the view that three volumes of oxygen are condensed to two. He has discovered that oil of turpentine so acts upon ozonised oxygen as to cause the volume of the gas to diminish, instead of this remaining unchanged, as when iodide of potassium acts upon it. He concludes from this that iodide of potassium decomposes this *compound oxygen*, or ozone, and absorbs part, while turpentine absorbs it wholly. Granting the truth of this conclusion, our readers will at once understand that if, as in the experiments of M. Soret, two measured quantities of the same ozonised oxygen are taken, and the one acted upon by turpentine and the other by heat, that the volume of oxygen equal to the ozonised gas will be learned from the latter action, and the quantity of unchanged oxygen in a given bulk of the gas from the former. The difference between the volume of the original oxygen and that of the unchanged oxygen will give the quantity converted into ozone; the diminution in the bulk of the ozonised gas caused by turpentine will give the volume of the ozone absorbed by it. M. Soret found in this way that the volume of the ozone absorbed by the oil of turpentine was produced from a volume about half as great again of oxygen. Hence he concludes that the density of ozone is half as great again as that of oxygen.

We have so much more to say about ozone, more especially as regards the late controversy as to its existence or not in the atmosphere, that we must reserve this for another article.

A MODEST VETERAN.—M. Velpeau, on the occasion of presenting to the Académie des Sciences, on the part of its author, a copy of the third edition of Professor Sédillot's "Traité de Médicine Opératoire," stated that he regarded it as the most complete work of the kind that has ever appeared, and the one most up to the progress of science—very superior to the "Traité de Médicine Opératoire" which he himself "committed" some twenty years ago.

## THE WEEK.

### DR. GREENHALGH'S CÆSARIAN SECTION.

IT is unnecessary to call our readers' attention to the case of Cæsarian section described in this week's *Medical Times and Gazette*, and which will be quoted as an historical fact, so long as Medicine shall have a history. It will greatly tend to shake the opinion of some of our conservative Surgical brethren, who believe that although the new method of local anæsthesia may be good enough for small superficial operations, yet that it is insufficient for those of the heroic or capital order. The Cæsarian section is, if any, *the* capital operation. Two lives are at stake. We deeply regret that in this case the child did not live, but certainly all the evidence shows that the safety of the mother was mainly due to, or at least very much increased by, the peculiar action of the new anæsthetic. There was no brain affection, and no vomiting, and the cold helped materially to contract the womb. True, chloroform is not dethroned yet; this woman was plucky and self-possessed, and there was no need of profound unconsciousness; still this operation will give the names of Greenhalgh and Richardson a place in the annals of Medicine, if possible, more permanent than they have already earned.

### THE INTERNATIONAL CONFERENCE ON CHOLERA.

OUR readers are aware that the sittings of this Conference commenced last month. A Committee composed of Dr. Sotto, Dr. Monlau, Count de Lallemand, Dr. Goodeve, Dr. Mühlig, Dr. Pélikan, MM. Vernoni, Murza-Malkom-Khan, and Salih Effendi, were appointed to sketch out a plan for the guidance of the Conference in its discussions and inquiries. The Report they have presented is an able document, but too long to be transferred in its entirety to our columns. We content ourselves, therefore, with indicating the chief lines of investigation which it recommends. The Committee ranges the questions to be examined under three groups: The first includes those relating to the origin and genesis of cholera; the second those having reference to its capability of transmission and propagation; the third, the great subject of preservation. Under the first head are found such questions as the following:—Is epidemic cholera developed spontaneously, under certain conditions, in European countries, or is it always imported from without? What are the countries in which the genesis of cholera may be incontestably asserted to take place? Does cholera always reign in India, or only at certain epochs and periods of the year, and does it appear with greater violence at certain seasons than at others? Are there certain localities in India in which exclusively cholera is engendered, or which are more favourable than others to its development? Do we know the causes by the concurrence of which cholera arises spontaneously in India or in any other locality, also the circumstances which make it periodically assume the epidemic form? Is there in Hedjaz an original focus of cholera, permanent or periodic; and if so, under what circumstances does it develope itself? Is there reason to fear that cholera may in time acclimatise itself in European countries? How is the immunity which some localities appear to enjoy in the proximity of cholera to be explained? The second group, referring to the transmissibility and propagation of the disease, comprehends a number of questions, of which the following may be taken as examples:—Is the transmissibility of cholera now proved by facts which admit of no other interpretation? What are the principal facts which support this hypothesis? Are there conclusive facts which compel the admission that cholera may be propagated by certain atmospheric conditions—for example, by winds, by the proportion of ozone in the atmosphere, etc.; or rather are there certain cosmo-telluric changes which alone favour its propagation? Can a person coming from a place infected with cholera carry the disease into places free from the disease; and, if so, under what conditions of health does the power of carrying the disease occur? Is the arrival of a single individual affected with diarrhœa sufficient to give rise to the development of an epidemic? Other questions refer to the transmission of cholera by merchandise, water, dead bodies, dejections, etc.; to the influence of different modes of convection, sea or land carriage, roads, railways, steamboats; the effect of the collection and movement of human beings in large masses, as in fairs, pilgrimages, or military operations, on the spread of the disease. The third group on the important subject of preservation, includes comprehensive questions on the value of preventive measures —*i.e.*, public and private hygiene; and on that of restrictive enactments—*e.g.*, quarantine, sanitary cordons, the interdiction of emigration, fairs, etc. Under the head of quarantine, the subject of the incubation of the disease is started. Lazarettos, cholera Hospitals, the disinfection of ships, houses, and goods, the establishment of stations for Medical observation—for example, at Djeddah, Yambo, Suez, Alexandria, and in Persia—are subjects proposed for discussion. The Commission recommend that the questions comprised in the first and second group of their programme should be submitted to a sub-committee of eleven of the members, who are to report the result of their investigations with as little delay as possible. We stated in a recent number that the Conference have adopted the proposal made by the representatives of France to stop communication between the Arabian ports and Egypt in case of another outbreak of cholera amongst the Mecca pilgrims. It is to be seen, however, whether the Porte will have the courage to act on the advice.

### MEDICAL INSPECTION OF LONDON WORKHOUSE INFIRMARIES.

The Profession will learn with satisfaction that a systematic inspection of the sick-wards of the London Workhouses is to be made by Dr. Edward Smith, F.R.S. Dr. Smith's testimony will be accepted as that of an acute and impartial man, whose position places him above the temptation to be sensational, and the suspicion of interested motives. It is felt that the Association for Improving the Condition of the Sick Poor in the Workhouses have not acted quite prudently, inasmuch as the speakers at their public meeting displayed a little too much of the advocate, and were too indiscriminate in their censures, and confounded the innocent with the guilty, in order to create a public "sensation." They would have been far more likely to have secured their end had they shown common justice to the West-end parishes, whose treatment of their sick is most generous, and whose Medical officers feel that they have been subjected to undeserved contempt. The Archbishop of York committed the common fault of orators when, in comparing the Workhouse Hospital with the ordinary Hospital supported by voluntary contributions, he dragged forward all the horrors that could be alleged against the former, and all the sentimental exaggerations which novelists urge in favour of the latter. Does his Grace think that there are no discomforts in a voluntary Hospital? or that patients are always well classified? Do we never hear of patients who go in for slight injuries dying of fevers contracted from the occupant of the next bed? As for Mr. Tom Brown, who expressly accompanied the strongest censure of others by the affirmation that he had no personal knowledge of the matter, the less such an advocate is heard, the better for the cause. As it is, a large number of active and benevolent men, who have devoted their leisure for years to the West-end Workhouses, feel themselves insulted quite gratuitously, and the good which is sought has been hindered by want of delicacy and good management. One point to which we invite Dr. Smith's attention is this—What amount of fever and smallpox has been imported into the London Workhouses by the tramps who flocked to them under the Homeless Poor Act? Inspector Farnall, C.B., is surely the last person in the world who ought to throw stones at London guardians.

### FROM ABROAD.—THE FRENCH REPORT ON TRICHINIASIS—STATISTICS OF PARIS.

Great alarm having seized the public mind in Paris in respect to the possibility of an outbreak of trichiniasis, the French Government, in place of mystifying opinion as it did with respect to the cholera, has done its best to present the most accurate account of what has taken place in Germany. To this end it promptly despatched Professors Delpech and Reynal to the various districts in which the disease had prevailed, with instructions to put themselves into communication with the most able of the *savants* who have there paid attention to the subject. They have recently returned, and the *Moniteur* has just published an abstract of their report.

According to this, all the epidemics in Germany are extinct or are disappearing; and none of them, with the exception of the last at Hedersleben, where a concurrence of unfortunate circumstances led to most deplorable consequences, have been attended with other than an insignificant mortality. Thus in those occurring at Zwickau, Seitendorf, and Sommerfeld, not a single death took place among 86 or 88 cases. There must surely be some mistake here, as by all accounts some of the epidemics, as that at Hettstadt, were very fatal. All these epidemics arose from eating pork loaded with trichinæ, either raw, smoked for much too short a period, or, more rarely, imperfectly cooked. Pigs in Germany are not infrequently the subject of trichinæ. In about 25,000 examined in Hanover, 14 such were found, and 16 out of 14,000 in Brunswick. The animals or their flesh present no peculiarities in appearance, unless examined by the microscope. This examination is quite conclusive—unless, indeed, the flesh of a diseased animal be chopped up amidst that of numerous healthy ones, when it may escape detection. The evident utility of this examination has induced various governments and provinces in Germany to render it obligatory, as at Hanover, Brunswick, Magdeburg, Görlitz, etc.; and although the butchers in the other parts of Northern Germany have announced that they have their meat carefully examined, the Reporters regard this as altogether destitute of security. The examination to be of real practical utility must be rendered obligatory, however difficult it may be to provide an organisation for this. They see no occasion at present to institute any such examination in France, where neither human nor porcine trichiniasis has yet been met with; and in spite of the exaggerated fears which have of late been excited, they see every reason to expect the immunity to continue. Trichiniasis is now so well defined by its symptoms as to admit of its ready detection, and although it has prevailed and does prevail in Germany, both epidemically and sporadically, nothing analogous has been observed in France. The rats which frequent the sewers, *abattoirs*, etc., in Germany has been found loaded with trichinæ, but the French rats examined by the reporters have not exhibited these parasites. The habits of the two countries are, moreover, so different, for while in Germany the working classes eat the pork either raw or insufficiently prepared, in France they only consume it after being well cooked. Although the Reporters do not recommend an obligatory microscopic examination to be made in France, they recommend that such examinations should, as a matter of investigation, be constituted in some of the towns having *abattoirs* at various parts of the French territory. The heart, liver, kidneys, brain, and fat have never been found to contain trichinæ, so that the most timid may consume these parts without fear.

We may direct our readers' attention to a highly interesting clinical account of trichiniasis by Professor Lebert, of Breslau, now publishing in the *Gazette Médicale*, the material being derived from a small epidemic which he witnessed.

Some interesting statistics have recently been published, showing that Paris is not only progressing in embellishment but in the means of increased viability by reason of the large spaces rendered accessible to the public. Its superficies has increased from 1104 hectares (a hectare being about 2 acres

1 rood English) in the reign of Louis XIV. to 7450 hectares in that of Napoleon III. The Bois de Boulogne alone contains 800 hectares. In 1856 there were 1168 streets and 44 "chemins." There are now 1898 streets and 127 "chemins." The number of boulevards, and "places" has more than doubled since the annexation of the ground between the old octroi and the fortifications. Independently of the old "boulevards exterieurs," now a magnificent promenade, and of two parks in process of execution, eight "squares" have been formed in Paris, measuring together 61,284 metres, or more than 6 hectares. The *population* has increased from 580,600 in 1806 to 1,696,141 in 1861; and it is estimated that the new census now being taken will bring it up to 1,809,000. The mean annual number of *births* was 29,016 from 1831 to 1841, and 31,759 from 1841 to 1851. In 1864 they amounted to 53,835. The *deaths* were in that year 8922 fewer than the births. From 1831 to 1850 there was 1 birth for 30 inhabitants, and 1 death for 32. In 1864 there was 1 birth for 31 inhabitants, and 1 death for 35. For the whole of France, according to the last statistics, there is 1 birth in 35 inhabitants, and 1 death in 41. The quantity of butchers' meat consumed in Paris between 1851 and 1854 was calculated at 62 kilogrammes per individual per annum, while by 1864 this quantity had risen to 68 kilos.

## THE EXHIBITION OF OBSTETRICAL INSTRUMENTS.

The Obstetrical Society is to be warmly congratulated upon the success of their *conversazione* held last week at the College of Physicians, and the display of obstetric instruments, so fully appreciated by the large gathering of visitors present on the occasion. There must have been some hard work done, to have secured, out of the heterogenous total of contributions, the well-arranged order in which the various objects of interest were displayed; and the Society must not forget that praise is peculiarly due to its President, Dr. Barnes, who was the original projector of the Exhibition. It was through his personal instrumentality that the Library of the College of Physicians was secured, that contributions were obtained from Russia, Italy, and Belgium, and a great many difficulties and doubts dispelled. The Society, no doubt, will find some way of recording its satisfaction at the labours of Dr. Barnes and the committee associated with him. We should be also unjust if we did not specially mention the valuable services of the Secretaries. Amongst those present, in addition to a large number of our well-known London *confrères*, we noticed Dr. Martin (Berlin), Dr. Lazarewitch (Kharkoff), Drs. McClintock, Beattie, and Kidd (Dublin), Dr. Wilson (Glasgow), Dr. Aveling (Sheffield), Dr. Hall (Brighton), Dr. Lumley Earle (Birmingham), Dr. Payne (Wimbledon), Mr. Baker (Derby), Dr. Middleton (Brussels), Dr. Rausch, Dr. Bräumler, Dr. Stillwell, Dr. Bennett (Beamston), and a full attendance of the country Fellows generally. Sir J. Simpson and Dr. Keiller came up from Edinburgh and spent several hours on Wednesday in examining the instruments removed to the Medical Society's Rooms in George-street. We are given to understand that it is the intention of the Society to publish something in the shape of an illustrated report. This will be very acceptable indeed.

We noticed last week the order adopted in the general arrangement of the instruments. How shall we classify the vast array? We think the best plan will be to make a kind of physiological or pathological scheme; to reckon up all the various affections to which the sexual organs of woman are liable from youth to age; and to give with each a slight sketch of the appropriate instruments and appliances that were exhibited.

We will first take the affections peculiar to the unimpregnated state; afterwards the impregnated.

### FIRST DIVISION.

Beginning with the *virgin state*, we may mention that marvellous antique machine, in the Archæological series, entitled the *girdle of Venus*, which should rather have been called the girdle of Diana, as it was intended to secure the observance of Diana's law. There is a proverb that love laughs at locksmiths, and in any case we may assert with the poet that it is better to

> "Put the padlock on the mind."

The same may be said of gloves to be worn during sleep, secured with padlocks, made at the suggestion of Dr. Brown-Séquard by Mr. Pratt.

For *imperforate hymen*, trocars, bistouries, etc., *passim*.

Vascular tumour at orifice of urethra, caustic, and caustic holders, see *infra*.

*Inflammation and Suppuration of Vagina.*—Dr. Barnes, a caoutchouc bag for keeping the canal open and the inflamed surfaces asunder, on the principle of giving them rest.

*Vaginal Douches.*—Dr. Sansom, a self-filling india-rubber bag, with long tube. Messrs. Weiss' "Uterine Douche, 1865;" bag to be suspended; long syphon tube. Self-acting douche by Weiss and Son; like a bidet; the reservoir under the seat, so that patient's weight is made to propel the water. M. Lüer, of Paris, exhibited apparatus for applying pulverised liquids to the vagina and womb.

*Womb, Affections of* (engorgement, hypertrophy, erosion, ulceration, polypus, and morbid growths).—The *Specula* numbered between sixty and seventy. One which attracted some attention was the small pocket bivalve speculum of Weiss and Son, in which a simple screw mechanism of good strength is so arranged as not to interfere with a full view of the vaginal passage. Amongst others were Sir J. Simpson's trivalve portable speculum; Scanzoni's; a modification of Cusco's, with portable handles, which double up conveniently for pocket use; a portable duck-bill speculum made by Pratt, in which the blade unscrews from the handle part; vaginal retractor or spatula by Fergusson; another by Professor Fabbri; a long vaginal spatula by Jobert de Lambaelle; a curved vaginal speculum by M. Jobert; Maw and Sons' duck-bill speculum; Dr. Tyler Smith's bivalve, made by Weiss; Hilliard's, by Fergusson, forming, when opened by a screw action, the three sides (two lateral and inferior) of a square; a simple *two-bladed wire speculum*, acting on reverse principle to bull-dog forceps, closed by compression for introduction, and opening by its own elasticity, by Mr. Olsen, of Christiania.

There were three *Hysteroscopes*—one by Dr. Tyler Smith, in which the light which entered fell on a mirror at the bottom of the speculum, and was then reflected through a special tube two inches long, which projected as a fixed part from the speculum, and was passed into the uterus, the internal surface of the latter being reflected on to the mirror at the bottom of the speculum. A second was by Krassovsky; a third, a simple bent metallic tube, gradually narrowing, by Grunevaldt.

*Dysmenorrhœa.*—Uterine Dilatation. Verrier's Uterine Dilator, a straight short vulcanised tube, closed at the top, and with an inch at the top quite thin. This is introduced into the cervix and inflated.

*Tents* of machine-compressed sponge by Coxeter; laminaria tents, solid and tubular, by Krohne and Sesemann; tents compounded of sponge and laminaria by Dr. Wiltshire, of Islington.

A *tent conductor*, consisting of a central wire in a tube, made for Dr. Barnes by Weiss.

*Dilators of the Uterine Cervix.*—These may be conveniently classed into four groups. 1. Those which carry out the original idea of Weiss, in which the two halves separate and bow out, though the point remains solid, as in those of Dr. Thompson, Dr. Priestley, and M. Matthieu. 2. Those in which the stem of the dilator is simply split into two, as Mr. Ellis's. 3. Those in which the instrument resembles a split sound, but is jointed at the terminal end to allow of the expansion; to this group belongs Dr. Marion Sims's, the handle of whose instrument is like ordinary forceps. 4. Those in which there is a combination of these two above modes of construction, as Dr. Hamborough's and Dr. Greenhalgh's, both of which have a central bar, or central piece, from either side of which the dilating springs take origin. In all the dilatation is effected by a screw action at the end of the handle. Dr. Bryant exhibited a case of cervix dilators. Dr. Routh a dilator of the female urethra.

*Engorgement.*—A good many knives of ordinary construction for scarification were exhibited. Especially noticeable were the scarificators of M. Lüer, consisting of a glass speculum, through which passed a moveable knife; an artificial leech made upon a like principle by Mr. Stille, of Stockholm, and the knife of Weiss; also Routh's uterine scarificator by Coxeter

*Uterine Sounds.*—Of these there were three kinds. *The first*, in which the sounds were all of one solid piece curved to the required shape; *the second*, in which the uterine or terminal part was moveable before the introduction of the instrument, as in instruments by Dr. Sims, and Dr. Haake, of Leipsic; and *the third*, in which the uterine portion was moveable at will, even after the introduction, by means of a screw action at the end of the handle, the most perfect being that of Dr. Lumley Earle, made by Fergusson.

*Scoops.*—M. Recamier's, exhibited by Luer; Sir J. Simpson's, made by Fergusson, for removing cauliflower excresences; Sir C. Locock's scoop for soft polypi, and others.

*Intra-uterine Syringes (impregnated or not).*—A large one of Prof. Lazarewitch, consisting of a curved pipe and a large 10-ounce syringe for the purpose of throwing iced water, perchloride of iron solution, or other fluids into the uterine cavity. Fergusson's — a simple compressible ball with a catheter stem. Dr. Marion Sims'—a long glass tube connected with a syringe, the piston being worked by a screw action. Lüer's—being workable by an ordinary pump piston action, fitted with a *rondeau*, that runs upon the piston-rod to regulate the amount of fluid. There was also a syringe with attached curved tube of Krassovsky for injecting the uterine cavity. Dr. Hennig showed a syringe to draw out any mucus from the uterus—"Tuyau d'aspiration de la Matrice."

*Bladder.*—A catheter spray producer: quite a novelty, for introducing various solutions into the bladder in the form of spray, or for the purpose of washing out the bladder.

*Caustic-holders, etc.*—Of these there were eight or nine, including those of Mr. Ellis, Dr. Barnes (consisting of a roughened point, which is charged by steeping it in fused caustic), Sir J. Simpson's (a canula capable of holding the caustic, which is pushed out by a stilette arrangement), and that of Mr. Stille, of Stockholm (made up of coiled solid silver so as to constitute a flexible tube, which can hold a piece of caustic in its end capable of being turned round in any direction). Mr. Stille exhibited a second form for fluid applications. It consisted of a hollow female catheter and a stilette armed with sponge. Mr. Fergusson showed a caustic-holder for use without the speculum. The gas cautery of M. Nélaton, a large caoutchouc bag with a hollow tube or burner, was exhibited by Fergusson.

*Hysterotomes and Metrotomes* were of various makes. M. Smith, Surgeon in the Army of Christiania, exhibited a double knife with a mechanical dilatorium. Professor Faye, of Christiana, single edged probe-pointed knives of various curves for use with the speculum. A good many were constructed upon the principle of Civiale's urethrotome; such were Routh's, Greenhalgh's, Sköldberg's, and Weiss's. Mr. Spencer Wells's hysterotome cuts as it expands. In most of the instruments exhibited the blades are expanded when introduced, and the cutting effected by drawing the knife downwards. Dr. Sims's instrument can be used either as a double or single-edged knife. Sir J. Simpson's is a single-bladed hysterotome. We noticed Dr. Coglan's double-edged knife with a projecting neck, Whitehead's hysterotome, and others. Dr. Aveling's possesses some special features. In the majority of hysterotomes the blades are protruded, so as to form a triangle with the apex turned towards the handle; in Dr. Aveling's, which is a single-bladed instrument, the blade works on a pivot at the extremity of the stem, and when it is protruded the *base* of the triangle is turned towards the handle of the hysterotome.

The single-bladed form is adopted by Dr. Aveling, in the belief that where there is a double blade the thin healthy part often gets cut through whilst the indurated cervix escapes, and the object in having the blade to open from above downwards and outwards is this, that the diseased structures are incised at the spot where cutting is most wanted, whilst the healthy structures are not damaged.

*Medicated Pessaries*, vaginal and uterine, shown by Mr. W. T. Cooper, chemist, of Oxford-street, and containing morphia, belladonna, iodoform, iodide of lead, oxide of zinc, borax, opium, matico, tannin, lead, and other medicinal compounds.

Iodised cotton, used by Dr. Greenhalgh.

Carbolic acid, with and without glycerine, by Calvert.

Amongst the instruments used for introducing substances into the uterus, may be mentioned that of Dr. Savage, like a long pair of narrow forceps, forming when shut, at the terminal end, a little hollow tube, which would contain any solid or fluid, and could be opened for the escape of its contents in utero. Dr. Marion Sims' syringe for intra-uterine injection, like an ordinary little brass syringe, to which is fitted a long glass tube. Sir C. Locock's tube glass sponge, for sponging out the os uteri.

*Womb, Displacements of — Prolapse, Ante- and Retroversion—Pessaries.*—We saw no globular or any box pessaries save one antique specimen exhibited by Professor Faye, of Christiania.

Pessaries may be divided into 1, the simple contrivances for keeping up the womb by distending the vagina; 2, those which have besides a stem attached to external bandage. For description's sake, in the case of compound pessaries, we speak of that part on which the womb rests, as the receptacle, or *hysterophore*; 3, those provided with intra-uterine stems.

The variety of which the largest number was exhibited was decidedly *Zwancke's*. This we may call the *butterfly pessary*, inasmuch as it consists of two wings, joined by a hinge in the middle, the two wings being capable of being compressed together for introduction, and then of expanding laterally within the vagina, so as to resemble a butterfly with wings expanded. There was Zwancke's pessary with German silver cradle receptacle, modified by Dr. Tanner, and made by Coxeter; one with solid wooden receptacle, by Durroch; the same in vulcanite by Maw, Coxeter, and Pratt. Zwancke's pessary, modified by Professor Giordano, of Turin; one specimen made of zinc and copper wire so as to establish galvanic action.

*Hodge's Pessary.*—A ring of flexible wire or gutta-percha, bent more or less into the shape of a Jew's harp, or imperfect figure of 8. Modification by Sir J. Y. Simpson; made by Young, of Edinburgh; the inferior loop narrow. Routh's modification, made by W. Russell, 58, George-street, Portman-square; the inferior loop broad; the same in vulcanite, by Mayer and Metzler, 59, Great Portland-street; the same in malleable gutta-percha and in vulcanite, unvarnished, by Russell.

*Hodge's Pessary* in horseshoe form, ends of the lower loop open.

*Meigs's Ring Pessary*, made for Dr. Marion Sims, by Mayer and Metzler.

*Reid's Spring Pessary*, 1840, *by Fergusson.* — V-shaped receptacle of vulcanite, kept open by a spring.

Pessaries consisting of *india-rubber bag*, to be introduced flaccid, and then inflated through tube attached; Dr. West's and Dr. Barnes's varieties, were exhibited by Weiss and S. Maw. (See also dilatation of os uteri, Barnes's bags, and air balls used as plugs.)

*Pessaries supported by stem and bandage.*—Several old-fashioned varieties in boxwood; some with globular, some with cradle tops, exhibited by Professor Faye, of Christiania.

Professor Lazarewitch's *Redresser for the Uterus.*—A wire loop, covered with thin rubber for receptacle, a curved wire stem, and a wire disc to lie over the pubes, and be supported by a circular bandage. *Duffin's* Pessary.—The receptacle a half sphere of wood, two inches in diameter, perforated with holes; resting on an ivory stem, which again rests on a small wooden disc outside the vulva, to be kept *in situ* by a bandage. *Dr. Fred. Bird's* Pessary.—A vulcanite receptacle one and a-half inch in diameter, with a stem four inches long. *Roper's* Pessary, made by Walters, of 16, Moorgate-street.—A good one; vulcanite receptacle, thin stem, and external wire pad, supported by bandage. Mr. Peter *Magennis's*, made by Pratt, of Oxford-street.—India rubber receptacle, German silver stem, and large outer wire disc to be affixed to bandage. Sir J. Y. *Simpson's* Stem Pessary.—Transverse oval receptacle three inches by two inches. Dr. *Priestley's* Pessary for Retroversion and Anteversion.—A "Jew's-harp" loop supported by straps and bandage. *Coxeter's* Pessary.—A hollow receptacle covered with perforated india rubber, solid curved stem. The same with an air cushion affixed to the top, capable of inflation, by Coxeter. *Priestley's* Pessary for Ante- and Retroversion.—Broad spoon-like bag, capable of inflation, placed before or behind cervix; tube for inflation, double vulcanite stem. *Hysterophore*, by Professor Breslau, of *Zurich.*—Receptacle shape of inverted mushroom, caoutchouc stem and bands. *Nyrop's Pessary*, as given to the poor of Copenhagen.—Concave wood receptacle two and a-half inches in diameter, stem capable of lengthening telescopically, outer wire support to be affixed to bandage. *Calthrop's* Band for Ante- or Retroversion.—A wire loop receptacle covered with sheet rubber, supported on a spring attached to an efficient leather abdominal belt. *Graily Hewitt's* Apparatus for Retroflexion, consisting of hollow distensible rubber bag pessary, on ivory stem two inches long.

*Intra-uterine Supports.*—Sir J. Y. Simpson's Uterine Stem, in German silver, by Fergusson; the same in wood and ivory, as modified by Professor Martin, of Berlin; in horn, by Professor Faye, of Christiania. Sir J. Y. Simpson's, perfectly straight and solid; Balandins, of St. Petersburg, complicated; Dr. Wright's, very simple; the diverging spring is shut or withdrawn by means of a grooved canula, and the little support retains its place by simple elasticity, and no speculum is required for its introduction. In addition, a fourth kind by Dr. Greenhalgh, and a fifth by Tarnovsky may be mentioned.

*For Prevention of Uterine Displacements.*—Good abdominal or rather pelvic belts, with T strap and air-pad, to press on perineum, exhibited by Salmon, Coxeter, Nyrop, and Russell. A very efficient looking one with Dr. Priestley's name attached.

*Subsidiary Apparatus.*—Air-syringes to fill india-rubber bags, by Pratt, Skölding, etc.

Screw for removing impacted pessary, by Fergusson.

In concluding our remarks on the long list of apparatus for palliating uterine displacements, we can but be struck with the carelessness which allows sufferers from "pain in the back," etc., often to go for years without seeking efficient aid; till an over-weighted womb, and distension or elongation of a few muscular fibres induces one of these distressing forms of infirmity, which all these elaborate mechanical contrivances can but make a little more tolerable.

*Operations on the Unimpregnated Uterus Generally.*—Dr. Marion Sims's reclining-chair, a very comfortable easy chair, for any one; is so balanced that it follows the slightest movement of the patient. Many of these chairs were ordered by visitors from the exhibitors, Mayer and Metzler, 58, Great Portland-street, W.

For drawing down and fixing the womb: a corkscrew tenaculum by Dr. Routh; vulsella of Museux, etc.

A needle-hook, by Dr. Routh, for taking up uterine arteries.

Lint and sponge-holders, by Weiss and Son.

*Polypi.*—Écraseurs, about thirty in all, most of them working on the ordinary principle of Chassaignac; two, however, were so constructed as to be worked at right angles to the stem, and were exhibited by Dr. Haake, of Leipsic, but in the larger one, the rack being in the middle of the stem, seems to be inconveniently placed; the small one was free from this objection, being worked by a handle placed at the bottom of the instrument. A small one by Maissoneuve, another by Dr. Hicks; and Dr. Sehlberg; a double one by Weiss, securing alternate action by means of a screw; a curved one with friction rollers by Pratt, and Spencer Wells's wire écraseur were among the remainder. Mr. Ellis's galvanic cautery for polypi.

*Polyptrite.*—Dr. Aveling's polyptrite is manufactured on the principle of a lithotrite; there is a basis like a blunt hook, grooved on the inner side, and into this groove fits the female blade, which has a terminal projecting bar, one and a-half inches long, placed at right angles to it. The hook is introduced over the pedicle, the female blade pressed up towards the pedicle, and then forced home by the working of a screw, as in the original lithotrites; there is no cutting blade, only a crushing one. On the outside of the stem is a flat piece by which the instrument is steadied, so as to prevent its rotation during the operation.

*Vulsella* were well represented. Dr. Priestley exhibited a complicated pair by Robert, in which a terminal set of teeth could be projected at right angles to the stems after introduction of what looked like a pair of polypus forceps with flat terminal ends. Dr. Greenhalgh's vulsellum has a series of notches on the stem, so as to form several quasi-joints, in which the bottom-like pivot of its fellow fits. In addition there were several four-pronged vulsella—viz., those of M. Melle, and the canular vulsella of Dr. Greenhalgh; then the double hooks of Museux, and Sir J. Simpson's vulsellum, which is made with separate blades on the principle of the forceps, which can be introduced one at a time. Polypus scissors were in abundance. We notice two special ones, in which the cutting part was as near as possible at right angles to the stem. Most operators have experienced very much difficulty in obtaining scissors cutting at right angles. Dr. Hugenberger showed one pair constructed for the purpose of cutting off little pieces of mucous membrane or other structure for examination; and a second and stronger pair, made for Dr. M. Sims, was exhibited by Mr. Pratt. M. Lüer's tumour fixers consisted of a canula with a bell-shaped end; inside runs a stem, at the end of which are two divergent hooks, which can be retracted within the bell-shaped end of the canula. The instrument is applied to the tumour, the hooks protruded, and then the tumour is fixed by a screw-like action. A second pair of M. Lüer's consists of simple open fenestrated blades. Beaumont's instrument for tying uterine polypi. Curved scissors by Mr. Stille, Lüer; and spring polypus scissors of Mr. Harper.

*Ovariotomy.*—Several complete cases of instruments required in the operation of ovariotomy. One by Messrs. Weiss, made for Mr. Spencer Wells; a second for Mr. Baker Brown, by Mr. Pratt. Several clamps were exhibited; one used by Mr. Brown, when the actual cautery is desirable, opening like a pair of scissors; Mr. Hutchinson's, and that of Dr. Clay; also a pair of forceps for holding the abdominal parietes, exhibited by Pratt. Mr. Chambers has sought to avoid the unequal pressure supposed to be produced by ordinary clamps by the construction of another, in which the two halves open equally in parallel lines by means of a small windlass at the base of one handle; the blades are approximated equally from the top to the bottom, so as to compress the pedicle equally. A third, scissor-shaped, by a French maker, had a semi-circular instead of a straight grip. Mr. Wells' trocar has a fixed vulsellum forceps arrangement on either side of the canula. Mr. Chambers' trocar is furnished with a single set of teeth, which are moveable up and down the shaft of the instrument, for the purpose of enabling the sac to be grasped when it is difficult to withdraw the sac any distance from the abdominal wall. Weiss exhibited a set of Mr. Wells' hollow trocars, with a simple improved Higginson's syringe, by which fluid can be injected into or removed from a sac. Also a neat uterine case, 8 x 3 inches, containing fourteen instruments and two bands, including sounds, knives, needles, hooks, caustic, and lint, and potassa-fusa holders; also a lamp to buckle on the forehead, with a moveable reflector, of use in reflecting light into the vaginal or other canal during operations.

### SECOND DIVISION.—THE MARRIED AND IMPREGNATED STATES.

*Hymen and Vaginal Orifice Thickened, Rigid; Vaginismus, etc.*—The only special instruments noticed were Weiss's three-bladed dilator and three-bladed speculum, made upon the principle of old instruments, and an antique dilator, lent by Mr. Robins, composed of a round tripartite wooden stem, dilatable by a lateral screw action.

*Pregnancy, diagnosis of.*—Küncke, a double stethoscope—*i.e.*, two india-rubber tubes, one going to each ear, for the detection of twin pregnancy, by comparing the number, force, and place of the two fœtal hearts. Dr. Routh's double stethoscope, with intensifying membrane for getting one sound. Routh's vaginoscope, a curved glass acoustic tube for application to the os uteri.

*Pregnancy, Adominal Supporters, Belts, etc.*—A good spiral silk abdominal bandage by Russell; also a good stocking for varicose veins of leg. Other bandages by Pratt, Salmon, etc.

*Abortion.—Abortion Forceps.*—Those of Sir James Simpson, about ten inches long; of Weiss and Son, very thick and strong, with open blades; a small pair of Dr. Cory; those of Lüer, of Paris; and several scoops of Boujalsky, of wood and metal, for the purpose of scraping out the ovum from the uterine cavity.

*Induction of Premature Labour.*—The fiddle-shaped india-rubber bags of Dr. Barnes, dilatable by water pressure; and a modification or copy almost by Tarnier, of Paris, consisting of a deeply-grooved sound, holding in the groove a piece of india-rubber tubing. The sound is introduced into the uterine cervix, and fluid is then injected up the tube, which dilates at the terminal end in consequence of the greater thinness of its walls there.

*Hæmorrhage before Labour.*—Braun's colpeurynter; a folded vulcanised caoutchouc distensible bag, to act as a plug, exhibited by Sköldberg. Another variety by Mr. Stille, of Stockholm, also exhibited by Sköldberg. It is provided with an additional small india-rubber tube, passing through the centre of the air-bag, open at top, and closed by a tap below. By opening this tap it may be known whether hæmorrhage is going on above the plug, without relaxing or removing the latter.

Vaginal bags, distensible by air or water, modified by West, Barnes, etc., and exhibited by Weiss, Maw, and Pratt.

Greenhalgh's expanding felt plug; the felt surface makes it a more efficient plug, and accelerates coagulation.

*Labour.—Puncturing the Membranes.*—There were several instruments for this little operation. Those of Dr. Lee Dubois consisting of a whalebone flexible stem, tipped with an ivory spear-point. Dr. Braxton Hicks's seemed the least objectionable, the pointed stilette being very small, the inventor relying upon a slight lateral or scratching movement to effect the rupture of the membranes, so that the child should not in the least be injured.

*Fillets.*—Of these instruments, almost unknown to London Practitioners, two were shown. They consisted of wooden handles, into which were inserted whalebone loops of sufficient size to go over a child's head. Dr. Radford exhibited one, the other was shown by Dr. Williams, of Wrexham. Some Practitioners prefer the fillet oftentimes to the vectis or forceps, and believe that they are excitors of the reflex muscular action. It is not likely that our shrewd and energetic brethren should be mistaken, still we cannot help remembering the great Dr. Merriman's story of the man who used a fillet, and succeeded in bringing away, not the child's head, but one of its cervical vertebræ.

*Obstructed Labour—Forceps.*—These numbered more than 100. "The Chamberlen case," containing three vectes (two combined hooks and crotchets and one simple crotchet) and four pairs of forceps. On one table were shown fifty-five pairs of long forceps, including those of Simpson, Barnes, Greenhalgh, Lever, Oldham, Hugenberger, Levy, Hennig, Martin (of Berlin), Busch, Ramsbotham, Krassovsky (of St. Petersburgh), Churchill (long), Blundell, Roberton, Waller, Murphy, Radford, Boerg, Naegele (two), Caderaehjold (of Stockholm), and those of Richter, with which the present Emperor of Russia was brought into the world. We may give some of the weights of these:—*Long Forceps.*—Lovati (Assalini's joint), 1⅜ lb.; Cozeaux, 1¾ lb.; Saxtorph, 1⅜ lb.; Naegele's, 1⅛ lb.; Simpson's (long), 1 lb.; Lazarewitch (Assalini's joint), 1 lb.; Simpson's (jointed), 1¼ lb.; Ditto (common, used as long or short), 1¼ lb.; Oldham's, 1 lb.; Simpson's (long, by Maw), 1¼ lb.; Ditto (by Weiss), 1 lb.; Greenhalgh's, under 1 lb.; Barnes' (Weiss), 1 lb.; Lever's (Durroch), 1 lb.; Boerg, 1 lb.; Radford's (Fergusson), 14 oz.; Levy's (Coxeter), 1 lb.; Sir J. Simpson's (Fergusson), under 1 lb.; Blundell's (Weiss), 1 lb.; Roberton's (Coxeter), 1 lb.; Matthews Duncan's, 1 lb. Sir J. Simpson's forceps are all made with roughened handles, and generally with transverse shoulder-pieces. In Sir J. Simpson's jointed forceps the blade and handle parts are connected very much after the manner of a lady's parasol, and are conveniently made for pocket stowage. Some of the foreign instruments are constructed of one solid piece—*e.g.*, those of Tacitarni, of Naples, working on a common pin screw-joint; of Professor Levy, used in Denmark; Saxtorph and Charriere, Nivet de Clermont, Trèlat, Lazarewitch, Siebold (made thirty years ago and used in Russia by order of the Government), Cazeaux (1835), and Lovati (of Pavia). Most of the forceps are constructed with the ordinary lock joint, two with Assoline's (Lovati and Lazarewitch).

*The Short Forceps*—about thirty-eight in all—occupied a separate table, and included those of Denman, Graily Hewitt (two), Murphy, Sir J. Simpson, the forceps commonly called English in Sweden (exhibited by Dr. Sköldberg), Jorg's, Naegele's (with bottom joint); those also of Churchill, Trelat, Gayton, Greenhalgh, Chassagny, Beattie, Hamilton, Davis, and Assalini, in which the joint is at the terminal end of the handle, a modification of this being seen in those of Mondolle, where a transverse circular bar at base receives the ends of the two handles. There were also some curiosities in the shape of two pairs of Japanese forceps, the one lent by Dr. Tyler Smith, the other by Dr. Matthews Duncan. They were small, with fenestrated blades; and a small craniotomy forceps of Japanese make. It is imagined that the Japanese may have got some ideas as to the construction of these instruments from the Dutch. There was also a pair of face blades of Dr. Davis's for the position of the face towards the right ilium.

A mechanical apparatus for the extraction of the fœtal head, invented by Dr. Hoffmann, of Molde, in Norway, for the purpose of giving additional power to his own naturally weak arms. The apparatus consists of a forceps with a specially constructed handle, two iron rods, and a windlass arrangement. One of the ends of each rod is furnished with a pad; the other is capable of being connected with the handle of the windlass. The forceps is applied in the usual way. The padded ends of the rods placed one on either side near the inguinal region, the other ends are connected with and converging to the point of the handle, forming together a triangle with the apex at the handle of the forceps, the latter occupying the middle of the triangle. Now the lateral rods afford fixed points near the thighs, and by means of a mechanical windlass arrangement traction is made upon the forceps. The operator takes charge of the forceps, leading it in a proper direction, whilst an assistant turns the winding handle and makes the extraction gently, according to the wish of the accoucheur.

*Foot Presentation.*—Forceps for holding the child's foot, similar to hæmorrhoidal forceps on a large scale, by Professor Nyrop, of Copenhagen; Lollini, of Bologna, exhibited by Dr. Priestley; and Gronning, exhibited by Professor Nyrop.

*Funis Presentation.*—Sir C. Locock's instrument for the reposition of the funis, and that of Dr. D. Davis's amongst Dr. Radford's collection.

*Impossible Labour.—Perforators.*—A great many, too numerous to name in detail, made after the usual fashion. Two special ones attracted attention—the one by Professor Braun, of Vienna, consisting of a large tube containing a circular-toothed saw and screw—in fact, it is a large trephining instrument, worked by a screw; the other, that of M. Lüer, with a bell-shaped end, containing two blades, with a screw in the centre working laterally. The difference between the two consists in this, that when the skull is cut through, in M. Lüer's the blades and screw fly back on account of a specially-constructed screw arrangement; whereas in Professor Braun's, it is necessary to retract the cutting part by reversing the direction of the screw.

*Craniotomy Forceps.*—About twenty-four in all, including those of Dr. Barnes, Sir J. Simpson (cranioclast), Churchill, Conquest, Hall, Davis, Lever, and Priestley; and the identical craniotomy forceps and hooks used by the late Dr. Merriman during his long course of Midwifery practice. In addition, there was a good display of vertebral hooks, crotchets, blunt hooks, and embryotomy scissors.

Amongst the *Decapitators* may be mentioned that of M. Matthieu, consisting of a canula, freely jointed at the upper end, so that it could be made to assume a curved or straight position. Within this canula ran a knife curved like a blunt hook, which could be projected from the sheath or retracted, when the end of the canula assumed the curved form. It is introduced guarded, and looks like a blunt hook. When applied round the neck, traction is made on the canula, and the knife exposed. After the cutting is over, the knife is readily sheathed before withdrawal. It is simple, and most useful. It could be used for polypi.

*Individual Collections of Instruments.*—Dr. Cory exhibited some twenty-three instruments, amongst them were the forceps of Levret (1747), three pairs of Smellie (1752), those of Lowder (1771-93), R. W. Johnson, a pair contemporary with Chamberlen (1700), Jacques Mesnard (1741), Burton (1751), and vectes of Lowder, Bland, etc.

Dr. Radford sent a very large number of antique instruments, exhibited on a separate table by themselves. Nine vectes, Ogden's, D. Davis, Bland, and others; about thirty pairs of forceps,—viz., those of Osborn, Smellie (short), D. Davis, Johnston, Bandelocque, Hamilton, Conquest, an antique French pair in two solid halves, Orme (short), Rivers (short), Haighton (long and short); Denman; Bandelocque's pelvimeter; Dr. Davis's funis replacer, crotchets, scoops, blunt-hooks; Davis's osteotomist and his guarded crotchet; Craniotomy forceps of Holme and others. The most curious was an instrument consisting of three blades, which when joined formed by their base (as shanks) a long screw, fitting into a wooden handle accurately wormed to correspond to the tripartite screw stem. Each blade can be introduced separately, the handle then fitted on, and the blades approximated to any required degree. Nothing is known as to the inventor.

*Suction Apparatus.*—Sir J. Y. Simpson's original bell-shaped, exhausted with attached syringe, was exhibited, and the modification constructed by Mr. Lüer in 1848 for use in craniotomy. Mr. Lüer proposed first to use a species of perforator, then to apply a long glass tube to which is attached an india rubber ring, which should fit closely to the child's head, to exhaust this tube, and thus get away as much brains as possible; then to apply another tube containing at its upper end two projecting arms capable of expanding laterally when introduced into the hole in the skull, and by which means a hold might be obtained in the cranium; then to exhaust again till the head collapsed completely. Messrs. Krohne and Sesemann, of Whitechapel-road, exhibited several complete complete cases of midwifery instruments for ordinary and consulting practice.

*Cephalotribes.*—Thirty in number; peculiarly novel to the eye of the English obstetrician. Sir J. Simpson's is the only English one amongst the number. At a glance one sees that they indicate a different style of practice—at any rate, of mechanical appliances, adapted to break up the child's head. In all the cephalotribes the screw power is connected with the right handles, indicating their inapplicability when the patient is placed upon her left side, according to English custom; in fact, they could only be used when the patient was lying upon her back. All have the fulcrum in the centre with the exception of two; viz., those of Assalini and Lazarewitch, which have what is well known as the "Assalini joint." In this case the working power is that of a common screw placed transversely at the centre of the instrument—an inconvenient arrangement, perhaps, in operating, and of deficient power. Some of the cephalotribes have open fenestra, but in the majority the blade is solid. Amongst these formidable instruments was the original one of Baudelocque, presented to the Obstetrical Society by Madame Petit Jean in 1865, weighing 4¾ lb., 21 in. long, with blades 1½ in. wide, by ½ in. in thickness. One wonders when the head is jammed in the pelvis how such a huge thing could be introduced without producing additional mischief. Sir J. Simpson's, the smallest, about half the size of the other, weighs 1½ lb., and is only 13 in. long; Professor Faye, 20½ in. long and 3 lb. in weight; those of Depaul, Assalini, Martin, 17 in. long, in weight 3 lb. 2 oz., made with open fenestra, and a curve as near as possible that of the pelvis, this being one of the chief points in the construction. There were others in which the two handles were approximated by means of a chain, which attached to a hook at the bottom of the right handle, then ran round a pulley at the end of the opposite handle, and, by means of a screw-like action, ran up along a bar placed parallel to the handle at its inner side, and reached up to near the junction with the blade: it was the transverse screw action prolonged upwards along the handle of the opposite side, so to speak. That of Dr. Etlinger and Hugenberger, 3 lb. 4 oz. in weight, and that of Dr. Braun, of Vienna, acted on this principle. Lazarewitch's smaller instrument weighed 2 lb., Killian's 5 lb. 2 oz. In some of the cephalotribes there was a combined chain-saw apparatus for breaking up the fœtus, as in those of Billi of Milan, Levret, Faye, and Pajot, four pounds in weight. The chain was passed through a little hole in a transverse piece fixed across the widest part of the fenestra of each blade on both sides, forming of course a bridge across the space or area contained by the blades of opposite sides intended for the child's head. This chain, when the instrument is applied, relaxes before the head or body of the child, and forms a loop over it, and by a see-saw action it is made to cut the opposing part through, until of course it becomes tense again, on the principle of the écraseur. Thus it is adapted for piecemeal delivery in cases of arm presentation, when the womb has contracted so forcibly that it is impossible to alter the child's position. The other cephalotribes were those of Martin, Nyrop, Scanzoni, and Hennig. Baron von Huevel's saw forceps, made somewhat on the same principle as the others for cutting the child's head off, the transverse chain-saw, however, remaining tense during the operation, its level being altered upwards or downwards, by a special mechanical arrangement, the pulleys at each side travelling along a groove in the inner aspect of each fenestrum from top to bottom. In some cases a windlass action is substituted for that of the transverse screw in the closure of the handles.

*Hæmorrhage After Labour*.—Weiss's tourniquet, a broad, concave pad, covered with leather, to compress womb, and a circular abdominal spring. Dr. Priestley's obstetric binder, pressure being made by a tourniquet acting upon a pad in front.

*Transfusion Apparatus*.—Those of Dr. Martin, of Berlin, consisting of a small curved and flattened canula and contained trochar, with a simple glass syringe; Dr. Lumley Earle; Dr. Blundell, improved by Fergusson; Mr. Harper, Dr. Graily Hewitt, and Dr. Aveling.

*Vesico-vaginal Fistula*.—A good many ingenious needles for the operation of vesico-vaginal fistula; a complete case of instruments, by Weiss; forceps for the contortion of thread, by Heppner of St. Petersburgh; Beaumont's needles; Dr. Sims' needles; Dr. Aveling's shot suture; and needles by Dr. Mesterton of Upsala, etc.

*Operating Table for Instrumental Delivery*, invented by Dr. Hewitz, exhibited by C. Nyrop, Copenhagen. A horseshoe table, adapted to support patients' buttocks and feet in the usual Continental dorsal position of delivery; easily folded and carried.

*Umbilical Hernia*.—Langhardt's umbilical belt exhibited by Weiss—an ivory pad to fill aperture, and hollow well-adapted pads outside with belt; follows movements of respiration. Pratt's simple umbilical belt, with a water pad, affording the equable resistance of fluid pressure. Pratt also exhibited trusses for femoral hernia, in which the pressure was made by means of a water pad, a great improvement upon ordinary trusses.

*Support during Labour*.—Obstetric back supporter exhibited by Dr. Woodward—a pad for the back, with circular bandage, and rack to increase pressure.

*Binders after Delivery*.—A great variety by Salmon, Pratt, and Salt, of Birmingham, Dr. Priestley's consisting of stout material cut to a proper shape, and tightened by simple buckles and straps in front.

*Ergot of Rye*.—Exhibited by Cooper, chemist, 26, Oxford-street.

Instrument for measuring the length of babies, consisting of a board 27 inches long by 11 wide, with a sliding piece at one end like a bootmaker's wooden measure, and a graduated scale.

*Lactation*.—Bandages for supporting the breast with a large circular water-pad, which adapts itself to the shape of breast. Exhibited by Pratt, of Oxford-street. Various breast pumps, etc.

*Feeding Bottles*, by Cooper, Oxford-street.

*Chloroform Inhalation*.—The inhalers were those of Dr. Townley, Dr. Skinner, Dr. Sanson, and Dr. Kidd. Mr. Baker Brown, jun., exhibited his chloroetherine, for use in ordinary midwifery cases.

*Instruments for Producing Local Anæsthesia, Dr. Richardson's*, with single and double jets. Exhibited by Messrs. Krohne and Sesemann. Also, a probe-shape tube for inducing local anæsthesia about the os uteri, or introducing a spray of any solution into its cavity.

*For Resuscitation*.—Galvanic coil, by Ladd.

## REVIEWS.

*A Treatise on the Principles and Practice of Ophthalmic Medicine and Surgery*. By T. Wharton Jones, F.R.S., Professor of Ophthalmic Medicine and Surgery in University College, London; Ophthalmic Surgeon to the Hospital, etc. Third edition, recast, much enlarged, and illustrated by numerous additional engravings. John Churchill and Sons. 1865.

The third edition of such a well-known work as that of Mr. Wharton Jones would not require more than a bare announcement, were it not for the fact that the progress of Ophthalmic science since the last edition appeared has rendered it necessary to introduce a very large quantity of totally new matter. A very brief notice of some of the more important of these additions will be sufficient in the case of a book which has been so long before the public.

The chapter on the Ophthalmoscope is completely new. Mr. Jones gives a brief, but clear explanation, aided by diagrams, of the optical principles upon which the instrument is constructed, showing the mode of exploring the fundus of the eye both by the direct and the indirect image. He then describes the healthy, and some of the more important of the morbid appearances which are thus revealed; a more minute description of some of the latter being given in subsequent chapters, in which the diseases in which they occur are the subjects of consideration. The letter-press is illustrated by two of Professor Liebreich's beautiful chromolithographs, reproduced by his permission; as well as by numerous woodcuts, printed in red ink; and the chapter, though necessarily very much condensed, contains a large amount of valuable information.

Another totally new topic in the present edition is the treatment of glaucoma, or, as Mr. Jones prefers calling it, "arthritic posterior internal ophthalmia," by iridectomy. With regard to the pathology of the disease, his views accord, in the main, with those of most modern writers on the subject, being to the effect that the fundamental morbid condition is great venous congestion of the choroid and retina, with effusion of fluid into the cells of the vitreous humour. He makes one suggestion which we do not recollect to have seen before, that in some cases the hardness of the eyeball is due, not alone to intra-ocular pressure, "but also to extra-ocular pressure, arising from a condensation and shrinking, with loss of elasticity of the tissue of the sclerotica." Such cases must, we apprehend, be rare; as with such a sclerotic complication, it would be difficult to explain the complete and rapid return of the normal tension which follows a successful iridectomy.

Mr. Jones is by no means a warm advocate of iridectomy as a cure for glaucoma. He considers the claim which has been set up for the operation as an unconditional cure, as unfounded. He admits that in acute cases it proves a useful auxiliary to treatment: with regard to such cases it may be said, "*remedium anceps melius quam nullum.*" In chronic glaucoma he believes the result of the operation to be much less favourable, and refers, as a proof of its inefficiency, to the table of cases in the "Ophthalmic Hospital Reports" for January, 1860.

We confess that we cannot see much force either in the facts or in the arguments adduced by Mr. Jones in support of his views, which seem to indicate a reaction against the somewhat exuberant claims which were set up by a few enthusiasts on the first introduction into this country of Professor V. Gräfe's method of combatting a disease of extreme intractibility. We believe that the great majority of Surgeons who have given it an extended and impartial trial are agreed as to the utility of iridectomy even in chronic glaucoma as a means of subduing pain, and of arresting the farther progress of the disease; though, of course, no one expects that any mode of treatment will restore vision where the retina has been disorganised.

It will be observed that the name of Professor V. Gräfe does not once occur in connexion with this subject.

We have been somewhat disappointed with the chapter on cataract. It contains a good deal of new matter, including some very valuable and practical remarks in the form of "General Observations and Questions Regarding the Operations for Cataract." It contains most minute and elaborate instructions for the performance of the old operations; even "reclination," now so rarely adopted, is favoured with seven pages; but the new operations of Schuft and Mooren are merely alluded to in a very few lines, and the operation by suction of Mr. Teale is not mentioned at all. Surely these are grave omissions. No one can be better aware than Mr. Jones that these operations have been considered worthy of the most careful trial, and that they have ultimately been adopted to a very large extent by a large proportion of the most eminent ophthalmic Surgeons throughout this and other countries, and that the literature of the subject, as contained in the British and foreign Medical journals, is abundant and elaborate. Is it right that students who apply to this work for instruction should find long and minute disquisitions upon exploded proceedings, while such operations as those of Schuft and Mooren are dismissed in a few lines, and that of Mr. Teale is suppressed altogether?

But our limits are reached, and our observations must be drawn to a close. There is much in Mr. Jones's book which is well worthy of perusal, even by the most advanced students, though in many instances there clings to it a flavour of antiquity. We would especially direct the attention of our readers to the chapter on the adjustment of the sight and the use of spectacles, in which the recent investigations of Dr. Donders and others are discussed with a perspicuity and thorough knowledge of the subject, which is the result of long and patient scientific research.

The book terminates with an ample glossary, which will be welcomed by those who believe that uncouth combinations of Greek, Latin, or Arabic have any necessary connexion with the study of ophthalmic Medicine or Surgery.

## PROVINCIAL CORRESPONDENCE.

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## SCOTLAND.

EDINBURGH, March 28.

ALTHOUGH there has been no event of any peculiar Professional interest since my last letter, the ordinary routine of work during the winter has produced matter of sufficient importance to entitle one or two subjects to be selected and chronicled. Many very valuable papers have, during the session, been brought before the Medico-Chirurgical Society, of which, however, it would be impossible to give an extended account. We will refer in detail to only two of these, not only because of the great ability with which the subjects have been treated, but also as they contain matter of a novel and practically important character. A paper was read at a recent meeting by Dr. Sanders, "On a case illustrating the supposed connexion of Aphasia (loss of the Cerebral Faculty of Speech) with Right Hemiplegia, and Lesion of the External Left Frontal Convolution of the Brain." Dr. Sanders introduced his case by an explanation of the title and a reference to the classification of aphasia into *amnesic* and *ataxic*; the former being a loss of speech dependant on imperfect memory of words, and, therefore, a psychical defect; the latter, on loss of speech due to a lesion of the central and supposed cerebral apparatus of co-ordination for the movements of articulate speech. A distinction of comparatively simple application can be drawn from the circumstance that in the former (amnesic) variety there is loss of the power of writing as well as of speaking, while in the latter (ataxic) the patient so far retains a knowledge of words as to be able to write but not to articulate them. The discussion of the etiology of this disease is new to this country. One of the first important steps towards its localisation was made, in 1825, by Bouillaud, who referred aphasia to a lesion of the anterior cerebral lobes. M. Dax afterwards limited the cause to disease of the left hemisphere. In 1861, the lesion was still further limited by M. Paul Broca to the "posterior third of the third external or inferior left frontal convolution." Dr. Sanders' case confirms the view of M. Broca. This patient was a domestic servant, Margaret M., aged 43, who was admitted into the Royal Infirmary suffering from defective memory and imperfection of speech. She was described as showing great distress at her inability to articulate distinctly. A curious symptom was the frequency with which she misnamed things and mispronounced words. She called druggist "yollit," and the firm of Duncan and Flockhart, "Doctor and Forrit." When admitted, there was slight paralysis of the right side, and the left pupil was smaller than the right. In a short time the paralysis extended to the left leg, but this was afterwards traced to an obstruction of the left femoral artery, and suggested the idea that the disease in the left cerebral hemisphere might be due to embolism of the artery of the left Sylvian fissure. On one occasion she was asked to sign her name, and wrote the capital "J," but saw her mistake, and made several ineffectual attempts to correct herself, expressing her disappointment by repeatedly exclaiming, "I can't do it; do it." At the patient's death permission was given to examine the brain alone, and here no disease of any description was found, except at the *posterior portion of the external or inferior left frontal convolution*, and also in the left parietal lobe. We believe that Dr. Sanders has the merit of being the first to give a description in Great Britain of a case of aphasia completed by an autopsy. In connexion with this subject, Mr. Turner, the able and popular Demonstrator of Anatomy at the University, delivered an interesting lecture before the Royal Medical Society in which he explained the principles on which were based the subdivision of the surface of the brain of which future cerebral pathology must take cognizance. We believe with Dr. Sanders that these anatomical and pathological investigations, and especially the remarkably beautiful result in asphasia, will necessitate a greater accuracy in future descriptions of changes on the surface of the brain, and, possibly, a subordination to the system of convolutions which we owe to Gratiolet.

A very valuable paper was read at the last meeting of the Medico-Chirurgical Society by Dr. John Duncan, "On the Galvano-puncture of Aneurisms." Dr. Duncan's patient was a man of 45, with a thoracic aneurism, which first made its appearance in 1863, and in November, 1865, was described as covering one-half of the sternum and about a-half of each clavicle, measuring laterally over its highest point thirteen inches, and protruding so far that when the patient sat stooping from weakness his chin rested on it. Its surface was covered with nodulated eminences, several of which increased rapidly until from one a slight oozing of blood occurred on December 2. The father of the author, Dr. James Duncan, had some years ago made a trial with galvanism for the cure of an abdominal aneurism, and the result had been so extremely satisfactory that it was determined to attempt to postpone death for a short time in this case by the same means. Accordingly, on December 3 the first application was made. Two large needles, insulated to about an inch and a-half from their points, were introduced one in each side of the sac, not far from its base, and were so placed that an inch of each must have overlapped, while lying about that distance apart. These needles were then converted into electrodes by being connected with a Bunsen's battery of four cells. A continuous galvanic current was passed through the aneurism for three-quarters of an hour, by which time there was an apparent diminution in the pulsations. The connecting wires were exchanged, so as to make the positive electrode negative, and the negative, positive. After an application of two hours and ten minutes the needles were withdrawn, and it was found that there was a very considerable diminution in the pulsation, and a somewhat alarming accumulation of decomposed gases at the upper part of the sac. On the following evening the galvanic treatment was repeated, a more powerful battery having been employed, and the application continued for only twenty-five minutes. The electrolytic action was on this occasion very energetic, and tympanitic percussion was obtained in ten minutes at various parts. Although the result of this treatment was extremely encouraging in so far as the risk of immediate death from hæmorrhage was averted, and as the attempt to coagulate the contents of the anterior portion of the sac was successful, the patient gradually sank and died on December 9. The autopsy showed an aneurism which had extended itself to a formidable extent, and demonstrated the power of the galvanic current in coagulating the contents of such a sac. Not less interesting than the narrative of the case was the able summary of the history and prospects of this method of treatment, which occupied the greater portion of Dr. Duncan's communication. The data are as yet limited, but comparing the results of galvano-puncture with those of ligature, as contained in Norris's tables, the disadvantage certainly appears to rest with the latter.

| | Total number of cases. | Deaths. | Percentage of deaths. |
|---|---|---|---|
| Ligature . . | 579 | 198 | 33·1 |
| Galvano-puncture | 54 | 7 | 12·9 |

Hitherto it has been found that cures have been most frequently obtained with inflammatory accompaniments, next by immediate and complete coagulation, and, least frequently, by partial coagulation and subsequent fibrinous deposition. It would appear that by a few precautions, the principal being a complete insulation of the part of the needle in contact with the perforated textures, galvano-puncture may be so employed as to avoid the first of these results, and so an important objection to its application may be eliminated. Dr. Duncan concluded by expressing his belief that the operation is one capable of valuable extension, and deserving of more attention than it has as yet received, were it only because of the success it has met with in the hands of Peterquin, Abeille, Ciniselli, and Nélaton.

We feel very much inclined to criticise the title which Dr. Duncan, following the example of previous writers on this subject, has given to his communication. Galvano-puncture, we would submit, suggests the idea of an operation in which the puncture is the main object, and in which this is attained by means of galvanism. This method of treating aneurism consists, in reality, of an application of galvanism to the blood, and the puncture is obviously only a method of gaining access to the blood within a sac. We should suggest, as being more correct and definite, the substitution of electrolysis for galvano-puncture, the former being the usual term to describe that galvanic decomposition which is the object of the operation.

Our Winter Medical Session terminates this week, and an unusually short one it has appeared. The true close of the session will, however, take place on April 2, when the Lord Rector of the University, Thomas Carlyle, is to deliver his inaugural address.

## GENERAL CORRESPONDENCE.

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### "REPTILE'S HEART ENEMA."

Letter from Dr. Leared.

[To the Editor of the Medical Times and Gazette.]

Sir,—In an article in the *Medical Times and Gazette* of Feb. 24 on india-rubber enema apparatus, you speak of a form of the instrument as "workable with one hand, and the construction requiring a simple act of expansion and contraction, like a reptile's heart." Your mention of the heart reminds me of a matter I had almost forgotten, which, is, nevertheless, a somewhat novel incident in its bearing on the "History of Inventions." The application of the principle of the present invention, for which I was indebted to nature, I hold to be mine, and its application to the enema apparatus is curious.

In the beginning of 1865 I was very intent on perfecting an apparatus by which the formation of the sounds of the heart could be demonstrated, and which should be a close copy of the heart itself. There were great difficulties in the way, and a friend advised me to apply to a Paris firm famous for the ingenuity of their work in india-rubber. This I did through their agent, then, and possibly still, in London. I was assured that the apparatus would be perfected as desired. After many inquiries and several months had elapsed without any result, I was informed, however, that my order could not be executed. Very soon afterwards I was not a little surprised to see in the chemists' shops an india-rubber enema apparatus bearing the stamp of the firm to which I had given the order, constructed not only on the principle, but almost identical with my proposed heart-sound apparatus. The only difference was that the diameter of the tube was lessened, and the valvular arrangements were more simple. The very form and size of the propeller or heart were preserved. Copies of the drawing and descriptive letter sent to the Paris manufacturers are in my possession, and afford ample proof of the correctness of the above statements.

I am, &c., Arthur Leared.

March 27, 1866.

### THE COMMITTEE OF THE MEDICO-CHIRURGICAL SOCIETY ON THE HYPODERMIC METHOD.

Letter from Dr. R. E. Thompson.

[To the Editor of the Medical Times and Gazette.]

Sir,—The Scientific Committee appointed by the Royal Medical and Chirurgical Society to investigate the physiological and therapeutical effects of the hypodermic method of injection, is desirous of obtaining from the Medical Profession generally, communications of any facts bearing upon the subject, and, knowing your courtesy in matters of this kind, they have directed me to ask you to aid them in their appeal by the insertion of this letter in your columns.

The Committee requests to draw the attention of Medical men to the following points:—Whether the drug acts in the same way by the skin, the mouth and the rectum? Whether the effects are more or less rapid, or energetic, or permanent by the skin than by the other methods of administration? Whether any local effects follow the hypodermic injection?

Communications may be addressed to me at the Society's Rooms in Berners-street. I am, &c.,

Reginald E. Thompson,

March 28, 1866. Secretary to the Committee.

### ADVICE TO CLERGY ON THE TREATMENT OF EPILEPSY.

Letter from Dr. G. Rogers.

[To the Editor of the Medical Times and Gazette.]

Sir,—In the *Church Times* of March 31 I find the following paragraph in that portion of the paper which is devoted to reviews:—

> "We desire to call the attention of the clergy especially to a little book which will enable them to suggest a remedy for some of the most distressing cases of illness which they frequently discover among their parishioners. Epileptic affections have been long considered usually incurable. Mr. Baker Brown, F.R.C.S., the eminent Surgeon, has discovered and applied with great success, at the London Surgical Home for Gentlewomen and elsewhere, a Surgical remedy for certain forms of epilepsy and kindred diseases. He has published through Mr. Hardwicke a little volume of cases, which prove incontestably the success of the treatment, and which the clergy will be doing a service, especially to their poorer parishioners, by bringing under the notice of Medical men, any of whom can, if possessed of ordinary Surgical skill, perform the operation with but slight assistance."

It says little for the judgment of the editor of a religious journal, who, by the way, is alway falling foul of those who pronounce shibboleth somewhat differently from himself, that he should in this direct manner aid in diffusing advertisements of books relating, however innocently, to sexual disorders, when the Medical press has so strenuously exerted itself to check this evil, and thus to further the great interests of morality. Observe, I am not involving in this charge the writer of the little book. He is an eminent Surgeon, and if honours are worth anything, his prove him such, for they occupy fifteen lines of the title-page. But brilliant as is his operating skill, and philanthropic as are his endeavours, "dictated by the loftiest and most moral considerations," to interest "philosophical and charitable minds"(a) in his plan of treatment, I, for one, think any one is mistaken, however well meaning, in bringing "spiritual advisers" to take part in this "vast and important consideration affecting the well-being of the whole human race; "(b) whereas every one who reflects calmly upon the matter knows that it is one exclusively appertaining to Medical "advisers."

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(a) Pp. 12—13.

How are the clergy to "suggest a remedy," as the sapient *Church Times* reviewer puts it, or to bring cases under the notice of Medical men, unless, at great risk to their own moral well-being and well-doing, they vex the minds of their "poorer parishioners" (not the richer ones, mind you) with prurient inquiries, to which even those alleged to exist in manuals of confession are purity and incorruption? In perusing Mr. Baker Brown's treatise I find (p. 13) the name of Dr. Rogers amongst other gentlemen who have been led to adopt the views and treatment therein detailed. I will only add, in conclusion, that this gentlemen is not, Sir, your obedient correspondent, G. Goddard Rogers, M.D.

Grosvenor-street, April 2, 1866.

## THE DOSES OF MEDICINES.

### Letter from Dr. C. R. Bree.

[To the Editor of the Medical Times and Gazette.]

Sir,—It is impossible for one moment to admit the extraordinary plea set up by Dr. Farre that the doses of medicine in his posological table are those of Dr. Pereira, and not his. Turning to the title-page of his book, I find "Arranged in conformity with the British Pharmacopœia, and adapted to the use of Medical Practitioners, chemists and druggists, and pharmaceutical students."

According to Dr. Farre's plea, then, he is to "arrange" and "adapt" Pereira's Materia Medica according to a work which has altered the strength of the medicines; and yet the doses are to remain as fixed by Dr. Pereira. On consideration, I think Dr. Farre will admit that such a plea is untenable. For all practical purposes—for the use of "students," "chemists and druggists," etc., Dr. Farre's table is new; and coming before the world under the authority of one of the editors of the British Pharmacopœia, I must be altogether excused if I demur to Dr. Farre's refusal to accept its responsibility.

Last week there was a trial at Brighton, in which a chemist was charged with causing death by giving thirty drops of the tincture of aconite by mistake. The symptoms were those undoubtedly of poisoning by aconite. One of the Medical witnesses swore that ten drops might cause death under certain conditions of the heart. But suppose Dr. Farre's table had been produced in court, wherein the dose is given as ♏v. to xv., would there not have resulted one of those clashings of Medical opinion which lawyers so delight in exposing? Again, Dr. Nevins is a lecturer on Materia Medica and Therapeutics, and a well-known authority. In his Analysis of the British Pharmacopœia, p. 147, I read—"*Belladonna Extractum*: Dose, gr. $\frac{1}{6}$ to gr. $\frac{1}{2}$. *I have seen violent effects follow the last-named dose.*" Surely it would be a reasonable inference that in this case double the dose would have caused death, and yet, on turning to Dr. Farre's table I find—"Ext. Belladonnæ, gr. 1 to 3," without any comment. In the case of death from gr.j., would any judge allow Dr. Farre to put in the plea of irresponsibility, because Dr. Pereira wrote the dose, and not himself?

Let us take the alkaloid of belladonna—atropia. Dr. Farre says the dose is that of Pereira, but, for the reason above stated I must decline to accept this excuse. Turning to the English edition of Trousseau, by Dr. Bazire, p. 96, I find the distinguished French Physician stating that the treatment which for years he has found most useful in epilepsy is that which begins with $\frac{1}{100}$th of a grain of atropia once a-day.

Dr. Farre gives the minimum dose as $\frac{1}{30}$th of a grain—more than three times the dose proved to have been successful by Trousseau. Surely comment upon such a discrepancy is unnecessary. Dr. Farre asks me what I think of Dr. Pereira ordering ♏x. to ♏xx. of the t. lobelia to children two years old. I answer that I have seen ♏x. every four hours produce violent sickness and collapse in an adult in twenty-four hours, and therefore I designate Dr. Pereira's dose to children as altogether unjustifiable, and that to adults dangerous to life, as the inquest upon the victim of a celebrated quack abundantly proved.

Let me give an ideal, though far from improbable case, to illustrate the great danger which may be caused to human life by the use of Dr. Farre's posological table. Suppose one of the men who spend their days and nights in any way except hard work during their London student's life manages by cramming to get through his examination, and is sent for post haste to take the practice of a brother Practitioner just dead in a rural district. Let us suppose that after a hard day's work a messenger arrives to say that his wife "has a great pain at her heart and is very bad"—a not uncommon message in country places. Our new Practitioner, in the course of his cramming, remembers aconite having been recommended for cardiac pain, and he finds the remedy among his defunct friend's drugs, properly labelled "Tinct. aconiti." But the dose? He is uncertain—"had got it up, but forgot it again." So the last new work by the editor of the British Pharmacopœia is consulted, and he finds the dose ♏v. to ♏xv., and as the poor woman is "very bad" he will send her the medium dose, ten minims. Now, it so happens that our friend's predecessor was a Scotchman, and always used Fleming's tincture—a name which probably his successor never heard of. The tincture is made up and delivered, labelled "A dose (ten minims) to be taken every two hours." Now, I ask, is such a case possible? If it is, which I firmly believe, then would that poor woman's life be sacrificed because the dose of the tincture of aconite was given without any explanation as "from five to fifteen minims" in the posological table attached to Pereira's Materia edited by Dr. Farre. That such a lamentable result should happen, no one, I am sure, would regret more than that gentleman.

Again, suppose a young "Medical Practitioner" in every respect well educated, or a "chemist and druggist," or a "pharmaceutical student," were to be called upon to prescribe for a case of asthma or dyspnœa. They have all read that lobelia is a valuable medicine in such cases, but having no practical experience themselves, they refer to Dr. Farre's posological table, and seeing the dose of the æthereal tincture of lobelia inflata is there stated to be from f. ʒj. to f. ʒij., they immediately order the drug in these doses. Will Dr. Farre or any other Practitioner of experience in the United Kingdom deliberately state such practice is free from risk?

I need not go over the old ground of colchicum and strychnia, I have only again to repeat my firm conviction that 15 or 20 minims of the former and $\frac{1}{40}$th of a grain of the latter are the proper minimum doses of these drugs.

Dr. Farre has made a greater mistake than I did when I spelled oxide as it used to be with a "y." Dr. Christison in his Dispensatory gives the dose of pil. colocynthidis et hyoscyami as it is made with socotrine aloes, whereas the new pill to which I alluded is made of Barbadoes aloes, and I am indebted to Dr. Christison for one of the most useful prescriptions in practice for that compound as it is ordered in the British Pharmacopœia, and of which I took down the dose in 1859 of gr. 2 to 4 from Dr. Christison's own lips.(c)

In conclusion, let me observe that I could extend these remarks to a very great length, for there are very many similar cases to those which I quoted at random equally faulty,—such as the minimum doses of acid. hydrochlor. dil., ♏xx.; acid nitrici dilut., ♏xv.; ammoniacum, gr. x.; balsum Peruvianum, ʒss.; borax, ʒss.; ergot, gr. v.; extractum nucis vomicæ, gr. $\frac{1}{2}$; hydrarg. c. creta, gr. v.; liq. ammon. acetatis, f. ʒj.; misit. ferri co., ℥j.; ol. crotonis, ♏j.; pulv. ipecac. c. opio, gr. v.; spt. ether nitrici, f. ʒj.; spt. ammon. aromat., f. ʒss.; spt. chloroformi, ♏xx.; syr. ferri iodidi, ʒss.; syr. scillæ, f. ʒj.; tinct. benzoini co., f. ʒj.; tinct. camph. c. opio, f. ʒj.; tinct. digitalis, ♏x.

I trust, however, that the new edition of the Pharmacopœia, notwithstanding the remarks of Dr. Farre, will contain a posological table which will, at least, tell us how we are to prescribe the preparations which the Committee have altered in strength, and that in such a table there will be a sufficient range between the minimum and maximum doses as will conduce on the one hand to the safety of the public, and, on the other, will enable the Practitioner to modify his dose in the direction which his knowledge and experience will permit him, and that such a table will reflect more credit upon its compilers than the literary productions of the General Council have hitherto done. I am, &c.,

Colchester, March, 1866. C. R. Bree, M.D. Edin.

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Académie de Médicine.—M. Richet has just been elected into the Section of Operative Medicine, in place of the late M. Malgaigne, by 53 votes of 73 voters present.

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(b) P. 13.

(c) Of course this was before the publication of the British Pharmacopœia; but the composition of the pill was exactly the same as that introduced by Dr. Christison into the British Pharmacopœia.

## REPORTS OF SOCIETIES.

## ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MARCH 13, 1866.

DR. ALDERSON, F.R.S., President.

A PAPER, by Dr. JOHN CADDY, Surgeon R.N., was communicated by Dr. HODGKIN, on some

### NOTES AND OBSERVATIONS ON FEVER DURING SERVICE ON BOARD H.M. SCREW CORVETTE, "PYLADES," ON THE WEST COAST OF MEXICO IN THE YEAR 1860. (WITH MAP.)

After referring to the previous services of the *Pylades* at Calcutta at the time of the Indian Mutiny, and the subsequent beneficial change produced on the crew by the climate of Vancouver's Island in 1859, the author gave a statistical statement of the fever cases on board when on the west coast of Mexico in 1860, and drew inferences as to the greater liability of attack in the ratio of greater age, and of the excess in length of the sickness when treated on the coast to that treated in the ship. The climates and geographical position of Mazatlan, Panama, La Paz, Guaymas, San Blas, etc., and the comparative lengths of their dry and rainy seasons, were then described. The *Pylades* arrived at Mazatlan in January, 1860, and details were given of the first cases of remittent fever which occurred on board as they entered the Mexican tropics. Numerous cases of continued fever followed after February 21, which were considerably added to by the occurrence of duties which involved much solar exposure, and the constant alternate landing of officers and men for duty on shore at San Blas, up to the beginning of June. The number of cases increased during the short passages between Mazatlan, La Paz, and Guaymas, up to the end of September; but from that time the men's health improved as the cool season advanced. The author then described the general symptoms seen in patients when first attacked, and the usual course of those developed as the fever increased. Only one case proved fatal. Black vomit was of rare occurrence, it being unknown in the fevers at the commercial towns of San Blas, Mazatlan, and Guaymas. The author, in describing his treatment, which proved most successful, included fresh breathing-air, personal ablution, close cutting of the hair, full supply of cooling drinks (those made with the mineral acids being preferred), pouring of sea-water on the head, mustard sinapisms and chloroform liniments, and the giving of sesquicarbonate of ammonia in conjunction with chlorate of potash early in the fever, the ammonia having been suggested to the author by a previous West Indian experience in 1845-47, and at Calcutta in 1858. With the cessation of active symptoms, quinine and iron usually and speedily concluded the treatment of the cases. The value of the above treatment, the author said he had been able to confirm by a subsequent ten months' service in the Gulf of Mexico in 1862, and again among the West Indian Islands in 1863 in H.M. screw frigate *Phaeton*. Details followed of the total number and length of cases of fever in these latter expeditions, and a summary of other diseases, which made up the total of 518 cases of sickness on board the *Pylades* in 1860, concluded the paper.

The PRESIDENT said the disease could not have been grave, or the treatment must have been very good to have resulted in so great success. There had been no autopsy to confirm any opinion as to the type of the fever.

Mr. GASKOIN thought papers on fever sent by Surgeons from remote parts of the world were most welcome contributions. He supposed the fever in Dr. Caddy's cases was remittent, as during recovery it assumed an intermittent type, and there were as complications hemi-crania and paralysis. It was not clear to what this fever could have been due. Attention had recently been directed to the effect of "coaling" under an ardent sun as a possible cause of fever. Mr. Gaskoin concluded by saying that a few months ago he saw in St. George's Hospital cases of spotted fever treated by ammonia, and that—whether the ammonia was theoretically wrong or not—the patients thus treated did well.

Dr. CADDY said his object was to bring forward the treatment by ammonia as treatment against that by calomel every four hours. The calomel treatment produced hypercatharsis and retching, and these were supposed to be symptoms of the disease. His treatment by ammonia had been suggested by the valuable researches of Dr. Richardson. He (Dr. Caddy) had observed that cases of tropical fever—the so-called yellow fever being an exaggerated type of tropical fever—terminated sometimes by serous apoplexy. In ammonia a readily absorbable pabulum was supplied to the blood; it stimulated the heart and arteries without exciting the brain.

Dr. HENRY G. WRIGHT asked if the author had noticed any difference in the fevers in different races of men. He (Dr. Wright) had crossed Panama in 1852, whilst the railway was making. There was a Hospital for Chinese coolies, who died at an enormous rate. They, however, would not stay in the Hospital, but went out into the woods to die. He had asked the Doctor, an American, if he had observed any difference in the symptoms when the fever attacked a Chinaman or a native. The only thing was that the Chinese did not suffer from headache, and this might be explained by the fact that a Chinaman always walks about with his head uncovered, unless he can afford the luxury of an umbrella.

Dr. CADDY said he had had no experience of fevers attacking Asiatics.

Dr. WEBSTER said that cases of fever on board ship were milder than cases on shore. This had been remarked in many parts of Europe. He instanced the yellow fever at Lisbon.

Mr. SPENCER WELLS said most Naval Surgeons would differ from Dr. Webster, as they frequently observed that men newly arrived in places where any disease was endemic, suffered much more severely than the acclimatised inhabitants. Many instances could be referred to where sailors suffered severely from remittent and intermittent fevers soon after arriving in places where the residents were quite unaffected. Then with regard to the coolies in Panama, rather than accept the explanation of the difference in the symptoms of fever being due to the covering or non-covering of the head, he should think the question one of race and climate. When any endemic, epidemic, or contagious disease appeared for the first time in any of the chief varieties of the human race, the mortality was much greater than when it attacked a race of men who had been protected by a previous attack, or had inherited some protection from forefathers who had suffered.

Dr. WRIGHT said the inhabitants of Panama were chiefly emigrants from the United States.

Dr. POLLOCK considered that the author's cases illustrated a form of gastric remittent fever with which he had formerly been familiar when practising in Rome, and which appeared to him to be dependent on malarious influences less powerful than those which determined the more perfect forms of tertian and quotidian. The Roman fever was characterised by great prolongation, many cases lasting from forty to sixty days, by daily exacerbations without distinct remissions, and by marked irritation of the gastro-intestinal mucous membrane, shown by vomiting, diarrhœa, and a morbidly clean and red glazed tongue. Above all, there was much intolerance of drugs. Dr. Pollock had lost many cases by an over-active and so-called "heroic" treatment in the early days of his practice, and had in the latter years of his residence in Italy often declared to the friends of the patient that he felt bound to abstain from prescribing. Quinine was only tolerated when the gastric irritative symptoms had manifestly subsided, and the type of fever was much less under the control of anteperiodic remedies than the more defined intermittents. The treatment described by the author (ammonia in effervescence with citric acid) did not appear to Dr. Pollock to be identical with that by uncombined ammonia, which possessed directly stimulating properties little likely to meet the requirements of the case.

Dr. CADDY said that at first he gave the ammonia with limejuice, but afterwards unmixed. He had observed that the acetate of ammonia purged; the citrate agreed well.

MEDICAL CHARITIES.—The following Medical institutions will benefit under the will of Miss M. F. Woodburn, of Kensington-park-gardens, lately deceased, viz.:—The Hospital for Consumption, Brompton, £1000; St. Mary's Hospital, Paddington, £500; the Metropolitan Convalescent Institution, £300; the Sea-side Convalescent Hospital, £300; the City of London Hospital for Diseases of the Chest, £300; the Notting-hill and Shepherd's Bush Dispensary, £300; the Royal National Sea-bathing Infirmary, £200; the Westbourne Dispensary, £200; and the Kensington Dispensary, £50. All legacies to the above and other institutions not strictly Medical benefited under the will to be paid free of legacy duty.

## OBITUARY.

### DR. DELATTRE, OF DIEPPE.

*La Vigie de Dieppe* reprints an account of this lamented Physician, from the graceful pen of his friend and Medical adviser, Dr. Moriarty. Dr. Delattre took his degree in Paris in 1822, and practised for nearly twenty years in Dieppe. He was Professor of Agriculture, of Physics as applied to the Arts, ex-director of chemical works at Fontenay-aux-Roses, and member of many learned societies. He published a classical Medical dictionary, dedicated to the late Duke of Orleans, and made discoveries in therapeutics. Some one has said that a Doctor should be learned and honest. Dr. Delattre was both, and in a larger sphere he would have been a remarkable man. He lived simply, was habitually silent and diffident, but his shyness, the attribute of true genius, did not lessen his merit. But you required to know this guileless man intimately to appreciate the depth of his learning and the versatility of his genius. He was an indefatigable worker, and Dr. Moriarty thinks, from conversations he had with him, must have left a mass of unpublished materials. He died from cardiac disease. "It was," says Dr. Moriarty, "evident that the long and fatal malady was near its end, and there was something grand and edifying at this solemn moment in the peace with which he awaited death with manly courage and Christian trust. At the last moment he bade farewell to his daughter as naturally as if he were setting out on a journey." As is well known, he devoted his time and learning with prodigality to the public service, and his death is a serious loss to the town and neighbourhood of Dieppe.

## MEDICAL NEWS.

**Apothecaries' Hall.**—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, March 29, 1866:—

Henry Burrill Glaister, Southwell, Notts.; James Webb Booth, Queen-street, Huddersfield; Henry Warlow, Haverford West; George Cooper Sanders, Earlswood, Red-hill, Surrey; John Henry Simpson, County Asylum, Gloucester; William Gillett, Westminster.

The following gentlemen also on the same day passed their First Examination:—

Lancelot Newton, St. Bartholomew's Hospital; Lawrence Clapham, St. Bartholomew's Hospital.

### APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

**Beamish, M.**, M.D., has been elected Vice-President of the County and City of Cork Medical Protective Association.

**Clayworth, C. C.**, L.R.C.P. Edin., has been appointed House-Surgeon to the London Hospital.

**Harrison, Mr. Reginald**, has been appointed Junior Surgeon to the Liverpool Northern Hospital.

**Lyons, R. D.**, M.B., F.K.Q.C.P.I., has been appointed to the Richmond Hospital, Dublin.

**M'Cormack, M. J.**, M.B., has been appointed Medical Officer of Health for the Borough of Southampton.

**Roberts, F. T.**, M.B., B. Sc. Lond., has been appointed Physician to the Liverpool Northern Hospital.

### BIRTHS.

**Christie.**—On April 1, at Pembroke House, Hackney, the wife of T. B. Christie, M.D., of a daughter.

**Dunlop.**—On March 29, at Holywood, County Down, the wife of A. Dunlop, M.D., of a son.

**Hubbard.**—On March 27, at 22, Ladbroke-gardens, Notting-hill, the wife of W. Hubbard, L.R.C.P., of a daughter.

**Neilson.**—On April 2, at Blairgowrie, N.B., the wife of James Neilson, of a son.

**Nowell.**—On March 19, at Cornwall Villas, Westbourne-park, the wife of A. H. Nowell, L.R.C.P. Edin., of a son.

**Sealy.**—On March 28, at Oakland's-park, Weybridge, the wife of G. J. Sealy, M.D., of a daughter.

**Smyly.**—On March 28, at 8, Merrion-square, North Dublin, the wife of P. C. Smyly, M.D., of a son.

### MARRIAGES.

**Bolton—Orpew.**—On March 27, at Queenstown Church, A. J. Bolton, M.B., Assistant-Surgeon R.N., to Geraldine Francis, third daughter of the late T. H. Orpew, M.D.

**Latham—O'Hara.**—On March 21, at Ballymoney, T. Latham, M.B., to Anne, daughter of C. O'Hara, Esq.

**Wilkinson—Leadbeater.**—On March 22, at the Cathedral, Manchester, T. J. Wilkinson, L.R.C.S. Edin., to Miss Jane Leadbeater.

**Wise—Sharp.**—On March 29, at St. Margaret's, Plumstead, A. Wise, M.R.C.S., to Marie Jane, eldest daughter of John Sharp, Esq.

### DEATHS.

**Beckett, A. R.**, L.F.P. and S. Glasg., at Liverpool, on March 16, aged 28.

**Browne, Robert Cave**, M.D., at Barnet, on March 22, aged 66.

**Cambridge, Dr. S.**, at Cheltenham, on March 14, aged 94.

**Davies, Samuel S.**, M.R.C.S., L.S.A., at Pembridge, Herefordshire, on February 12.

**Hawkins, James**, L.R.C.P. Edin., at Newport, Monmouthshire, on March 21, aged 52.

**Hemphill, Dr. S.**, at Spring-hill, Co. Tipperary, on March 17.

**Mackenzie, W.**, M.D., late of E.I.C.S., at 14, Carlton-terrace, Edinburgh, aged 86.

**May, W.**, M.D., at Madeira, on March 21, aged 56.

**Melson, John Waller**, B.A., M.R.C.S., at Birmingham, on March 21, aged 23.

**Thomson, E. D.**, Army Medical Department at Gibraltar, on March 6, aged 32.

## POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

### RESIGNATIONS.

*St. Austell Union.*—The St. Blazey District is vacant; area 4990; population 7564; salary £20 per annum.

*Clitheroe Union.*—The Clitheroe District is vacant; area 17,634; population 7744; salary £30 per annum.

*Haslingden Union.*—The Haslingden District and Workhouse are vacant; area 4659; population 10,320; salary £30 per annum.

*Marlborough Union.*—Mr. David P. Maurice has resigned the First District; area 28,271; population 7182; salary £100 per annum.

*Newport Union (Monmouth).*—The Western District is vacant; area 29,856; population 22,536; salary £56 per annum; also the Workhouse, salary £24 per annum.

*Wincanton Union.*—The Wincanton East District is vacant; area 15,435; population 5164; salary £36 per annum; also the Workhouse, salary £19 per annum.

### APPOINTMENTS.

*Birmingham Parish.*—Jabez Jackson, L.S.A., L.F.P. and S. Glasg., L.M., to the Fourth District.

*Chertsey Union.*—John P. Hunt, L.R.C.P., Edin., L.R.C.S.I., L. Mid. Dub., to the Windlesham District.

*Portsea Island Union.*—John F. Pritchard, M.R.C.S.E., L.S.A., to the Kingston District; Frederick Page, M.D. St. And., F.R.C.S.E., L.S.A., to the Workhouse.

*Rochford Union.*—George F. B. Willing, L.R.C.P. Edin., M.R.C.S.E., L.M., to the Great Wakering District.

*Wincanton Union.*—Samuel S. Larcombe, M.R.C.S.E., L.S.A., to the Castle Carey District.

**Dr. Richardson.**—This gentleman gave the first of a course of six lectures on Physical Researches into Pathology and Therapeutics at the Royal College of Physicians on Wednesday last, to which course any member of the Profession will be admitted on exhibiting his personal card.

**Professor W. Herapath on Rinderpest.**—Professor W. Herapath, of Bristol, has addressed a letter to the *Times* stating that he had made a chemical examination of inflamed tissues from two cows just slaughtered on account of commencing Rinderpest, and that he found that "the blood, the mucous surfaces, and the adherent matters were alkaline, and the alkali was ammonia;" and he thereon suggests a theory of infection, "as the volatile ammonia would carry the poison into the atmosphere;" and a theory of treatment. Our readers will not need reminding that there is nothing new in the suggestion of a super-ammoniated state of the blood in some exanthematous fevers. Doubtless Professor Herapath has communicated his observations to the Cattle Plague Commission, or to some scientific journal, as well as to the popular daily paper.

**The House of Charriere, of Paris.**—This celebrated Paris Surgical instrument maker, so well known all over Europe, having met with an irreparable loss in the death of his son, in whose favour he had retired from business, has just disposed of his important establishments to MM. Robert and Collin, formerly his pupils, who have already acquired a great reputation with the rising generation of French Surgeons.

**Suspected Poisoning.**—At Malmesbury, in Wiltshire, a series of extraordinary disclosures have just been made. A widow lady named Perring lately resided there with one daughter, who is not yet 18 years old. Last October there came to Malmesbury a young man, who gave the name of Fuller, and was engaged as assistant in a Surgery. Soon after he eloped with Miss Perring, and was married to her at Cheltenham. A few weeks ago it was discovered that Fuller, as he called himself, forged a cheque. Further inquiry showed that he had already married two women, both of whom are alive. For the two bigamous marriages he was committed for trial last week; but there yet remains a more serious inquiry to be completed. Mrs. Perring died a few days ago, after a short illness, which commenced only a few days before the discovery of the forgery. It is proved by her daughter that Fuller gave her medicine, and a post-mortem examination revealed that an active poison, such as chloride of mercury, had been administered to her. The contents of the stomach and intestines have been sent to Dr. Herapath, of Bristol, for analysis.

ROYAL INSTITUTION OF GREAT BRITAIN.—At the general monthly meeting on Monday, April 2, 1866, Sir Henry Holland, Bart., M.D., D.C.L., F.R.S., President, in the chair, John Curwen Christian Boyd, Esq., Charles Browne Cornish-Browne, Esq., Walter Thomas Fawcett, Esq., Mrs. Bridget Margaret Sortain, Calvert Toulmin, Esq., were elected members of the Royal Institution. The special thanks of the members were returned to the donor of the following addition to "The Donation Fund for the Promotion of Experimental Researches:"—E. O. Tudor, Esq., £20. The presents received since the last meeting were laid on the table, and the thanks of the members returned for the same.

LONDON WORKHOUSES.—The public will be glad to learn that the Poor-law Board has instructed their Medical officer, Dr. Edward Smith, F.R.S., in conjunction with Mr. H. B. Farnall, C.B., to inspect the Infirmary wards of all the metropolitan workhouses, and to inquire and report upon the existing arrangements for the care and treatment of the sick poor. They have also requested those gentlemen to suggest such remedies for any existing evils in the several workhouses as may be fitted to render the care of the sick satisfactory. It cannot be doubted that with such an official inquiry the truth will be ascertained, and it is to be hoped that the guardians will receive the recommendation with the intention of rendering the treatment of the sick poor in workhouses all that can properly be desired.—*Times, April 5.*

LOCAL ANÆSTHESIA BY DR. RICHARDSON'S METHOD IN ORTHOPÆDIC SURGERY.—We have not previously reported any cases in which the new method of producing local anæsthesia has been tried in orthopædic Surgery, although, *à priori*, it would occur to the Surgeon that such operations were well fitted for it. We now learn that this expectation is correct. At the National Orthopædic Hospital on Tuesday, the 27th ult., the usual operating day, local anæsthesia by Dr. Richardson's method was tried by Dr. H. Dick and Mr. Little. The first case, one of Dr. Dick's, was a contracted knee after disease of the joint. The hamstring tendons required division. On division of the semi-tendinosus and semi-membranosus no pain whatever was felt. In dividing the biceps, where deeper puncture was necessary, some pain was felt by the patient. The results were still more satisfactory in a case of Mr. Little's where the tendo-Achillis was divided. Etherisation here was applied on both sides of the tendon with two separate etherisers, so that the whole of the skin covering the tendon on either side was blanched. Mr. Little divided the tendo-Achillis in three separate patients, all of an age capable of expressing and describing what they felt. All the operations were painless. If it is possible to draw a conclusion from this small number of cases, it is that the division of tendons near the skin can be performed without pain, and in the division of tendons more deeply seated, the pain of the puncture in the skin can be avoided,—in itself no small gain.

THE LORD RECTOR OF THE UNIVERSITY OF EDINBURGH ON HEALTH.—Towards the close of the characteristic address with which Mr. Carlyle edified and amused the Edinburgh students on the occasion of his installation are the following remarks, which, we believe, are based on as sound ethics as physiology:—"Finally, gentlemen, I have one advice to give you which is practically of very great importance, though a very humble one. It is in the middle of your zeal and ardour —for such, believe, will be sufficient in spite of all the counsels to moderate it that I can give you, and I have no doubt you will have among you people ardently bent to consider life cheap, for the purpose of getting forward in what they are aiming at of high—and you are to consider throughout, much more than is done at present, that health is a thing to be attended to continually—that you are to regard that as the very highest of all temporal things for you. (Applause.) There is no kind of achievement you could make in the world that is equal to perfect health. What are nuggets and millions? The French financier said,—'Alas! why is there no sleep to be sold?' Sleep was not in the market at any quotation. (Laughter and applause.) It is a curious thing, that I remarked long ago, and have often turned in my head, that the old word for 'holy' in the German language—*heilig*—also means 'healthy.' And so *Heilbronn* means 'holy-well,' or 'healthy well.' We have in the Scotch hale; and, I suppose, our English word whole—with a 'w'—all of one piece without any hole in it—is the same word. I find that you could not get any better definition of what 'holy' really is than 'healthy'—'completely healthy.' *Mens sana in corpore sano.* (Applause.) A man with his intellect a clear, plain, geometric mirror, brilliantly sensitive of all objects and impressions around it, and imaging all things in their correct proportions —not twisted up into convex or concave, and distorting everything, so that he cannot see the truth of the matter without endless groping and manipulation—healthy, clear, and free, and all round about him. We never can attain that at all. In fact, the operations we have got into are destructive of it. You cannot, if you are going to do any decisive intellectual operation—if you are going to write a book—at least, I never could—without getting decidedly made ill by it, and really you must if it is your business—and you must follow out what you are at—and it sometimes is at the expense of health. Only remember at all times to get back as fast as possible out of it into health, and regard the real equilibrium as the centre of things. You should always look at the *heilig*, which means holy, and holy means healthy. Well, that old etymology—what a lesson it is against certain gloomy, austere, unæsthetic people, that have gone about as if this world were all a dismal prison-house. It has indeed got all the ugly things in it that I have been alluding to; but there is an eternal sky over it, and the blessed sunshine, verdure of spring and rich autumn, and all that in it too. Piety does not mean that a man should make a sour face about things, and refuse to enjoy in moderation what his Maker has given."

UNIVERSITY OF EDINBURGH.—THE DEGREE OF LL.D. CONFERRED ON PROFESSOR HUXLEY AND DR. RAE.—On the occasion of the installation of Mr. Carlyle as Rector of the University, amongst the gentlemen presented for the honorary degree of Doctor of Laws were two who were originally trained as members of the Medical Profession—Professor Huxley and Dr. Rae, the Arctic explorer. We subjoin the speeches in which Professor Muirhead recounted their claims to academical honour when presenting them to the Vice-Chancellor:—Professor Muirhead, in presenting Mr. Huxley, said: I present to you, Mr. Vice-Chancellor, as judged worthy by the Senate to receive the honorary degree of Doctor of Laws, Mr. Thomas Henry Huxley—(applause)—a Fellow of the Royal Society, Professor of Natural History at the School of Mines, and Hunterian Professor of Comparative Anatomy in the Royal College of Surgeons of England. Trained to the Medical Profession, Mr. Huxley became in early life an Assistant-Surgeon in the Royal Navy; and it was while serving in that capacity in one of her Majesty's ships, then engaged in a survey of the coasts of Australia and New Guinea, that he acquired his unrivalled knowledge of marine zoology, and vindicated his claims to be regarded as one of the most accomplished naturalists of the day. (Cheers.) His appointment, on his return to this country, to the Chair of Natural History in the Government School in Jermyn-street, gave him an opportunity of turning his attention to palæontological inquiries; and the results of his labour in that field are embodied in a series of valuable and most interesting papers descriptive of various extinct forms of animal life. (Cheers.) As Hunterian Professor in the College of Surgeons of England, he has delivered several courses of lectures on the comparative anatomy of the vertebrata; lectures which, not less than his contributions to the transactions of learned societies, testify his remarkable perspicuity and his rare power of discriminating the relations of structure in complicated forms of animal life. (Cheers.) Professor Muirhead, in presenting Dr. Rae, said: I next present to you, Mr. Vice-Chancellor, as also judged worthy by the Senate to receive the same honour, Dr. John Rae, a Fellow of the Geographical Society—(applause)—and a graduate in Medicine of this University. Entering life in the Medical service of the Hudson's Bay Company, he was soon afterwards transferred to its ordinary service, and before long attained the rank of one of its chief factors. In that capacity he had the command of several exploring expeditions in high latitudes—in the course of which, travelling sometimes in boats, sometimes in sledges, sometimes for weeks together on foot, he and his companions endured hardships and surmounted obstacles such as it has been the lot of few to encounter. On none of those occasions did Dr. Rae allow any opportunity to escape him of advancing our knowledge of the geography, meteorology, and natural history of the far north-west and frozen regions; and it is not to be forgotten that he it was who first obtained definite information of the fate of Sir John Franklin and his gallant comrades—(loud cheers)—and indicated the locality where three years later their remains were discovered by M'Clintock. (Applause.) Very recently, Dr. Rae has been engaged in a Government survey of a telegraphic route from Canada to Vancouver's Island, over the wild country of the Rocky Mountains—an enterprise in which he completely succeeded, although the occupation of a considerable part of the route by savage tribes has caused the construction of the telegraph to be in the meantime suspended. (Cheers.)

**The following are the last week's Cattle Plague Returns.**

| Census Divisions. | 1. Attacked. | | | 2. Result of reported Cases from the Commencement of the disease. | | | | |
|---|---|---|---|---|---|---|---|---|
| | Week ending March 24. | Week ending March 17. | Week ending March 10. | Attacked. | Killed. | Died. | Recovered. | Unaccounted for. |
| 1. Metropolitan Police District . . | 60 | 34 | 14 | 7749 | 3318 | 3504 | 333 | 594 |
| 2. South Eastern Co. . | 6 | 12 | 13 | 5042 | 1605 | 2785 | 442 | 210 |
| 3. South Midland Co. | 542 | 584 | 616 | 16309 | 4522 | 9863 | 1523 | 401 |
| 4. Eastern Counties . | 190 | 233 | 313 | 10050 | 4121 | 4766 | 758 | 405 |
| 5. South Western Co. | 10 | 32 | 35 | 1566 | 523 | 761 | 198 | 74 |
| 6. West Midland Co. . | 444 | 831 | 405 | 10977 | 2870 | 6147 | 1205 | 755 |
| 7. North Midland Co. | 671 | 873 | 910 | 12676 | 4994 | 6005 | 1049 | 627 |
| 8. North Western Co. | 1492 | 1504 | 2023 | 52969 | 8425 | 33925 | 5433 | 5186 |
| 9. Yorkshire . . | 683 | 999 | 811 | 31704 | 4911 | 18250 | 5765 | 2778 |
| 10. Northern Counties. | 264 | 547 | 522 | 6819 | 3280 | 2483 | 936 | 120 |
| 11. Monmouthshire & Wales . . | 85 | 160 | 90 | 7597 | 312 | 5904 | 1059 | 322 |
| 12. Scotland . . | 257 | 449 | 766 | 45563 | 5423 | 26966 | 10585 | 2590 |
| | 4704 | 6261 | 6518 | 209022 | 44305 | 121369 | 29286 | 14062 |

*Note.*—39 Inspectors who reported cases last week have not reported in time for this return—viz., for the county of Berks, 1; Salop, 1; Bucks, 2; Cambridge, 1; Chester, 2; Cumberland, 1; Essex, 1; Hereford, 1; Huntingdon, 1; Lancaster, 1; Lincoln, 7; Norfolk, 2; Northampton, 1; Oxford, 1; Stafford, 1; Yorkshire, 6; and Scotland, 9. These Inspectors returned 1215 cases last week.

## NOTES, QUERIES, AND REPLIES.

◆

He that questioneth much shall learn much.—*Bacon.*

In consequence of the pressure of matter this week, many Communications, articles of interest, and Reports of Societies are postponed.

*Mr. John Adams's Clinical Lecture on Lithotomy* shall appear directly.

*A Third Year's Student.*—Dr. Guy's.

*N.B.*—Lallemand, Perrin, and Duroy. The elimination theory does not hold water. *Some* is eliminated doubtless, but the quantitative test fails.

*Dr. W. B.*—The autograph of Albinus is of great rarity, according to Pettigrew. A memoir of this distinguished Anatomist appeared in the *Medical Times*, vol. XI., p. 150.

*St. Thomas.*—The Académie Royale de Chirurgie de Paris was opened in 1731, and Cheselden was elected the first corresponding member of it in the ensuing year.

*W. A. P.*—Dr. Henderson's paper "On New Specific Remedies for Gonorrhœa" appeared in the *Medical Times and Gazette* of June, 1865. Galvanism in the cure of Graves's disease is noticed in Ranking's "Abstract" for 1865, vol. xlii., p. 85.

*Bibliopole.*—An index to the *Times* for 1862 and 1863 was published by Freeman, of Fleet-street; copies are in the Library of the College of Surgeons, where also the newspaper has been filed for many years past. Write to the Secretary.

*A Medical Churchwarden, Kennington.*—The credit is unquestionably due to Mr. George Alfred Walker, a retired member of our Profession. You will find an account of the other circumstance referred to in old Stow's Chronicle, p. 409, who states in his quaint language that the body of a man hanged for felony was begged by the Chirurgeons of London in 1583 or 4, to have made of him an anatomy. After he was dead, to all men's thinking, cut down, stripped, laid naked in a chest, thrown in a car, so brought from the place of execution through the Borough of Southwark and City of London to the Chirurgeons' Hall, near unto Aldersgate; the chest being there opened and the weather extremely cold, he was found to be alive, and lived to the day next following, and then died.

*The Cattle Plague.*—A correspondent would be glad to know whether the mineral acids have been given to cattle in the water which they drink to act as a preventive when the disease breaks out in a herd. If the Rinderpest bear any analogy to scarlatina, small-pox, or diphtheria, the nitro-hydrochloric acid would, perhaps, be the best preventive, but sulphuric acid is more of a tonic, but possesses less febrifuge properties.

*Erasures from the Medical Register.*—We have been requested by Dr. John Burton, of Walsall, to publish the following extract from a letter of Dr. Francis Hawkins. We regret that Dr. Burton has been annoyed by the publication of the list of erasures from the Medical Register, one of the persons erased by the Council bearing his name. Of course the publication of the list is necessary on public grounds, but we should scarcely have thought it possible to confound any respectable Practitioner with persons so punished.

*Copy extract of Dr. Hawkins's Letter dated April* 3, 1866.

"Since you ask for particulars as to that person with a view to publication, I do not feel justified in furnishing any which the Medical Council has not already published. I can only say that the entry of that person's name was thus made in the Register:—

"'1859, January 1. Burton, John, Bulter-row, Gloucester. In practice before August 1, 1815.'

"On the 13th of June, 1859, that entry was erased by order of the Branch Medical Council for England, because 'it was proved to the satisfaction of the Branch Council that the said John Burton was not entitled to be registered, and that the entry of his name on the Register had been fraudulently or incorrectly made.'

"I am, Sir, your obedient servant,
"(Signed) Fras. Hawkins, Registrar."

### The Alleged Case of Manslaughter at Middlesborough.

Some of our readers may need reminding that in this case an indictment was brought against William Simpson, the unqualified assistant of Mr. Richardson, of Middlesborough, for the manslaughter of a man named Jenkinson. Jenkinson was suffering from stricture of the urethra, and died from rupture of the canal and extravasation of urine. It was alleged that the accused had caused the man's death by neglecting to use the catheter and by treating him solely by the administration of saline medicines. As the Medical evidence in the report, which has reached us from a local paper, is passed over as unfit for publication, we are unable to give anything more than an outline of the case. It will be sufficient to add that the trial took place before Mr. Justice Keating, and was terminated by the jury unhesitatingly returning a verdict of "Not guilty." We have a few words, however, to offer on the ethical aspect of the case. Mr. Richardson was absent during the progress of the patient's illness, and could not therefore be responsible for its result, except inasmuch as he was responsible for the competence of his representative. It is only fair to Mr. Simpson to state that he voluntarily retired from the management of the case on Monday, and the friends of the patient do not appear to have obtained any other Medical assistance until the following Thursday, when the patient was dying. Mr. Husband, who was then called in, was, we think, quite justified in expressing an opinion that the man ought to have been relieved by operative procedure. The thing was self-evident, and we do not think that a Medical man is restricted, by any rules of Professional etiquette, from expressing a judgment, when a patient's life has been at stake and the plain rules of Professional practice have not been followed. If Mr. Husband were instrumental in obtaining an inquest, as it was hinted at the trial, we can but regret it. It is sufficient for a Medical man to express his opinion in his Professional capacity. We do not think that he is required to set the law in motion, for the purpose of visiting with pains and penalties the shortcomings of the representative of a brother Practitioner. Mr. Husband, however, in his evidence, denied that he had taken such a course. He stated that, although he wished for an inquest, he did not write to the Coroner to procure one, nor take any step beyond the fact of "giving a sort of certificate." We give him full credit for the truth of his assertion, and are sorry that any expressions he may have used should have given any colour to an opposite theory of his conduct.

### Poor Law Medical Reform.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The following subscriptions have been received by me towards the funds of the Association:—Hinnell, E. J., Thingoe, 5s.; Morris, R. T., Wigan, 20s.; Green, H., Lexden and Winstree, 10s.; Lys, D. F., Blandford, 5s.

By Mr. Prowse: James, J., Bristol, 10s.; Wraith, J. H., Over Darwen, 10s.; Probert, J., Merthyr Tydvil, 10s.; Allday F., Merthyr Tydvil, 10s.; Dyke, T. J., Merthyr Tydvil, 10s.; Rees, M., Merthyr Tydvil, 10s.; Roberts, B., Eastbourne, 5s. Richard Griffin.

### What is the Use of the Saffron in the Pil. Aloes c. Myrrha, and Other Preparations of the Pharmacopœia?

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The pil. aloes c. myrrha of the Ph., is one of the most useful aperient pills, especially for females, we possess; but the pill is rendered bulky and disgusting by the saffron contained in it. I am informed by a pharmaceutist that saffron is an expensive article, and as it possesses no Medicinal properties, why is it permitted to clog the above-named pills and other preparations of the Pharmacopœia?

The day is past for colouring and disguising our remedial agents, and let us hope that the revisers of the new Pharmacopœia will bear in mind that simplicity in the art of compounding should not be overlooked.

I am, &c., A Physician.

**COMMUNICATIONS have been received from—**

A Physician: John E. Gross, Esq.; Dr. Markham; M. C. Mitra, Esq.; Apothecaries' Hall; R. E. Thompson, Esq.; Armstrong Todd, Esq.; British Medical Association; J. Laidler, Esq.; Dr. Laycock; Western Medical and Surgical Society; Dr. Durgan, R.N.; J. Munday, Esq.; R. Griffin, Esq.; H. B. Condy, Esq.; The Royal Medico-Chirurgical Society; J. N. Viven; Dr. Burter; Obstetrical Society; Ethnological Society; Dr. H. Fearnside; Mr. J. Hutchinson; Dr. Lionel Beale; Dr. B. W. Richardson; Dr. C. R. Bree; Dr. Silver; Dr. Tilbury Fox; Dr. Hughlings Jackson; Mr. J. Chatto.

**BOOKS RECEIVED—**

The Pharmaceutical Journal—Flint's Physiology of Man—Leared, On Imperfect Digestion—Gibbs, Remonstrance respecting the Vaccination Bill of 1866—Annual Report of the Cumberland and Westmoreland Lunatic Asylum—The Eleventh Annual Report of the Manchester Medico-Ethical Association—Tilbury Fox, On Leprosy, Ancient and Modern—Spencer's Elements of Qualitative Chemical Analysis—The Archives of Dentistry, vol. i.—Watt's Dictionary of Chemistry, part 33—The Edinburgh Medical Journal, April—The British and Foreign Medico-Chirurgical Review, April—Condy, On the Purification of Water and Air—The Westminster Review, April.

**NEWSPAPERS RECEIVED—**

The Dublin Medical Press—The Stockton Gazette—The Sunday Gazette—The Edinburgh Daily Review.

## COMPOSITION AND QUALITY OF THE METROPOLITAN WATERS IN MARCH, 1866.

The following are the Returns of the Metropolitan Association of Medical Officers of Health:—

| | Total Solid Matter per Gallon. | Loss by Ignition.(a) | Oxydisable Organic Matter.(b) | Hardness. | |
|---|---|---|---|---|---|
| | | | | Before Boiling. | After Boiling. |
| *Thames Water Companies.* | Grains. | Grains. | Grains. | Degs. | Degs. |
| Grand Junction . . | .. | .. | .. | .. | .. |
| West Middlesex . . | 20·25 | 0·86 | 0·48 | 13·6 | 3·5 |
| Southwark and Vauxhall. | 20·72 | 1·01 | 0·40 | 14·1 | 4·0 |
| Chelsea . . . . | 19·99 | 0·94 | 0·41 | 12·8 | 4·0 |
| Lambeth . . . . | 20·29 | 1·01 | 0·56 | 13·7 | 3·1 |
| *Other Companies.* | | | | | |
| Kent . . . . . | 24·78 | 1·11 | 0·05 | 18·6 | 7·0 |
| New River . . . | 21·44 | 1·29 | 0·24 | 15·8 | 4·8 |
| East London . . . | 23·25 | 1·14 | 0·41 | 16·5 | 4·5 |

(a) The loss by ignition represents a variety of volatile matters as well as organic matter, as ammoniacal salts, moisture, and the volatile constituents of nitrates and nitrites.

(b) The oxydisable organic matter is determined by a standard solution of permanganate of potash, the available oxygen of which is to the organic matter as 1 is to 8; and the results are controlled by the examination of the colour of the water when seen through a glass tube two feet in length and two inches in diameter.

## VITAL STATISTICS OF LONDON.

*Week ending Saturday, March* 31, 1866.

### BIRTHS.

Births of Boys, 1082; Girls, 1025; Total, 2107.
Average of 10 corresponding weeks, 1856-65, 1992·1.

### DEATHS.

| | Males. | Females. | Total. |
|---|---|---|---|
| Deaths during the week .. .. .. | 821 | 761 | 1582 |
| Average of the ten years 1856-65 .. .. | 728·6 | 703·9 | 1432·5 |
| Average corrected to increased population.. | .. | .. | 1576 |
| Deaths of people above 90 .. .. .. | .. | .. | .. |

### DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

| | Population, 1861. | Small pox. | Measles. | Scarlatina. | Diphtheria. | Whooping-cough. | Typhus. | Diarrhœa. |
|---|---|---|---|---|---|---|---|---|
| West .. | 463,388 | 1 | 9 | 3 | 2 | 10 | 9 | 3 |
| North .. | 618,210 | 3 | 8 | 5 | .. | 10 | 38 | 6 |
| Central .. | 378,058 | — | 5 | 3 | 2 | 6 | 6 | — |
| East .. | 571,158 | 8 | 10 | 12 | 1 | 28 | 7 | 3 |
| South .. | 773,175 | 4 | 8 | 7 | 5 | 22 | 11 | 6 |
| Total .. | 2,803,989 | 16 | 40 | 30 | 10 | 76 | 71 | 18 |

### METEOROLOGY.

*From Observations at the Greenwich Observatory.*

| | |
|---|---|
| Mean height of barometer .. .. .. .. .. .. .. | 29·909 in. |
| Mean temperature .. .. .. .. .. .. .. | 49·3 |
| Highest point of thermometer .. .. .. .. .. .. | 64·0 |
| Lowest point of thermometer .. .. .. .. .. .. | 33·1 |
| Mean dew-point temperature .. .. .. .. .. .. | 44·0 |
| General direction of wind .. .. .. .. .. | W., N.W., & S.W. |
| Whole amount of rain in the week .. .. .. .. | 0·46 |

## BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, March 31, 1866, in the following large Towns:—

| Boroughs, etc. | Estimated Population in middle of the Year 1866. | Persons to an Acre. (1866.) | Births Registered during the week ending Mar. 31. | Deaths. | | Temperature of Air (Fahr.) | | | Rain Fall. | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Corrected Average Weekly Number.* | Registered during the week ending March 31. | Highest during the Week. | Lowest during the Week. | Weekly Mean of the Mean Daily Values. | In Inches. | In Tons per Acre. |
| London (Metropolis) | 3067536 | 39·3 | 2107 | 1400 | 1582 | 64·0 | 33·1 | 49·8 | 0·46 | 46 |
| Bristol (City) . | 163680 | 34·9 | 123 | 73 | ‡114 | 59·7 | 38·1 | 48·5 | 0·57 | 58 |
| Birmingham (Boro') | 335798 | 42·9 | 281 | 163 | 185 | 62·2 | 33·8 | 48·4 | 0·35 | 36 |
| Liverpool (Borough) | 484337 | 94·8 | 424 | 281 | 444 | 59·3 | 37·2 | 49·0 | 0·55 | 56 |
| Manchester (City) . | 358855 | 80·0 | 240 | 203 | ‡288 | 60·0 | 34·0 | 48·3 | 0·67 | 68 |
| Salford (Borough) . | 112904 | 21·8 | 80 | 57 | 82 | 58·7 | 33·3 | 47·6 | 0·68 | 69 |
| Sheffield (Borough) . | 218257 | 9·6 | 179 | 115 | 147 | 60·8 | 35·5 | 47·6 | 0·39 | 39 |
| Leeds (Borough) . | 228187 | 10·6 | 327 | 116 | 159 | 61·0 | 32·5 | 47·8 | 0·56 | 57 |
| Hull (Borough) . | 105233 | 29·5 | 84 | 94 | 78 | .. | .. | .. | .. | .. |
| Nwcastl-on-Tyne, do. | 122277 | 22·9 | 151 | 65 | 66 | 58·0 | 36·0 | 46·6 | 0·15 | 15 |
| Edinburgh (City) . | 175128 | 39·6 | ‖123 | 84 | ‖113 | .. | .. | .. | .. | .. |
| Glasgow (City) . . | 432265 | 85·4 | ‖372 | 252 | ‖270 | .. | .. | .. | .. | .. |
| Dublin (City and some suburbs) . | 318437 | 32·7 | 158 | †156 | 194 | .. | .. | .. | .. | .. |
| Total of 13 large Towns . . . | 6122894 | 34·4 | 4649 | 3014 | 3722 | 64·0 | 32·5 | 48·2 | 0·49 | 49 |
| | (1863) | | | | Week ending Mar. 24. | Week ending | | § | Mar. 24 | |
| Vienna (City) . . | 560000 | .. | .. | .. | .. | .. | .. | .. | .. | .. |

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·909 in. The mean daily reading was above 30 in. on three days of the week. The barometrical pressure was 29·19 in. on Sunday, and it was 30·05 in. on Monday and Friday.

The general direction of the wind was W., N.W., and S.W.

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* The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.

† Registration did not commence in Ireland till January 1, 1864; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in that city were the same as the averages of the rates in the other towns.

‡ The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

§ The mean temperature at Greenwich during the same week was 49·3.

‖ The returns from Edinburgh and Glasgow not having been received in time for insertion in the above table, averages of the returns of the six previous weeks have been substituted for the correct numbers.

## APPOINTMENTS FOR THE WEEK.

### *April* 7. *Saturday (this day).*

*Operations* at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free Hospital, 1½ p.m.

### 9. *Monday.*

*Operations* at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.

### 10. *Tuesday.*

*Operations* at Guy's, 1 p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; St. Peter's Hospital for Stone, 2 p.m.

Ethnological Society of London, 8 p.m. John Crawfurd, Esq., President, "On the Invention of Writing Materials;" "On an Ancient Hindoo Sacrificial Bull, with Inscription, Found in the Northern Island of the New Zealand Group."

Royal Institution, 3 p.m. Professor Frankland, F.R.S., "On the Non-metallic Elements."

Royal Medical and Chirurgical Society, 8½ p.m. Dr. Murchison, "On the Pathology of Pneumonia;" followed by Mr. Gaskoin, "On Continued Syphilitic Inoculation," or Mr. A. Durham, "On the Radical Cure of Hernia."

### 11. *Wednesday.*

*Operations* at University College Hospital, 2 p.m.; St. Mary's, 1¼ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.

Royal Institution, 3 p.m. Professor Du Bois Reymond, "On Muscular Contraction."

### 12. *Thursday.*

*Operations* at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.

Royal Institution, 3 p.m. Professor Frankland, F.R.S., "On the Non-metallic Elements."

### 13. *Friday.*

Royal Institution, 8 p.m. Professor Du Bois Reymond, "On the Time required for the Transmission of Volition and Sensation through the Nerves."

*Operations*, Westminster Ophthalmic, 1½ p.m.

# ORIGINAL LECTURES.

ON

# GENERAL AND LOCAL CHEMICAL AND MECHANICAL DISORDERS ARISING FROM ERRORS OF CHEMISTRY IN THE DEVELOPMENT AND REPAIR OF THE BODY.

By H. BENCE JONES, M.D., F.R.S.

## PART IV.—LECTURE XI.

(Continued from page 333.)

THE three actions of supply, assimilation, and removal which constitute nutrition are usually so closely dependent and interwoven that no separation between them can be made, and the result of these actions, whether in excess or in deficiency, may each be summed up in a single word. For example, an increased supply of blood, increased assimilation, and slightly increased removal, constitute hypertrophy. Whilst the diminished supply, and lessened chemical action, and more or less diminished removal of disintegrated matter produce simple atrophy, or atrophy with more or less degeneration, according to the nature of the substances—(as, for instance, fatty and calcareous matters) which remain unremoved in consequence of the suboxidation occasioned by the diminished supply of blood.

I shall now take the conjoint effect of these three actions, and I shall try to bring before you one or two chemical diseases and the secondary mechanical disorders which are thus produced.

Among many diseases from which I may select, I shall take simple hypertrophy of the prostate on account of the very marked mechanical disease which springs from the primary chemical error of nutrition.

"Simple enlargement of the prostate," says Mr. Paget, "consists of increased gland cells and muscular fibres with masses of new-formed tissue within and without the gland. These prostate glandular tumours are composed of simple tissues like those of the gland itself. The gland cells and muscular fibres are not to be distinguished from those of the gland itself. They are masses of new structure, resembling the prostate embedded in the proper substance of the enlarged gland. Near the enlarged prostate similar detached outlying masses of new substance like tumours in their shape and relations, and like prostate gland in tissue, may sometimes be found. A very large specimen was taken from a man, 64 years old, and who for the last four years of his life was unable to pass his urine without the help of a catheter. He died with bronchitis, and a tumour, measuring 2⅓ inches by 1⅓, was found lying loose in the bladder, only connected to it by a pedicle moving on this like a hinge, and when pressed forward obstructing the orifice of the urethra. Now, both in general aspect and in microscopic structure this tumour is so like a portion of enlarged prostate gland that I know no character by which to distinguish them."

The immediate result of this growth is that the urine cannot flow out; it is mechanically stopped in a greater or less degree, according to the amount of the impediment. The mechanical disease then begins to produce its effects. These are altered pressure of the urine on the bladder and altered chemistry, in consequence of more or less of the urine being retained in the bladder.

In a previous lecture I have brought before you the phenomena of the fermentation of the urine. Even in perfect health whilst the urine is in the bladder, chemical changes are going on, although they usually escape our notice; but when a little of the urine is continually left in the bladder, then the internal chemical action becomes very evident. The increase of time during which the ferment can act on the urea, the production of vibrios, the increased chemical action going on in the prostate, these sometimes very slowly, sometimes very rapidly, according partly to the amount of acid that passes from the kidneys, set up ammoniacal urine, and then the chemical action of carbonate of ammonia on the urine and on the mucous membrane has to be added to the original chemical disease.

Meanwhile the mechanical pressure of the urine has been more or less effective, and helps to increase the chemical action on the mucous membrane. Each time the bladder contracts the pressure temporarily rises in intensity, and slowly increased nutrition of the different tissues and increased oxidation in them is set up; this insensibly passes into peroxidation, and the chemical action of the carbonate of ammonia not only adds to the inflammation, but alters its products, so that mucus and pus can no longer be recognised, but a gluey, ropy, adhesive matter, even more adhesive than the stringy alkaline secretion from the throat and nose is produced. The ammoniaco-magnesian phosphate crystallises in and upon this matter, and the granular phosphate of lime increases its consistence, so that a mechanical irritation, or even a fresh mechanical obstruction to the passage of the urine, is added to the fearful sufferings which a small chemical error of hypertrophy originally set up.

If you look at the treatment of this disease, you will soon see how the mechanical secondary disorder constitutes the important part of the complaint. Without a mechanical remedy almost no good whatever can be done by treatment, and when the catheter is used scarcely any other treatment is required.

During the gradual increase of the hypertrophy an increased action may suddenly come on from internal or external causes; for example, from excessive acid or other chemical irritant formed in the kidneys and passing into the bladder; from cold applied to the skin. From substances in the blood passing into the structure of the prostate, increased flow of blood to the hypertrophied part takes place, and this may reach to any amount of congestion and inflammation; an immediate stoppage of the flow of water is the result, and when this happens, recourse must be had the same day to mechanical relief, and very often from that date the catheter must be always passed, more or less frequently, according to the degree of wrong chemistry that exists. If the ammoniacal urine be not drawn off sufficiently often, diffusion takes place into, and perhaps even through, the mucous membrane of the bladder. The phosphatic salts are found not only adherent to the bladder, but even deep in the structure of the mucous membrane. The putrid urine passes through into the blood, and thereby a general state of poisoning may be produced. This has been also called uræmia, and by some persons ammoniæmia, but the experiments of Hammond, in the *American Quarterly Journal of Medical Science*, vol. xli., p. 55, 1861, show that putrid urine acts much stronger as a poison than carbonate of ammonia, and it is highly probable that among the offensive matters in putrid urine some more poisonous substance than carbonate of ammonia or urea may be formed. Certainly the poison differs from those higher compounds which cause death in the so-called uræmia of Bright's disease.

If, instead of hypertrophy, I take an example from atrophy, which depends on diminished supply and lessened chemical action, and more or less diminished removal of disintegrated matter, you will see an opposite chemical error of nutrition, giving rise to secondary mechanical or chemical diseases far more serious than the primary complaint.

I will shortly bring before you senile gangrene and apoplexy from diseased blood-vessels, both of which arise from a slowly acting error of nutrition, suddenly giving rise to a chemical or mechanical disease, which often rapidly ends in death, or when this is not immediately produced, the effect of the diseases in causing general or local loss of power is only very partially removed.

No part of the body is exposed to greater continuous action in proportion to the supply of blood to its structures than the arteries. From the semilunar valves to the arterial capillaries the structures of the air vessels are exposed to mechanical pressure comparable with the pressure of the atmosphere. Thus in man the pressure in the aorta is equal to one-third the weight of the atmosphere. It has been found to be 9·7 inches of mercury. In the brachial artery it is equal to one-sixth, or 4·5 inches of mercury. Down to the capillaries this pressure is continuous, lessened by the friction of the blood in vessels. This pressure and friction have a direct influence on the chemical actions of nutrition and oxidation which take place in the coats of the arteries. When the pressure in the arteries is increased, the actions of nutrition and oxidation must be increased also, and with long-continued action a state of pertrophic action and peroxidation must be produced, giving rise to thickenings of the different coats, which entirely alter the chemical changes going on in them. Hence errors of disintegration arise, and suboxidation and subtrophic action readily occur. The acids that ought to be produced to dissolve the earthy matters are no longer formed; the fatty matters no longer are oxidised, and hence fatty and earthy substances accumulate, and the healthy tissues are not formed. If the nutritive fluid be loaded with fatty matter, or if the supply of oxygen be deficient from any cause, or if the conditions on which the oxidising and nutritive actions depend be lowered, the errors of disintegration will more rapidly arise.

Wherever the arterial textures are injured or destroyed, there the mechanical pressure from within is less capable of being resisted, and rupture is ready to occur at the place of least resistance, and when any slight extra pressure is made the vessel breaks. If this happens in the brain a mechanical blow and a rupture of the nervous structures is produced, and paralysis is the result, the muscles being cut off from the action of the will. When the rupture is large, and the quantity of blood effused great, the pressure on the nerves that regulate the motions of the heart and muscles of respiration soon put an end to life.

When the smallest branches of the arteries are much thickened the supply of nutritive materials and the supply of oxygen to the textures beyond these arteries is interrupted. The day before the senile gangrene begins, the arteries supplying the part are nearly, if not quite as diseased as the day after when the mortification has commenced. The altered action in the textures begins only when the diminution of nutritive material has reached to a degree that alters the chemical actions of the part, or when the diminished amount of oxygen produces the same effect. From one or other or from both of these causes the part becomes livid, and gradually darkens until it becomes black; as the oxidation is stopping it becomes cold, and the accumulation of carbonic acid and the stoppage of the circulation render the nerves insensible. The stagnant blood exudes its serum under the cuticle, where there is least resistance, and the fluids gradually evaporating, leave a black brown mass in which vibrios are produced, and putrefaction is set up, varying in its products with the dryness and the temperature of the part.

The further a part is from the centre of the circulation the more the force of the blood is diminished by friction, and the more readily will the altered vessels cause gangrene to be set up. Thus the extremities are the seat of the disease, and in the toes the greatest loss of chemical action takes place. Around the dead part the obstruction causes an opposite action; increased flow of blood and increased chemical action amounting even to inflammation, occurs. At the part where the dead nerve joins the living structures the most violent pain may be produced, and this become so severe that perfect rest and the strongest opiates alone give any relief. The progress of the mortification can only be stopped by keeping up the temperature, promoting the circulation by position, and making the blood as abundantly nutritious as possible.

Very much less serious errors of repair than those which I have mentioned may produce most remarkable general and local chemical diseases. Debilitating climates and hereditary subtrophic actions give rise to results at places of greatest pressure and least resistance, which, but for the striking phenomenon produced, might almost escape notice. In such a structure as the kidney it might almost be expected that from the immense pressure in the arterial vessels albumen, if not blood globules, would constantly be forced through the dialysing membrane. In the renal artery the pressure cannot be much less than one-sixth of the weight of the atmosphere, and a considerable portion of this falls on the malphigian tuft, and has to be resisted by the walls of the vessel which separate the blood from the urine. If by subtrophic action this membrane is made less resisting, albumen may be forced through; when the pressure is increased, blood-globules may pass into the urine; and when the pressure is diminished, the blood-globules first, and then the albumen may disappear. So also in other parts of the kidney, where there is less pressure than in the tufts, as in the capillaries on the tubes in the medullary structure, a subtrophic action in the textures may allow an increased pressure in the capillaries to force out substances which would not escape if the dialysing membrane were thicker. From one or other of these places fat, albumen, and blood-globules may pass into the urine, and constitute the complaint known as chylous urine, which is worthy of a few minutes' attention, not only as an example of increased pressure producing wrong chemistry of the urine, but also because it furnishes the most striking contrast to Bright's disease in its course, and in its secondary diseases.

In chylous urine the daily loss of albumen may be as much, or even considerably more, than in Bright's disease, and yet the complaint may last for a quarter of a century, whilst the patient may continue his work, and, if he were blind, might know nothing of his ailment except by a feeling of more or less general debility. No secondary diseases are produced, no accidents occur except that sometimes so much fibrin may escape from the blood into the urine that it may cause the contents of the bladder to coagulate, and thus give rise to a mechanical impediment to the escape of the urine. The distention and obstruction may cause much pain and distress for a day or two until the clot shrinks, and the fibrin loses its cohesion and gradually breaks up and is passed away in the urine. Throughout the course of the disease there is usually no dropsy and no uræmia. The poisoning of the blood, which commences with the alteration of the different structures in Bright's disease, never takes place in chylous urine. The structure of the kidneys may let one or many of the constituents of the blood out when the pressure is increased, but the alteration does not keep the uriniferous substances in the blood.

In the *Medico-Chirurgical Transactions* for 1850 you will find the history of a patient who has now been under my observation more or less frequently for sixteen years. I shall here only bring before you the evidence of the effect of pressure in causing the altered chemistry of the urine.

The first specimen of urine I saw "was made at 9·30 a.m., one hour and a-half after breakfast, the patient remaining in bed. It was clear, acid to test paper, not light coloured; sp. gr. 1022·5. It did not coagulate when boiled and when nitric acid was added; but the acid made the colour deeper. On the surface there was a slight appearance of oil; one or two blood globules were also seen." "The second specimen was passed at 11.30 a.m., two hours after being up. It was of a yellowish-milk colour, quite thick, and spontaneously coagulated, so that it could not be poured from the bottle. The specific gravity was 1017·0. It was very feebly acid to test paper. Nitric acid and heat gave a considerable precipitate. Under the microscope I saw blood globules in some quantity. No trace of oil globules, but a large quantity of very minute molecular matter, scarcely resolvable by a magnifying power of 320 times. No trace of casts of the ducts could anywhere be found. Little films of coagulum could be seen, containing many blood globules. Treated with ether, the etherial solution was clear; the urine below was cloudy, but on long standing became clear. The etherial solution on evaporation gave a great mass of oil globules, but with the microscope no decidedly crystalline fat was seen."

In the *Philosophical Transactions*, Part II. (1850), you may see some further experiments on the influence of rest and motion in lessening or increasing the albumen in the urine previous to or after food was taken:—

Last food was taken at 5.15 p.m. yesterday. He laid in bed this morning till 9.30 a.m.

10 p.m. last night.—Urine milky.

6.40 a.m.—Urine yellow, slightly milky, acid, contained a little albumen.

8.10 a.m.—Urine clear, healthy looking, made just before breakfast, which consisted of boiled milk (a pint), with sago and bread with a little butter; the specific gravity of the urine was 1021.3; it gave no coagulum with heat and acid.

9.30 a.m.—Urine opalescent, but not spontaneously coagulable; specific gravity 1019·0; gave a considerable precipitation with heat and acid.

12.30 a.m.—Urine milky; spontaneously coagulated.

Contrast this with the following day, when he got up earlier and breakfasted as before, though half an hour later:—

Last food was taken between 5 and 6 yesterday. He got up this morning at 6 a.m.

10 p.m. last night.—Urine milky.

2 a.m.—Yellow milky urine, acid, slightly coagulating with heat and acid.

6 a.m.—Urine quite clear, healthy looking, acid, contained no trace of albumen; specific gravity 1026·4.

7.30 a.m.—Urine opalescent, feebly acid. Gave a large precipitate with heat and acid; contained multitudes of healthy blood globules, but no casts. Specific gravity, 1018·6.

9 a.m.—Urine opalescent; by 12 became a solid jelly, alkaline. This was passed just before breakfast.

11.30 a.m.—Coagulated spontaneously to a strong unclear, slightly milky jelly.

Experiments on other days gave the same results, showing that when he remained in bed the urine was clear, and did not contain albumen, and when he got up the albumen, fibrin, and blood globules passed into the urine before food was taken; so that I frequently determined beforehand whether the urine before breakfast should be albuminous or not by directing the patient to get up and move about early, or to keep very quiet in bed. And by keeping him in bed all the day the urine throughout the whole day was very slightly albuminous.

Fifteen years after these experiments I have the following note:—

4 p.m.—Very milky urine. Specific gravity, 1031.

10.30 p.m.—Urine has slight milkiness. Specific gravity, 1029·5.

6.40 a.m.—Clear urine; specific gravity, 1020; contains no trace of albumen.

8.30.—Breakfast; up early.

9.15 a.m.—Urine clear; considerable precipitate with heat and acid. Specific gravity, 1023·0.

This influence of rest and of motion to me indicates that the disease depends on some slight alteration in the structure of the kidney, dependent upon some slight change of nutrition, which remains without perfect repair for years. Even with a slight increase of pressure the altered mechanical condition immediately affects the chemistry of the urine, and this to a degree resembling the wrong chemistry of the most serious Bright's disease, but none of the complications of Bright's disease occur; and sometimes, without any assignable reason whatever, or by the aid of strong astringent medicines, as gallic acid in large doses, the wrong chemistry will entirely disappear, and for a time at least the dialysing membrane appears to be sufficient to resist any pressure that it has to bear without admitting any of the proper constituents of the blood to pass through.

In order to show you how vast this subject of errors of chemical repair is, I must very briefly close this lecture with a sketch of one other chemical disorder arising from the injurious action of a chemical substance affecting the growth of the epithelial textures of the body. I allude to chimney-sweep's cancer produced by the action of soot.

The most violent opponent of spontaneous generation never can believe that any germ passes in with the soot, nor is it conceivable that any nervous or vascular action can transform an epithelium cell into a cancer cell. Whether the epithelial cancer be superficial in the vete mucosum; or deep, commencing in the epithelium of the sebaceous or sweat glands of the scrotum, or in the epithelium of the hair tubes, it consists in no error of oxidation, but in an entire change in the chemical growth of an epithelial cell.

It was for a time considered that a characteristic form of cell, a so-called cancer cell, marked this altered growth; then it was believed that an error *loci*, a peculiar birth-place, gave rise to it. The cellular tissue produced it. A corpuscule of the cellular tissue became an epithelial cancer cell. Most recently Dr. Thiersch has stated that the disease comes from the loss of the right balance of pressure between the epithelium and the stroma of the skin. The necessary equilibrium is destroyed by insufficient growth of the stroma; this gives rise to the peculiar increased development of the epithelium.

Although any peculiarity of form as characteristic of cancer is given up, and we no longer recognise it by fusiform, caudate, multinucleated, or polygonal cells, yet it is by no means unlikely that chemistry will detect some difference of substance; for the growth, propagation, and consequences of an epithelial cancer cell prove that it differs from an ordinary epithelial cell, and this difference of action probably is connected with a different chemical composition.

Not only does the soot act on the scrotum, but it even acts on the hand, and the pressure of the pipe on the lip or of the finger and thumb during shaving, and the lessened actions of declining years, all may lead to an altered epithelial cell growth. The cells no longer become healthy texture, but like pus cells they grow and multiply and oxidise and decay. Wherever a cancer-cell forms it begins its increased chemical action of nutrition, and it easily sets up peroxidation, and this adds the effect of ordinary inflammation to the altered nutrition of the part. At first, or indeed at any time, the increased flow of blood may cause all or any of the healthy structures to increase; thus the epithelium, the papillæ, the blood vessels may grow or waste, according as the nutritive fluid is attracted by growth or retarded by pressure. Even in the arteries themselves these changes may be observed, the inner epithelium coat may become thickened. The middle muscular coat may be still more developed and the outer coat of thickened cellular tissue may be extremely enlarged; after long-continued pressure the outer coat becomes fatty; the form of the vessel may be so changed that it becomes triangular instead of round. Generation presses on generation, and the multiplied growth exerts a pressure on all the neighbouring textures; so that increased action is accompanied in places by decreased action, and disintegration and suboxidations occur. The pressure destroys not only the healthy increased growths, but the very cancer cells themselves, so that they, in the places of greatest pressure, waste, become horny, fatty, or even earthy before they entirely disappear.

The abnormal growth takes the place of the healthy structures, and more especially in the deep-seated form of epithelial cancer, a single cell, or possibly even a nucleus, or a granule, or a possible cell, grows into an afferent lymphatic vessel, and is immediately carried to the gland. There it is stopped, and there it goes through the same series of actions as it would have gone through in the skin—at first, pertrophic and peroxidising actions, to be followed by subtrophic and suboxidised results, whilst rapid increase of epithelial and cellular growth goes on until a particle spreads into the efferent lymphatic, from whence it passes to any organ, and sets up a new colony, going through the same cycle of actions as it would have gone through in the skin.

At present, no medicine is known which can keep up the healthy formation of the epithelial texture, or which is able to stop the too prolific growth of the cancer cells. The chemical or mechanical removal of every outlying cancer cell alone can afford a respite, and in a few cases of epithelial cancer may give a perfect cure of the disease.

## ORIGINAL COMMUNICATIONS.

# LITHOTOMY IN SMYRNA.

By JAMES McCRAITH, M.D., F.R.C.S.,
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To the eighteen cases of lithotomy, as reported in the *Medical Times and Gazette* of July 2 and July 9, 1864, I have to add six additional cases since then, all of which have been successful, making two actual deaths in twenty-four cases—one of these deaths, as I then explained, ought not to count. I am induced to report these latter cases on account of the interest which I conceive attaches to two of them,—to one on account of the very large size of the stone removed by the "median" operation, the age of the patient (65 years), and the very satisfactory result; the interest in the second case is, the stone was encysted for a space of fourteen years, during which all the symptoms were more or less in abeyance, but recurred after this long interval with terrible violence, driving the poor patient to submit most willingly to any operation giving him a chance of relief.

I beg leave to make some remarks on the case of the old man with the very large stone:—

The calculus weighs 4½ ozs., is of a pear-shape, slightly flattened. Its chemical composition is given in the accompanying table. Assisting at the operation were Drs. Wood, Chasseau, and Edward McCraith. One would naturally suppose that such a large stone must be easily found and indicated by the sound, yet such is by no means the case, and for the following reasons, I believe:—The stone fills up the bladder, being moulded to its shape; if water be injected it will be forced into the upper part of the bladder, and the sound passing behind the stone is engaged in folds of the bladder; it cannot move freely, and it is impossible to get anything like the sensation which a moderate-sized stone moving freely in the bladder gives when struck by the sound. It will only be when jerking the sound towards yourself that you get the sensation of a foreign body being in the bladder, and you are then doubtful if it may not be a large tumour which you have in hand; a little manipulation, however, will give evidence of its being a stone. The above facts may, perhaps, be diagnostic of a very large stone. The time during which the symptoms may have existed will be no indication of the size; this very large stone was only eighteen months in forming, the symptoms dating only for that period. The calculi of urates or phosphates form quickly; the oxalates are very slow in being formed.

The old man was well, and left for Candia (his home) in three weeks. It is No. 34 in the table.

The points of interest about the second case which I will notice are the following:—The patient, 25 years of age, suffered severely from symptoms of stone when 3 or 4 years of age. This suffering continued for a couple of years, and then gradually ceased (the stone becoming encysted), to recur after sixteen or eighteen years, and then so severely as to make the patient submit to any operation. The three cases of encysted stone which have fallen under my observation were diagnosticated as such from the rectum. In this country it would appear that encysted cases are not rare, and the cyst was in the neck of the bladder in each case. Reasoning theoretically, it should always be so, as the stone must be driven into such a state (encysted) in an empty state of the bladder, when of course it lies at the neck, and being grasped spasmodically it must be driven forward into the neck, and the cyst there found. The body of this stone is of a longish pigeon's egg shape (this was contained in the cyst); then a neck or stem surmounted by a button-shaped body, flat on the top. This latter was contained in the bladder, and being struck by the sound gave me the idea that there were two stones, one encysted and the other free, and I gave such as my opinion to my *confrères* assisting at the operation. In operating I quickly came on the encysted part, and on pulling on it gradually it broke off at the neck, leaving the head or button-shaped part in the bladder. The cyst only was divided, and I had to enlarge the small opening into the bladder with a button-pointed bistoury and my finger as director to get this part away. The entire proceeding took less than a minute. The patient took nearly two ounces of chloroform on this occasion, and also, when sounded three or four weeks before, he required the same amount. Present at this operation: Dr. Wood and Dr. Nazick. No urine passed by wound after the seventh day.

You will allow me to make a few observations which I conceive may have some importance with regard to the question of median or lateral operation. All my later cases are of the median category. In encysted cases I suppose all will agree that the median is alone applicable. The stone is fixed in the centre or median line in a cyst; you cut on it direct and bring it away; the communication between this cyst and the bladder is in the median line; you evidently can get at this, and if necessary enlarge it, much more conveniently from the centre. There is no question of this in my mind. The median should alone be performed in all the encysted cases I have seen.

Now, as a general question, the chief advantage claimed for the lateral is the greater space it allows for the extraction of large calculi. The first case detailed in this paper is a proof that space enough can be made by the median operation for any calculus which can be met with in the general run of cases, this being far beyond the usual size of calculi, and yet extracted without much difficulty, and with perfect and quick cure. It is, therefore, a practical answer as to the space to be given by the median, being enough for all practical purposes. But I conceive the median has other and great advantages over the lateral, which, if I am right, should decide the question at once in its favour. They are the following:—During the operation, 1st, the Surgeon knows exactly where to make his incisions; nature has marked the line—no small advantage to one who has not had much experience. 2nd. The incisions are direct into the bladder; the manipulation of instruments therein, on that account, either to seize a small stone or broken pieces, is much easier; the washing out of *débris*, and the escape of blood, clots, and the flow of urine are facilitated. 3rd. You cut much more easily and securely on the groove in the staff when the latter is held centrally, than when held slantingly, as it must be in the lateral operation—a most important step in the operation thereby facilitated. 4th. You run little or no risk of arterial hæmorrhage; the pudic being safe, and no risk of dividing a large branch close to the point of origin, which may happen in the lateral. 5th. The vasa deferentia are safe, and the testicle consequently not affected; I have seen severe inflammation of testicle after the lateral. 6th. In extracting a large stone, as in the present instance, I think the dilatation of the parts more easy; and should some laceration take place, I consider it much less injurious when in the centre, between the lobes of the prostate, than when taking place through the lateral lobe; there is less risk of infiltration. But after the operation there is one advantage gained by the median, which, if it be acknowledged by the Profession, should decide in its favour. It is this:—The parts, when healed, are in a normal state, because in the median no muscular fibre need be divided; they may simply be separated, and no nerve is cut across its centre; whereas in the lateral all the muscles are divided more or less, and one—the transversalis—is cut quite across; and the cut ends of a muscle so divided tend to keep the wound open, and the muscle itself can never be normally restored; the functions, therefore, of those delicate parts are more or less interfered with; the result, incontinence of urine, or permanent fistula—derangement, in fact, of the functions of the part. After the median, none of those risks exist, and, in fact, in my twenty-five cases I have had very quick cures, and no resulting inconvenience. Table of last seven cases is given below:—

| No. | Weight. | Dimensions. | Shape. | Composition. | Age. | General Appearance. | Result. |
|---|---|---|---|---|---|---|---|
| 31 | ʒiss. | 1 × ¾ inches. | Flat oval. | Urates and oxalates. | 5 | Concentric layers | Cure. |
| 32 | ʒss. | 1 × ½ | Long oval. | Phosphates. | 11 | Shining long crystals, standing on end, like No. 3 in former list. | Cure. |
| 33 | ʒiij. ℈ij. | 1½ × 1⅛ | Irregular square, and curlish, like a piece of mortar. | Oxalates, fortification character on section, urates on outside. | 30 | Irregular squarish, like a piece of mortar. | Cure. |
| 34 | ℥iv. ʒiv. | 3⅜ × 2 | Long, roundish. | Urates and oxalates. | 65 | One end larger than the other. | Cure. |
| 35 | ʒij. | Broken in extraction. | Roundish. | Urates. | 9 | Do. | Cure. |
| 36 | ʒiij. | 1⅝ × ⅝<br>Head, ⅞ × ⅝, flat.<br>Body, 1¼ × ⅝<br>Neck, ⅜ × ⅜. | Long, oval, round body, with a neck at one end surmounted by a button-shaped head. | Urates body, phosph. head. | 25 | — | Cure. |

## NOTES ON, AND RELATING TO, CHOLERA.

### By JOHN PATTERSON, M.D.

After more than half a century the Medical world is beginning to acknowledge that little, if any, advance has been made in the treatment of cholera, and that at present it is the opprobrium of the Profession. This disease has been treated in every country, under every known condition of climate, in every rank of life, and with every application that enlightened and suggestive minds produced. With all these facilities for observation and treatment, it does seem strange that no remedy should have been discovered, and that the nature of the disease has not been elucidated. Surely the time has now come when we are justified in asking what must be done to satisfy the public mind that we, as guardians of the public health, have done all in our power to discover the origin and nature of this scourge of the human race, and that we have, as is our duty, pointed out to the heads of the various Governments the course to be adopted for the public welfare? These questions are now being asked, and soon, probably, our Profession will be invited to give a clear exposition of its views of this disease at the International Sanitary Congress. In what position are we to comply with such an invitation? Have we any clear idea to express as to its nature or treatment? Can we answer that our treatment has been based upon any sound principle of pathology, or shall we confess that every one of us has acted on a very vague idea of the nature of the disease he has been called upon to treat, and has applied remedies on a purely empirical principle? Serious questions these; yet most surely they are being asked, and demand our careful consideration. There certainly has been no lack of zeal and industry on our part as a body. Would that we could add the results were more satisfactory! The various theories of the day of the nature and manifestations of this disease, the diverse and often startling plans of treatment suggested and applied, the still fearful mortality, give too direct an answer to these questions. Shall we now quietly sit under the dogma that no treatment, no specific, has been, or ever will be, discovered for a pestilence; or shall we own that our researches have not been conducted in such a way, or our treatment applied in such a manner, as a sounder pathology might suggest? What has been the object of treatment for the last fifty years? To check diarrhœa and vomiting by opiates and astringents, in spite of the positive evidence that this is seldom accomplished; to stimulate the liver to secrete, and anxiously watch for the coloured motion, which is the indication of improvement, as if it were a certain result of the medicine, when more likely it is the first indication of the general returning vitality, which permits the organ to resume its natural function, and which, in cases of recovery without medicine, is equally well shown, and which never takes place till the reaction from collapse, however mild that may be, begins to show that the system is recovering from the shock which caused the first disturbance. To apply warmth and external frictions (which is certainly the only part of the treatment that looks efficacious), in conjunction with diffusive stimuli, to produce heat where there is cold, and to stimulate the visibly flagging powers of life, although this has not always been done with due regard to the principle on which it should be applied. These principles of treatment have guided the mass of the Profession in every country; and what have we to show for it? Simply that no definite knowledge of the value of any medicine has been obtained in spite of the variety of treatment, inasmuch as no cases were treated without external stimulation being applied at the same time, and the probability is that this was the most efficacious; that often the after-consequences of many of the medicines have been injurious; that, until within a very short time, we have had worse than ridiculous statistics of the results of treatment in various countries, arising either from the desire of some to gain a fleeting reputation by pretending to cure, or, perhaps, believing they really did cure, by forms of treatment daily practised for simple diarrhœa; that our knowledge of the contagious and infectious character of the disease is as limited as ever, no two men holding the same opinion; lastly, we have the same fearful mortality as when the disease first appeared. That this is not an exaggerated picture four fearful experiences of cholera in England and Egypt prove. Every form of treatment suggested I have seen tried, and by Practitioners of every civilised country. The honest opinion, of all whose opinion was worth having, is, that Medical treatment has done little. What, then, remains for us to do? To reopen the subject, and endeavour to obtain some clue to the nature of the poison which causes this disease, and its *modus operandi*, either on the nervous system directly or through the blood; to ascertain by careful and scientific meteorological observations, and by chemical analysis of the air the relations that varying atmospheric conditions bear to its progress; to ascertain what peculiar affections of the nervous system attend these varying conditions of atmosphere, which all admit prevail at these periods of epidemic, and which are more marked in warm climates. We have seen the great advances made in England alone in the study and treatment of fevers from opening out a new field of inquiry, and basing our treatment on certain known pathological conditions, modified by external conditions of climate, food, etc., after many years of what seemed a profitless discussion. Can we not do the same by this fearful pestilence which continually revisits us? It seems now certain that we must disassociate certain fixed ideas as to the nature of cholera. It must be considered something more than purging and vomiting, that being but secondary, and either an elimination of the *materies morbi* which should be checked, or a simple mechanical transudation which cannot be checked until the vital power of the mucous membrane is re-established. The able papers of Dr. George Johnson on this subject, embracing the former view, are suggestive of inquiry. I cannot, for one, as yet, agree with him, as they do not sufficiently explain the nature of the nervous shock, which I have shown, in a previous paper, constituted a marked feature in a recent epidemic, which, from its very severity and clearly-pronounced characters seemed to throw a clear light on the operation of the poison; nor do I think, with such a condition of the blood as Dr. Johnson supposes exists, that the cerebral functions would be so perfectly clear as they are in cholera.

This very marked condition of perfect intelligence has not been sufficiently considered as likely to throw light on the disease. It is more consistent with a diseased condition of part of the nervous system, especially the ganglionic, which we believe may receive impressions and not affect the brain, than with his theory of a blood disease. It is, however, probable there may be a close connexion between the two. The great restlessness and anxiety of many cholera patients, throwing themselves about so unceasingly is more indicative of sudden depression of the nervous system than that irritable restlessness induced by loss of blood or alteration in its quality. The collapse of pestilential cholera is also different from the collapse of excessive diarrhœa and vomiting. The sudden shrinking which we observe when there has been no great waste of the fluid of the blood, the extreme corrugation of the skin and contraction of the subcutaneous tissues, by which the capillaries are acted upon, seem to indicate something of the nature of shock, and show an action of the sympathetic system on the general circulation, which is also conformable to our notions of its action on the arterial system in preserving its healthy tone. Some of these conditions seem incompatible with the theory of Dr. George Johnson of infected blood, and are respectfully submitted for his consideration and inquiry. It is only from a careful consideration of such facts by such a man that we shall arrive at any useful conclusion, and I desire to provoke a new spirit of inquiry, that useful and philosophic spirit of inquiry which consists in something more than each man telling how many cases he has cured by such and such a treatment, which, when his neighbour tries it, is found useless, and brings us into notice rather as charlatans than sound pathological and physiological inquirers. The time is near at hand when we shall be called upon as a body to give some useful account of our labours. The International Sanitary Congress cannot but desire to take the opinions of scientific Medical authorities of the various countries of Europe, and then submit to the whole world the conclusions they have arrived at. It is probable the Commission may decide on certain sanitary precautions for Europe; how far these shall be based upon scientific Medical conclusions, or simply upon the experience and observation of shrewd outside observers, must necessarily depend upon the account we have to give of ourselves.

The great Powers of Europe have suddenly come to a resolution to try and prevent the progress of cholera—to shut it up, as it were, within certain limits, and prevent its spreading to Europe. What are the probable means at hand to carry out this very laudable intention, and what are the data they will act on? Are there really any definable limits to this disease? If so, it must have frequently overstepped them. Is our knowledge of the varying conditions of atmospheric temperature, electrical tension, development of ozone and other climatic conditions, so perfect as to determine those epidemic constitutions of atmosphere, and enables us to limit or arrest them by any system of quarantine? Can we say that cholera is infectious or contagious, and that such measures will have effect? Much attention has, of late, been directed to Egypt as the source of this malady. The pilgrims have been considered the importers, therefore by stopping the pilgrims bringing it to Egypt, its progress towards Europe will be prevented. But the pilgrims come to Egypt every year, and they do not bring cholera with them. The pilgrims come too from India; others, not pilgrims, also come from India, China, Cochin-China, and places where cholera is ever present. Do they ever bring it with them? In the early part of the year 1865, cholera was known to be gradually spreading from place to place along the shores of the Red Sea, long before any idea of the pilgrims bringing it ever entered the minds of people, keeping then as erratic a course as it has since done. If the doctrine of contagion and infection holds good, why did it leave some places untouched, in a straight line with others that were severely affected? On the other hand, how explain its locating itself in several places, giving apparent evidence, if one did not carefully examine it, of communicability; or, against the generally received opinion, attacking, as if *par preference*, the young and healthy and temperate, whilst the aged and weak and the hard-living escaped? It may be well worth our consideration what answers we are prepared to give to such questions.

The opportunity should not be lost of the present Congress. What cannot be done by the Medical Profession unaided may be done by the assistance of the various Governments. What is needed? A regular system of meteorological and chemical observations of the most accurate kind in India, China, and Cochin-China—at the places where cholera is known to take its rise. For the various Governments to have properly qualified persons, at home and abroad, provided with instruments and everything necessary to carry on an extended course of observations in the intervals of epidemics, and, when the disease appears, to carefully note its line of march and the varying circumstances likely to have a bearing on it.

To have some able pathologists and physiologists to watch the disease carefully, and make accurate post-mortem examinations, and to give them opportunities of studying the disease under circumstances likely to eliminate sources of error; not to leave this work altogether to the unaided zeal of common meteorological observers, and to the anxious and over-taxed mind of the practising Physician. Something of this kind is certainly wanted, and will probably do more good to mankind at large than what is likely to result from any local quarantine, which can rarely be properly enforced, and which almost all are interested in evading. And it really does not look like a bright idea to suppose that a local quarantine in Egypt will limit a disease like this, which is generally believed to be dependent on atmospheric conditions, operating over a large space, and often in several places at once on the same continent. If quarantine has to be applied for this purpose, the most natural way of imposing it would seem to be that of trying to limit the disease to the countries where it is generated—the Indian continents—not an easy matter certainly—but for the European Powers to try and keep it away by placing one way of communication in quarantine and leaving the others open, even allowing for a long sea voyage, seems strange enough. These reflections on cholera have arisen during a tour through Europe, and from conversing with my brethren in various countries on the nature and treatment of cholera, and from observing everywhere how little prepared we are, as a Profession, to answer the questions likely to arise. Lastly, from the humiliating feeling that so many years' experience has not enabled us to alleviate much the fearful scenes many of us have lately been called to witness, and from the desire to stimulate a spirit of earnest inquiry as to the nature and conditions of this fearful plague, and to discover some remedy.

Cairo, Egypt.

# REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

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## ST. MARY'S HOSPITAL.

### ABSTRACT OF CLINICAL LECTURE ON A CASE OF PARALYTIC CONTRACTURE AFTER FEVER.

(Under the care of Dr. HANDFIELD JONES.)

F. R., aged 12, an emaciated boy, was admitted under my care December 30, 1864. He had been ill about four months, had passed through a severe fever, in which there had been much diarrhœa and bed-sores had formed on hips. Since this illness he has never been able to stand. As he lies in bed he has evidently almost complete paraplegia; can only just stir his feet a little. The right knee is very much flexed, and the left somewhat also. He can use his hands and arms freely now, but some time after the fever was unable to use his left hand and forearm; the right upper limb has never been affected. The sensory power in the lower limbs is disordered, the right is hyperæsthetic; he cannot bear to have it touched or stirred; if it is, he feels pain all up the limb. The left is in a similar state, but not so badly affected. Sphincters have never been paralysed. On trial the muscles were found very insusceptible to the interrupted current. Appetite good; bowels regular; sleeps fairly; pulse very feeble. Urine neutral, pale, specific gravity 1015, not albuminous, deposits a notable quantity of pale flocculent sediment, which contains numerous cast-like objects of granular appearance and various size. The urine was in the same condition and deposited the same sediment fourteen days later, when the casts found in the sediment were made out to consist of a central cylinder of organic matter clustered over with refracting granules, which disappeared with effervescence when nitric acid was added, and were therefore probably carbonate of lime. On one occasion, some days previously, a cast was seen covered with minute oxalates. He was ordered gr. v. of citrate of iron and quinine and cod liver oil, which he took till February 1, when the former was replaced by strychniæ gr. $\frac{1}{20}$. The dose of this was raised after ten days to gr. $\frac{1}{16}$. On February 1 I made a note "that he has still very feeble power over his lower limbs, but moves his legs much more than his thighs; the sensory power appears perfect." Improvement to a notable extent had evidently taken place. On the 11th I noted that his right leg was rather stiff in the mornings, but he moved it as well as the other in the evenings. On the 18th the report is, "Urine pale and clear, specific gravity 1007, slightly acid. Right lower limb is nearly rigid in a semi-flexed state; very slight passive movement can be made at the knee-joint; the calf muscles are tense and also the extensors of thigh, but the muscles on the posterior aspect of thigh are tolerably lax. The left lower limb can be almost perfectly extended. Both are quite moveable at hip-joints. Both feet feel equally cold, but above the ankle the right limb is distinctly colder than the left. Sensation is good, and equal in both legs. Complains of pain only in the right groin. No pain at all felt when spinal column is percussed. Looks well in face. Pulse weak." Ordered pot. iod., gr. iv.; ammon. carb., gr. ij.; tinct. cinchonæ, ʒj.; aq., ℥j., ter die. Pt. c. oleo.

February 28.—Cannot stand alone, but can get along by himself with crutches; the right knee is still stiff, and he has but little power over the leg; his face looks bright and rosy. Urine pale and clear, specific gravity 1012. On closer examination it appears that it is the calf muscles especially which prevent the right leg from being straightened. They are felt tense and resisting, while the long flexors of the thigh are lax. Chloroform was now administered, and he was rendered quite insensible. The orbicularis palpebrarum did not act at all; the arms were lax for a short time, and fell when raised as inert masses, but the tense condition of the calf muscles (gastrocnemii) never changed at all. When the knee is flexed the muscles become lax enough, but are rendered tense by extending the joint. He was ordered ant. pot. tart., gr. $\frac{1}{6}$; liq. opii sed., ♏ij.; M. C., ℥j., ter die. Pt. c. oleo.

March 4.—When lying on his back he can kick vigorously forward with his left foot (the knee being bent), but cannot do the same with his right; can just stand alone.

8th.—Is improving; can extend the leg on the knee; can kick with the right foot. Urine deposits phosphates copiously. Pt. c. mist, quater die. Pt. c. oleo, ʒij. ter die. Warm hip bath with douche to back every night.

15th.—Improves; can hobble about pretty well without crutches, but cannot yet stand on the right leg alone. While he is having the hip bath and douche to the loins the right lower limb becomes much straighter, as the sister reports.

22nd.—Some sickness produced by the antimony, the dose having been increased to gr. $\frac{1}{4}$. Omit it. Pt. c. oleo, ʒj., ter die.

29th.—Walks about quite well without a stick, but the calf muscles still retain the knee-joint in a slightly flexed state; he can extend and flex it up to a certain point, but the extension is incomplete. Has had for the last three nights a large Pulvermacher's chain applied from the hip to the calf; it causes a pricking sensation, but there is no ulceration. Girth of right thigh = 13 inches, of left at corresponding part $13\frac{3}{4}$. Urine specific gravity 1028, turbid with lithates, not albuminous. Atropiæ gr. $\frac{1}{64}$, injected subcutaneously into ham. Pt. c. oleo. Ferri citratis, gr. v.; acidi hydrocy. dil., ♏iij.; tinct. calumb, ♏x.; aq., ℥j., ter die.

April 12.—He can walk and run now; the right knee is not quite straight, but very nearly; he can stand on the right leg alone. Discharged.

*Remarks by Dr. Handfield Jones.*—There can be no question in this instance that the palsy was the result of the fever. The impairment of nutrition which the disease so commonly induces affects sometimes one part, sometimes another more gravely. Generally, the more peripheral parts, the muscles of the limbs, or the skin, suffer, while the central and more important organs escape. It is well known, however, that the heart is often gravely affected, and we have recently had a very good instance of this occurrence. Some of you will remember the youth who lay for two or three weeks, after his fever had apparently ceased, with a most feeble pulse, an imperceptible cardiac impulse, and an all but extinct first sound. For many days 15 oz. of brandy taken with milk daily seemed no more than sufficient to keep up his feeble circulation, though his general muscular power was not so much impaired as to prevent him from changing his position in bed, and the skin retained its vitality, for he was free from bed-sores. Turning to the nervous centres, we find that a previous attack of fever has not unfrequently been recognised as the cause of such disorder of the brain as has issued in some form of insanity. Drs. Bucknill and Tuke state from 2 to 3 per cent. of the admissions are due to this agency, and that the mental malady is more apt to occur after typhus than after typhoid, and in this case is less curable also. In children, they add, it is not uncommon for illusions or extreme nervousness to last for some time after the attack of fever, but they pass away commonly as the strength is restored. M. Thore(a), in a paper on the relations between chorea and insanity, observes that a severe typhoid fever, complicated with cerebral symptoms, constitutes a serious predisposition to lesions of intelligence. There is at present a girl, aged 25, under my care in Victoria Ward, who has passed through a severe attack of typhoid, in the course of which she became extremely deaf, and had also a good deal of noisy delirium. The fever has long been at an end, but, though she is quieter than formerly, her deafness persists, she does not regain flesh or strength, and appears rather to be gradually wasting away—so much so that I made an examination of her chest recently with the expectation of finding some evidence of tuberculosis in progress. Concurrently with this general *dépérissement*, her brain seems to be undergoing atrophy, she has a semi-demented aspect, refuses food, and passes all her evacuations in bed. Her pulse is, indeed, very feeble, but not at all more so than it is in many sick persons whose cerebral functions are performed very differently. No doubt can exist that in this instance an originally not over strong brain has been so depressed by the fever process in its functional power that there is much ground for fear that it will never recover, but lapse still further into a condition of hopeless structural decay. The persistent deafness is no doubt owing to a like state of the auditory nervous apparatus. In the case of the boy which I related at the commencement of this lecture, the spinal cord failed to maintain its nutrition, while the brain resisted the depressing influence. The spinal centres of the lower limbs seem evidently to have a less vigorous and enduring life, and, therefore, to be more liable to succumb to morbid agencies than those of the upper. While superior paraplegia from spinal disease is infinitely rare, inferior is abundantly frequent. This may be in part due to the greater length of space between the volitional centres and the inferior than between them and the superior; but that this cannot be the chief cause is shown by a case recorded in my Lumleian Lectures, in which two tumours situated on the pons Varolii caused paralysis of the lower limbs, while the upper almost entirely escaped. Moreover, in the disease termed "locomotor ataxy" the wasting changes are most advanced in, or may even be confined to, the lower enlargement of the cord. In reflex paralysis the lower limbs are much more often affected than the upper; and the same is true, I think, of myelitis and white softening. Rokitanski, speaking of apoplexy of the cord, says that in adults it is confined to the lumbar portion. The failure of nutrition and of functional power in the cord could not have advanced so far as to produce actual dilapidation of structure, I think, as in that case recovery would not have ensued so completely. I regret very much that the record of the case is not so clear as could be wished with respect to the period when the shortening of the muscles first appeared. My own impression certainly is that it did not exist when he was admitted, but the sister's testimony was decided the other way. However this may be, it is plain that in the later stage of the disease we had to deal with a real shortening of the muscles attached to the tendo-Achillis, and not with a spasm only. This state was materially amended by exercise and by passive extension of the joints, which was frequently performed. What is the exact condition of the muscles which thus shrink and shorten when paralysed from disease of their animating nerves, we do not know, but it may be surmised that some alteration occurs in the sarcous elements approximating them to the condition of ordinary fibrine, which, as we know, has a marked tendency to retract and draw together. The indications of treatment were tolerably plain, tonics and restoratives were evidently necessary at first; but at a later period, though cod liver oil was still beneficial, it was clear that we should have gained nothing by persevering with strychnia. On the other hand, I incline very much to believe, though I would not speak too positively, that the small doses of antimony which we administered were really of much service. At any rate, improvement, which was at a standstill just before, went on very fairly after the use of this drug was commenced. Ackermann's observations go to show that antimony has the effect of diminishing very much muscular irritability; and it is conceivable, therefore, that it may be of service in states where the muscular tissue has a tendency to pass into a state of permanent and increasing contraction. Mr. Holmes Coote states that antimony in small doses, continued for many months, together with purgatives and stimulating embrocations to the limbs, constitutes the best treatment for infantile paralysis—a disease not altogether dissimilar to that which we have now before us. The persistence of the rigidity during chloroform anæsthesia, and the lax state of the muscles when the knee was flexed, seem to me to put it out of the question that the contraction was dependent on existing irritation of the nerves; yet I do not well know how to reconcile with this the statement made by the sister that during the warm bath and spinal douche the limb became much straighter. In all case of paralytic rigidity or contraction, passive movements of the limb should be practised diligently. I have heard of very unexpected results being thus produced. Steady perseverance in this proceeding may enable us to dispense with division of the tendons.

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(a) *Annales Méd. Psychol.*, March, 1866.

## ROYAL FREE HOSPITAL.

### CASE OF IMPACTED FRACTURE OF THE NECK OF THE FEMUR—RECOVERY WITH FIRM UNION, AND A FREELY MOVEABLE JOINT—LIMB SLIGHTLY SHORTENED—CLINICAL REMARKS.

(Under the care of Mr. GANT.)

THIS case is the continuation of a series of interesting cases on injuries and diseases of the hip-joint, which have been under Mr. Gant's care at the Royal Free Hospital, and reports of which have appeared in the columns of this journal. Last year, four consecutively successful cases of excision of this joint were communicated, as illustrations of what he appropriately terms "Pathological Operative Surgery,"—so named, as indicating the kind of knowledge which originally suggested all such local and limited operations, instead of amputations, for diseases of the joints otherwise incurable; and, moreover, as representing the guidance of pathology generally, in the design and performance of operations which characterise modern Surgery.

The following uncommon case—for the particulars of which we are indebted to Mr. Hackney, House-Surgeon to the Hospital—well exemplifies the suggestiveness of pathology in the *diagnosis* of an obscure form of injury to the hip:—

Respecting the diagnosis of the case, Mr. Gant remarked that early detection of the kind of injury much concerned the credit of the Surgeon, as well as being of great consequence to the patient. The interest of both turned on the fact that impacted fracture might be overlooked, and the symptoms attributed to a sprain of the joint, an oversight which would inevitably entail incurable lameness to a far worse extent than pertains to the injury itself.

The presence of extracapsular fracture *without* impaction cannot be mistaken. All the symptoms are exaggerated, so to speak, to the highest degree—the shortening of the limb, possibly to the extent of two or three inches; the complete eversion; the flattening of the hip, masked only by the severe contusion which generally accompanies the injury as caused by direct violence; the crepitation when the limb is drawn down and rotated inwards; the mobility of the great trochanter when it can be felt; the utter helplessness of the limb, and the extreme pain, which indeed renders inexcusable much, if any, manipulation in search of the local symptoms referred to, for the aspect of the limb itself and its diminished length, coupled with the contusion of the hip joint, are together sufficient evidence as to the kind of injury. Intracapsular fracture, *without* impaction, is recognised by the same symptoms, only in a lesser degree, particularly with regard to the contusion, which is generally conspicuous for its absence. But here, with impacted fracture, we noticed the absence, or nearly so, of all the symptoms enumerated, except shortening of the limb, and this only to the extent of about half an inch in the first instance. All the other symptoms were reduced to their lowest degree, so as to almost escape observation; yet this very negation of the usual symptoms suggests our diagnosis. Observing some degree of shortening after recent injury; without eversion of the limb, or scarcely any; without alteration of the contour of the joint itself, or scarcely any; without perceptible crepitation or alteration of mobility at the seat of injury, and without much power to raise the limb; then we have before us a case of impacted fracture. The pain and partial inability to use the limb may point to sprain as the kind of injury which the hip joint has sustained, but the shortening without the concomitant symptoms of fracture assure us of the presence of an *impacted* fracture.

The diagnosis between impaction within and without the capsule is of no practical consequence.

W. C., aged 48, labourer, admitted October 4, 1865, was knocked down by a drunken man in the street. He (the patient) fell on the pavement, striking his right hip, and with the leg twisted under him. On attempting to arise, he found he had no power in the right leg, which felt, as he described it, a "dead weight" to him. Any attempt at moving it also caused great pain in the hip.

He was brought to the Hospital, and on examining him in the recumbent position, the following symptoms presented themselves. The limb is slightly shortened—not more than half an inch less in length than the left—and it is slightly everted; but there is no marked flattening of the joint, the great trochanter being quite perceptible, although a little higher in position than on the left side; nor, on the other hand, is there any notable contusion or swelling. No crepitation or preternatural mobility can be felt on rotating the limb and grasping the trochanter. Lastly, there is not total inability on the part of the patient to use his limb. He can lift it off the bed to a height of some inches, and lower it again pretty steadily, though the movement is evidently attended with great pain.

The limb was allowed to remain at rest for two or three days until the immediate effects of the injury had passed off, and the hip would bear the pressure of a splint.

October 8.—It was noticed that the limb had shortened upwards of half an inch more, making the whole extent of shortening upwards of an inch. It was also then specially noticed that the shortening could not be altogether overcome, and the limb brought to its proper length, by extension.

A long splint was applied with a perineal band, and by tightening this occasionally to increase the extension, the limb was gradually brought down to only half an inch of shortening, which was the length finally attained at the end of a month. When the splint was removed a gutta-percha splint was then moulded to the hip, and a starched bandage applied over it. The patient was allowed to get about with crutches. Nothing worthy of note occurred afterwards.

December 5.—The patient can bear his weight partly on the limb, and can swing it freely, but soon becomes tired. His general health and strength, which were feeble before admission, have now much improved under the influence of good living, quinine, and cod liver oil. In this state, or a better, as to use of the limb, he left the Hospital on December 28.

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# Medical Times and Gazette.

SATURDAY, APRIL 14.

## DEATH-RATES.

An able writer (whose hand we fancy we recognise) on the "Fallacies of Sanitary Statistics," devotes some space this month in the columns of a contemporary to strictures upon a "statistical delusion" involved in the practice of quoting "what are supposed to be local death rates."

The writer we refer to objects to the publication by the Registrar-General of the rates of mortality of the twelve towns which are given in the weekly return for London, on the ground that "the proportion which the deaths occurring in a very limited period of time in any town or district bear to its assumed population is no true test either of the salubrity of the place or of the longevity and healthiness of its inhabitants;" and he asserts, in fact, that the publication of anything beyond the number of deaths registered in those places weekly and quarterly, leads to "mischievous absurdity."

Now, whilst we have no intention of taking upon ourselves the defence of a department so well able to hold its own as the one in question, we are nevertheless prepared to challenge the wisdom of the attack to the extent of retaliating that a mere comparison of the deaths registered in a town with those of another town, irrespective of the proportion which they bear to the population out of which they occur, would be a "statistical delusion" of the wildest kind.

Objection is further made to "two curious assumptions: first, that an annual death-rate may be calculated from the mortality of any single quarter: and, secondly, that the population has uniformly increased since the last census at the same rate as during the whole decennium before that census;" and the writer refuses to "admit that such results so obtained have any right to be termed death-rates."

Is not this just as if one having paid £2 10s. as the interest on the loan of £100 for six months should object to have it noted that the *rate* of interest was £5 per cent. per annum?

In point of fact the writer would place us in this difficulty: For the last three months, in a certain town of 500,000 inhabitants, the weekly deaths have not unfrequently exceeded the births registered; whilst in another town of 200,000 inhabitants the births have been largely in excess of the deaths during the same period. By what standard are we to measure the relative mortality of these two towns if we are precluded from placing them on a uniform basis by ascertaining in both cases the proportion of deaths to population? And as in the computation of interest the rate per cent. *per annum* is invariably quoted, why should not the same rule be applicable to death rates? We simply make use of a common denominator which is sufficient for all practical purposes.

The writer is equally hypercritical in his conception of "curious assumption" No. 2, for as it would be absurd to assume a stationary population when everything proved the contrary, there is no alternative but to make the "curious assumption" that the increase is regular in its progression.

We take the death rates which are published weekly as a means whereby we can judge of the relative healthfulness of the several towns; but neither we nor any person at all acquainted with the subject would dream, when we see it stated that the *annual* rate of mortality in a given week, say in Liverpool, was 57 per 1000, that it was thereby implied that throughout the year 57 deaths would actually occur to every thousand persons living. *If* that rate prevailed for a year, it would be an absolute fact, but as it is hypothetical the rate is relatively understood.

The Registrar-General does not, as far as we know, claim for these death-rates any higher position than this: that by assimilating places of different degrees of population to one general standard in that respect, a view of the general mortality rate of the towns is obtained which is thus fairly comparable. But this general view is without prejudice to more minute inquiries into the causes of divergence in the constitution of those towns, either as to locality, age, sex, or condition of the inhabitants. The mortality-rate of a town undoubtedly depends very greatly on the character of its population, and if hordes of uncleanly Irish families were to be accumulated in the most healthy localities of England, the effect of such a change of inhabitants would soon be apparent in the increased death-rate of those localities.

When the elaborate organisation dreamt of by the writer we have quoted is *un fait accompli*, we shall, perhaps, learn much that is at present obscure as to the remarkable difference in the death-rates under apparently similar circumstances; but we would have him bear in mind that public departments are not yet omnipotent, and that many things which are well known to the officials to be desirable, are under present arrangements impracticable.

# ATMOSPHERIC OZONE.

In speaking of ozone last week, we referred to its action on iodide of potassium as having been adopted as the test of its presence. Many of our readers, we are sure, have made use of ozone test papers to detect the presence of ozone in the atmosphere. At any rate, the action of the atmosphere on these test papers forms a part of nearly all meteorological observations. These papers are usually white paper which has been impregnated with starch and iodide of potassium. When ozone comes in contact with them, it colours them, in consequence of the reaction between the starch and the iodine set free from the potassium salt by the ozone. Now, these papers are influenced by the atmosphere in the same way as they are by undoubtedly ozonised air. May we not, therefore, consider that ozone is in the atmosphere, when the test papers are affected by it? That we may has been the general conclusion for years. But there are further reasons why this conclusion has been come to. Electric currents passed through air produce ozone, and we may fairly suppose, therefore—nay, more, we can hardly help admitting—that as there are so often variations in the electrical condition of the air, and discharges of lightning through it, ozone must be often found in it. Again, it is found that during slow oxidations at ordinary temperatures ozone is produced, and as these are constantly going on around, we may also suppose on this ground that ozone is always being produced in the atmosphere.

With regard to the test paper indications, however, there are other substances which may occur in the atmosphere capable of causing the liberation of iodine and its consequent action on starch. There is another reason for doubting the correctness of the indication of these test papers, which is the inexplicable irregularities of the variations in the quantity of atmospheric ozone recorded by them. In fact, after ten years' ozonometric observations, Admiral Bérigny stated, through M. Frémy, to the French Academy of Sciences, at its meeting on November 27, his serious doubts of the existence of ozone in the atmosphere at all. M. Frémy, on this occasion, commented on the very doubtful character of the evidence of its existence in the air. He looked upon the oxidation of silver as the only certain test of its presence, and he had repeatedly exposed metallic silver to the air without obtaining any indication of it. We are very far, he said, from being acquainted with all the substances suspended in the air. And may not iodide of potassium, he asked, become alkaline or liberate iodine by other means than that of ozone? What was the use, he said, of test papers which were affected, not only by ozone, but by the oxides of nitrogen, by peroxide of hydrogen, by formic acid, by essential oils, by acids, by particles of dust, &c., all of which, particularly in a wooded district, may be present in the atmosphere?

The result of this legitimate attack upon the theory of atmospheric ozone has called forth important replies from M. Houzeau, a French chemist, who has for years been engaged in investigating the subject. He admits that many substances capable of affecting the iodised starch papers of Schœnbein may be in the atmosphere—such as those above mentioned, as well as chlorine, bromine, and particularly iodine, the existence of which in the atmosphere has been demonstrated by M. Chatin. He shows the fallacy of M. Frémy's silver test by the fact which he has himself demonstrated, that actually ozonised air sufficiently diluted does not affect silver, although still far richer in ozone than the atmosphere is ever found to be. He considers that Schoenbein's test papers, which Admiral Bérigny employs, are certainly open to the objections of M. Frémy, and has for a long time employed papers of his own (which we described last week), made of wine-red litmus-paper slips, half of each of which has been impregnated with iodide of potassium. The potash formed by ozone then turns the part of the paper prepared with the iodide blue, while the other part preserves its colour in contrast. Iodine, chlorine, acids, etc., do not affect this paper, so that its ozone indications are of much greater moment. He referred to the results of his experiments he had laid on a former occasion before the Academy, which proved that the statement that the oxides of nitrogen which might be present in the air would turn his paper blue by forming an alkaline nitrite with the potassium of the iodide was incorrect. When oxides of nitrogen turned the iodised litmus paper blue it was due to ozone produced during the oxidation of binoxide of nitrogen. As far as the atmosphere was concerned, at the times when it was very active towards his test papers no oxides of nitrogen could be detected, and when it was artificially impregnated with oxides of nitrogen it did not affect his papers.

From the evidence of his papers M. Houzeau said he was far from sharing the doubts of Admiral Bérigny, who had employed iodised starch papers, inasmuch as that after ten years' experience also, he had not met with the discordant results and incomprehensible contradictions which had so discouraged Admiral Bérigny. There was no scientific reason for not admitting the existence of ozone in the air, and he had, he stated, never despaired of solving the doubts on the subject. This was on December 18.

On February 26 he laid before the Academy an important memoir, in which he states the conclusions from his observations to the following effect:—1. The principle acting on the test papers is a normal constituent of the atmosphere in our temperate climates, circulating freely in the open country. 2. Its proportion varies according to certain meteorological data. 3. Various causes favour its manifestation. These are winds and aqueous vapour: either of these may not singly affect the test papers. This is explained by the well-known chemical fact that moisture is essential to many chemical reactions. But when, in spite of agitation of the atmosphere, and sufficient moisture in it, the iodised litmus papers are not affected, it is because of the presence of an acid principle in the atmosphere, the existence of which has been already announced by him. 3. The established difference between the chemical activity of the air of towns and that of the country is very simply explained by the observed difference in the renewal of air in the two cases. In the country, the circulation of the air is free; in towns, it is impeded by the houses and other buildings. Consequently, with the same amount of active principle, the air of the fields ought to prove more active than that of the towns, since, in the same time, more air comes in contact with the paper. Hence the more exposed the test paper is, the more rapidly it is found to turn blue. 4. But, besides these almost purely mechanical influences on the mobility of the atmosphere, there are also natural causes, the action of which is more especially chemical, for they enrich the atmosphere itself with the principle which gives it chemical activity. These are storms, waterspouts, and hurricanes. The influence of these meteorological phenomena on the active properties of the air extends at times to great distances, and often even into regions where their existence remains unknown. Most frequently, however, the announcement of the great atmospheric perturbation by the iodised litmus papers is accompanied by other most characteristic signs, such as gusts of wind, a clouded sky, showers, and fall of the barometer. The author here gives some striking meteorological evidence of this, but too long for us to abstract.

Thus, the author remarks in conclusion, is resolved the meteorological part of the problem which has for so long a time divided philosophers.

Concerning the chemical part of the problem, the author adds in a note the peculiarly interesting fact which he had just then discovered, that by condensing the vapours of the atmosphere there is obtained a liquid possessing all the properties of the peroxide of hydrogen discovered by Thénard. He expressed his hopes of obtaining sufficient of the substance for analysis. If he does, we may hope soon to have evidence which may be said to prove and disprove at the same time the presence of ozone in the atmosphere; for atmospheric ozone has been by some regarded as modified oxygen, while by others it has been looked upon as a peroxide of hydrogen.

## THERMOMETER IN DISEASE.

We propose to continue an account of the information the thermometer affords us in cases which simulate phthisis. A patient presents himself with the following physical signs and symptoms:—There is general bulging of the chest, the antero-posterior diameter of which is much increased, the back is much curved, and the costal angle is very obtuse. The lower ribs are almost horizontal, and the lower interspaces are much widened. The expansion movements of the chest are greatly lessened. The heart is seen beating at the epigastrium. By percussion we learn that the chest is too resonant, and that the area of percussion resonance is much increased, encroaching on the heart and liver dulness. The respiratory murmur is everywhere weak. Respiration is divided, and expiration much prolonged, and there is heard over the whole chest some sonorous and submucous rhonchus. The patient has lost flesh greatly; his pulse beats too quickly; his appetite is lessened, and he sleeps badly at night. There is profuse muco-purulent and nummulated expectoration, and he sweats profusely. The other organs of the body are healthy. What have we here? Is the patient tubercular, or can we explain his symptoms in some other way? The bulging of the chest, the obtuse costal angle, the horizontal position of the ribs, with widening of the intercostal spaces, with increase of the antero-posterior diameter of the chest, prove that the capacity of this cavity is much increased. His chest has assumed in many respects the form that occurs when a deep inspiration is taken, but this is habitual with him. It may be termed the inspiratory chest. What diseases will produce this enlargement of the chest? The three diseases that will cause such distension are emphysema, pleurisy, and pneumo-thorax. If the two latter complaints were the cause of the signs and symptoms in such a patient as that described, the disease must be situated on both sides, and to have caused so much enlargement they must have also pressed and caused collapse of the lung. With such a condition of things the patient could not live. Thus these two diseases may be excluded from the diagnosis, and such a chest of itself becomes diagnostic of emphysema. Emphysema, also, will account for almost all the remaining physical signs. In this condition of lung the air vesicles are much distended, and thus the lungs are much enlarged. The amount of air contained in them relative to the solids of the lung is increased. This increased amount of air, with increase of the size of the lung, explains the increased clearness of the percussion note and the increase of the area of resonance. But such lungs have also lost much of their elasticity; but this elasticity is one of the chief factors causing expiration, thus the expiration is retarded, and the respiration becomes divided. The vital capacity of the chest is greatly lessened, and the amount of tidal air is diminished, and hence the respiratory murmur is weakened. Thus all these signs are sufficiently explained by the emphysema present; and further, we can only conclude from the rhonchus that the patient has some bronchitis. But does such a patient merely suffer from emphysema and bronchitis? Can these diseases account for the symptoms given, or must we accept some other disease to be present to account for them? If such disease be present it is probably phthisis, for the other organs of the body are healthy. Is the absence of physical signs sufficient to preclude the possibility of tubercle being present in the lungs? Certainly not, for with such signs as those given, and with them alone, cavities of considerable size may exist in the chest—nay, more, tubercles in considerable quantity may be scattered throughout the lungs, and yet give no evidence of their presence, or if they do give rise to any signs, the only one present may be submucous rhonchus; but this may also be due to simple bronchitis. Can the symptoms present be accounted for by the bronchitis? In many cases of simple bronchitis such symptoms are present. The profuse expectoration exhausts the patient. By the frequent cough the sleep is broken, and from want of sleep the appetite is greatly impaired, thus affording an additional cause for the loss of flesh and general weakness. We have already seen that weakness may quicken the pulse, and cause profuse sweating. Nevertheless, such symptoms are quite sufficient to justify the fear that tubercle is being deposited in the lungs, for such a deposition may be going on, and yet no other signs or symptoms than those given above be present. How are we to decide to which of these diseases the symptoms are to be ascribed? We have seen that the deposition of tubercle always produced an abnormal elevation of the temperature. *In bronchitis of the kind described the temperature is normal.* It is true, at the very commencement of an attack of capillary bronchitis, the temperature is much raised, but this elevation only continues five or six days, and then subsides again. Thus, when bronchitis has lasted some time the temperature is normal. The thermometer, therefore, affords us the information we require. If the temperature be normal the patient is not tubercular; or the converse case may be met with in which with the symptoms and signs given above, an active deposit of tubercle is taking place.

It is highly important not to confound these two diseases, for the latter is usually quickly fatal, whilst the former often subsides, and the patient may survive many years. If the temperature be elevated, and if the elevation continues for many days, it becomes almost a certainty that tubercle is being deposited in the lungs.

Other conditions may sometimes occur and render the diagnosis of phthisis difficult or impossible.

The following case, narrated by Dr. Bateman, Physician to the Norfolk and Norwich Hospital, illustrates one source of difficulty:—"A patient, aged 32, was admitted into Hospital. He had been ill two years. Twelve months previous to his admission he spat about a teaspoonful of blood, and for six months he had suffered from a slight cough, with some expectoration and dyspnœa. On admission the first and principal symptom which attracted attention was a stridulous noise with his breathing, as if something was pressing on the recurrent laryngeal nerve. There was slight cough, with some expectoration. Expansion on inspiration was deficient under both clavicles, but percussion was fairly resonant. The respiratory murmur was covered by a loud stridulous noise, evidently conducted from the larynx. There was considerable obstruction to the entrance of air into the lungs. He spoke in a whisper. He had no difficulty in swallowing, and there was no numbness nor pain in either arm. The right pupil contracted more sluggishly than the left. His digestive functions were healthy. A laryngoscopic examination revealed an œdematous condition of the glottis. *The temperature of the body was taken. This varied from* 101⅗ *to* 101⅘. Much doubt existed in respect of the nature of the disease; whether it was simply local and situated in the larynx, or whether the patient was the victim of a mediastinal tumour or of tubercular deposit in the lungs. The elevation of the temperature, which continued during the time he was under observation, negatived the two former suggestions, and rendered it highly probable that tubercle was being deposited in his lungs. The obstruction in the larynx increased to such an extent as to render laryngotomy necessary. Air was thus freely admitted into his lungs, and the stridulous noise was removed. After the operation moist crackling was heard at the left apex, and he died with all the symptoms of pulmonary phthisis about seven weeks after the operation." The patient was under observation for about three months.

**The German Hospital.**—Mr. Hermann Otto Post, lately deceased, has bequeathed £100 to the above institution.

## THE WEEK.

### POISONOUS WATER.

What killed Dr. Hodgkin? Impure water. We wonder that travellers do not carry with them a little bottle of solution of permanganate of potass—a few drops of which would speedily purify any water. A friend of ours, who has just returned from India, tells us that he has derived the greatest benefit from its employment. At stations where the water was turbid, and tasted and smelt of decaying organic matter, he found the addition of a few drops of the solution of the permanganate made it in a few minutes as clear and sweet as spring water.

### HÆMOSTATIC AND CAUSTIC ETHER SPRAY.

When a principle is once established in practice, it is remarkable in what a number and variety of ways it developes itself. This is specially the fact in respect to Dr. Richardson's process for producing local insensibility to pain by means of ether spray. We learn now that Dr. Richardson is pursuing a series of new inquiries by which he will be able to combine styptic and caustic substances with the ether. He expects in a few days to present to the Profession a hæmostatic spray which will combine, when it is directed on the bleeding surface, the constringing effect of the extreme cold with the styptic qualities either of tannin or of perchloride of iron. He also expects to have an ether containing an active caustic by which, when the part subjected to the spray is made insensible by cold, the structure will be destroyed and easily removed. We shall, of course, in forthcoming numbers, describe these processes in detail; meanwhile we report them as in progress, and wish them every success.

### HOW TO PROMOTE VACCINATION.

There are two ways in which we may endeavour to promote universal and efficient vaccination of our population. One we will call the English, or autonomic; the other the foreign, or bureaucratic. The first proceeds on the assumption that most people do of their own accord what is for their advantage to do. The second takes for granted that they need compulsion and people to look after them. To apply this to vaccination. It is to the interest of every Medical man to look after his own patients and to keep them in his own hands. Hence it is argued that if every Medical man were made virtually a public vaccinator, and were to receive payment from the State for every patient whom he successfully vaccinated, that the natural impulse to look after his own interests would induce every man to hunt up and vaccinate every vaccinable child. A very able and well considered scheme on this principle by Dr. Lilley, of Lambeth, was laid before a public meeting at the Freemasons' Tavern on the 10th, with Dr. Richardson in the chair. There was this further feature in Dr. Lilley's proposition—viz., that no charge should be made in any case for the act of vaccination, but that every Medical man should receive a small fee (1s. 6d.?) for the act of registering each successful case.

This proposal, however, was rejected by the meeting in favour of one to the effect that Mr. Bruce's Bill, now before Parliament, is a great improvement on the existing laws, though it still requires modification. We are almost sorry to say it, still the fact of the necessity of arrangements for arm-to-arm vaccination, for keeping up a regular weekly succession, and for not only not resorting to dried or preserved lymph, but for excluding the lymph from sickly, scrofulous children, with ill-developed vesicles, make it expedient that the vaccinator should not only do the operation regularly, but also in a large number of children. We are compelled, therefore, to agree with the majority of the meeting, in favour of public vaccinators, and not too many of them. There were several important suggestions brought forward by the gentlemen present; for instance, that the minimum fee should be 2s. 6d.; that the same sum should be allowed for revaccination; and likewise in cases in which these careful vaccinators had proved the insusceptibility of the patients to the disease, The onus of registering the certificate of successful vaccination to lie on the parents. On this point we are quite in unison with a very able letter addressed to the Chairman by Mr. Felce, of Launceston. Make the registration of vaccination compulsory, and the population will be protected; and there will be no more outcry about compulsory registration of vaccination than there is of births or deaths.

Mr. Jay related a crucial case in which arm-to-arm vaccination of an adult succeeded after "points" had thrice failed. It was the general opinion that the conduct of public vaccinators afforded no ground for "jealousy" on the part of private Practitioners. Considering how frequently of late we have heard from good observers accounts of the degeneration of the vaccine vesicles, and the probable effects of our present unpreparedness in the event of a small-pox epidemic, we were almost shocked to hear from Dr. Blackman that in his neighbourhood vaccination is performed gratuitously by unqualified persons, especially in hundreds of instances by a chemist, for the sake of the custom which is thus obtained. Dr. Richardson, while expressing his belief that Dr. Lilley's suggestion deserved consideration, agreed that Mr. Bruce's bill was an improvement as far as it went, and although at one time opposed to compulsory vaccination, he had seen reason, from its success on the Continent and in the farms of some American States, to alter his opinion. A correspondent informs us that the "farms" in America, to which Dr. Richardson alluded, are analogous to our Workhouses, "but very well conducted, so that there is never any degradation in a person having been born in them." All the inmates are vaccinated by the Medical man.

### DR. SALISBURY ON THE INFLUENCE OF LOW ORGANISMS IN PRODUCING DISEASE.

Dr. Salisbury, the Professor of Physiology, Histology, and Pathology in Charity Medical College, has recently made some novel observations "On the Cause of Intermittent and Remittent Fevers, with Investigations which tend to prove that these Affections are caused by certain species of Palmellæ." It appears that during the month of May, 1862, ague was peculiarly prevalent in the malarial district of the Ohio and Mississippi valleys, and continued to show itself during the months of July and August. Dr. Salisbury, obtaining a hint from former observations, was induced to institute some experiments for the purpose of determining the special condition of the emanations from the damp malarial grounds. He noticed that the damp season had been followed by a peculiarly dry time, so that the place that had been especially swampy became dry, the little streams much lower than usual, and the action of the sun was intense upon those parts of the exposed soil before covered with water. The succeeding drought ushered in intermittent fever, which attacked "nearly every family on ague levels." Dr. Salisbury began by instituting a careful examination of the first and morning expectoration of patients ill with the intermittent who had been constantly within the influence of malarial emanations, and detected a large and varied amount of low forms of life, algæ, fungi, animalculæ, desmidiæ, and others. He then attempted to show whether the presence of any of these was characteristic and constant, or whether they were all accidental, and concluded from his inquiry in different districts that the only bodies found constantly, and in any amount, were "minute oblong cells, either single or aggregated, consisting of a distinct nucleus, surrounded by a smooth cell-wall, with a highly clear apparently empty space between the outside cell-wall and nucleus," probably, according to Dr. Salisbury, not fungoid, but algoid, in all likelihood palmellæ. These were not found above the level at which ague was noticed; all the other forms of low life, however—the diatoms, desmidiæ, and fungi, etc.—were detected everywhere beyond the ague limits. Having, then, found these bodies constantly present, it became necessary to discover their source. He suspended pieces of glass 16 inches by 22 inches, about a foot above the ground, around the stagnant pools and marshy malarial places, and left them there all night, and in the moisture condensed upon the under surface no palmelloids were discoverable, but they existed in plenty on the upper side of the glass slide.

Dr. Salisbury states that on walking over one particular peaty bog he noticed a peculiar dry state of throat. To this spot, which had been freshly broken up, he often repaired, and upon it he observed what looked like whitish mould or salt. Over this the glass plates were suspended, and, curiously enough, there were detected after a while these palmelloid bodies on the *under surfaces*, and on microscopic examination the white mould of the bog turned out to be composed of palmelloid bodies and mucidenous fungi.

This led to the institution of a series of experiments, which showed that,—

1. Cryptogamic spores are carried aloft above the surface at night, in the *damp exhalations* which appear after sunset; they fall again after the sun rises.
2. These bodies rise from thirty-six to sixty feet, never above the summit of the damp night mists or exhalations, and intermittent fever observes the same limits in its occurrence.
3. The day air of ague districts is free from the "bodies" in question.

It appeared further that evening visits to the "peaty bogs" were followed by the presence of the palmelloid bodies in the expectoration.

There would appear also to be a relation between the peaty bogs and ague districts, the former being a feature in the topography of the latter. It is asserted also that in some cases when large excavations have been carried on, ague has appeared in districts where, up to the time of the excavations, it had been quite unknown.

These palmelloid bodies, Dr. Salisbury declares, are never found except in aguish districts, but are developed as the dry warm weather of spring and summer evaporates the surface water, and begins to dry up the recently exposed soil of rich, humid, low grounds and peaty bogs in certain localities," when "a peculiar white green, or yellowish or greenish white, or brickdust powder will be noticed making its appearance upon the surface."

It seems strange, too, that the examination of the urine of aguish patients should establish the fact that ague plants, the same as grow upon the ague soil, are constantly developed in the system of the intermittent fever patients, and that the urinary organs constitute one important outlet for the elimination of this fever vegetation.

Dr. Salisbury states also that he obtained a quantity of the peaty earth, placed it, in a neighbourhood where ague was unknown, near an open window of a room where two young men slept, and he declares that on the fourth day the glass suspended over it was covered with spores; and on the twelfth day one, and on the fourteenth day the other young man, had intermittent of a tertian type.

It would be well that some one set to work and put to severe test in our own country these remarkable observations of Dr. Salisbury.

### PATERSON *v.* SOMERS.—ACTION FOR LIBEL.

A TRIAL has been just concluded before the Lord President of the Court of Session in Scotland, in which Dr. Paterson, of Glasgow, sought damages from the proprietor of the *Morning Journal*, a Glasgow daily paper, for a libel which appeared in that paper during the early stage of the inquiries in the Pritchard case. It appears that the suspicions of the authorities in reference to Pritchard were first aroused by an anonymous letter which was sent to the Procurator Fiscal. This letter was signed "Amor Justitiæ," and simply drew that functionary's attention to the fact that Dr. Pritchard's mother-in-law and wife had died suddenly and unexpectedly, under suspicious circumstances, at his house in Sauciehall-street. In reference to this letter another letter appeared in the *Morning Journal* which contained the alleged libel. It was written by a friend of Dr. Pritchard's, who at that time believed in his innocence, and the following was the passage of which Dr. Paterson complained:—

"The whole matter lies in a nutshell. An anonymous letter is written by some moral coward or other, who either hazarded a stab in the dark, or whose love of justice did not conquer his sense of modesty—a man who, no doubt, does 'good by stealth, and blushes to find it fame,' a blush, doubtless, of deservedly deep scarlet. Well, this anonymous communication is traced to its source, and the writer must, of course, adopt the letter, and stand to it. Then the apprehension of the gentleman named or alluded to in it is a natural result, and the post-mortem examination, the scrutiny in his household, and all that has since taken place, follow in natural sequence; and here the affair rests. But it is not a little strange that a whisper of 'antimony' should have been heard about the County Buildings before even the examination was commenced. Why, what was Dr. Paterson about if he knew anything about antimony being administered? Was he not called in his Professional capacity, and entitled therefore to speak with a voice of authority as to what should be administered, and what withheld; and if administered against his advice, and he saw or suspected anything wrong, why did he not at once deem it his duty to boldly protest, or immediately communicate with the authorities? But we have not yet heard that he has adopted the anonymous letter referred to. It cannot be denied that his position in the case does not, *primâ facie*, appear either lucid or pleasant, and this he must feel himself, and actually too. Dr. Paterson should really clear himself as regards this anonymous letter; and the public, seeing that it was the primary cause of the arrest and the subsequent events, should withhold its opinion, give the accused fair play, and calmly wait for more light."

The case for the prosecution was that this paragraph evidently assumed Dr. Paterson to be the author of the anonymous letter, and branded him as a moral coward, who either hazarded a stab in the dark or whose love of justice did not conquer his sense of modesty. Dr. Paterson, however, totally disclaimed the authorship of the letter to the Procurator Fiscal, and it was proved at the trial that the real writer was Dr. Alexander Greenlees, who sent it to the authorities in consequence of what he had been told by Dr. Paterson. The jury returned a unanimous verdict for the pursuer, thus establishing the libel, but assessing the damages at one farthing. We think that justice was completely asserted by the finding of the jury, and we would suggest that the public and the Profession have heard quite enough of Dr. Paterson's connexion with this horrible tragedy.

### FROM ABROAD.—REVACCINATION IN THE PRUSSIAN ARMY—CATSUP AND CAT SOUP—THE PARIS FACULTY OF MEDICINE.

THE annual report on the vaccinations practised in the Prussian Army during 1865 has just been published. During the year 65,776 soldiers were either vaccinated or revaccinated, 56,895 of the number having distinct scars from former vaccinations, 6143 with indistinct scars, and 2738 exhibiting no marks at all. These 65,776 vaccinations ran a regular course in 41,334 individuals, an irregular course in 8326, and were unsuccessful in 16,166. These last were vaccinated again, and with success in 5469 instances, so that the total of successful cases amounted to 46,803. The number of true vaccine pustules produced were as follows:—From 1 to 5 pustules in 24,154, from 6 to 10 in 13,830, from 11 to 20 in 8075, and from 21 to 30 in 744. Among the soldiers successfully revaccinated there occurred during the year 3 cases of varicella, 6 of varioloid, and 1 of variola. Thus the proportion of completely successful revaccinations amounted to 62 per cent., and, including those in which the vaccination was not followed by regular vaccinia, 71 per cent.,—a proportion very similar to that which has been observed during the last ten years. Notwithstanding the frequent occurrence of variola amongst the civil population during the year, to the contact of which the soldiers were more or less exposed, there occurred only 69 cases of any form of pock. Of these, 35 (2 cases of varicella, 30 of varioloid, and 3 of variola) occurred in soldiers not yet revaccinated; 24 cases (4 of varicella, 18 of varioloid, and 2 of variola) in persons revaccinated without success; and 10 cases (3 of varicella, 6 of varioloid, and 1 of variola), as already stated, in those who had been successfully revaccinated. These cases were of a very slight description, only one person dying during the year, and he succumbed to a catarrhal affection, during the progress of which variola appeared.

The Bermondsey pig-liver catsup case has given rise to an amusing mystification in the Paris journals. Increasing in its proportions as it migrated through these, we find the following as the latest edition in the *Union Médicale*:—

> "An Impossible Broth.—Can it be believed that it has been recently proved that in an eating house of great renown in London, enormous quantities of a soup which has become highly popular is prepared simply with half putrid cats' livers?"

Evidently here our word catsup has been transmogrified into soup of cat, and the liver derived from the same animal, in order to give a proper degree of *vraisemblance*. But really, after all, our neighbours may fairly have the laugh at us, for certain it is that had this disgusting case occurred in France, no fine-drawn legal plea would have enabled the perpetrator to escape the penalty for making his beastly concoction upon the plea that it was intended not as an article of food, but as a condiment! The fact that it was destined for the human stomach would have amply satisfied the French legists. What the decision of the Court of Queen's Bench will be, after the learned discussion which is to take place there, is far more problematical.

The following is a list of the Professors at the Paris Faculty of Medicine for the summer course, which commenced on April 6:—Medical Natural History, Professor Baillon; Physiology, Longet; Accouchements and Diseases of Women and Children, Pajot; Therapeutics and Materia Medica, Trousseau; Legal Medicine, Tardieu; Pharmacology, Regnauld; Surgical Pathology, Gosselin; Pathological Anatomy, Laboulbéne, as substitute for Cruveilhier; Medical Pathology, Béhier; Hygiene, Bouchardat; Clinical Medicine, Bouillaud, Guillot, Grisolle, and Piorry; Clinical Surgery, Dolbeau, as substitute for Jobert, Laugier, Velpeau, and Nélaton; Clinical Midwifery, Depaul; Clinical Lectures on Diseases of the Skin, Hardy; Clinical Lectures on the Diseases of Children, Roger; Clinical Lectures on Diseases of the Eye, Foucher.

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### PARLIAMENTARY.—SURGEONS IN THE GUARDS—THE CATTLE PLAGUE—OYSTER CULTIVATION—EPPING FOREST—THE MORTALITY AT HONG KONG—THE VACCINATION BILL.

In the House of Commons on Monday, April 9,

Mr. O'Beirne asked the Secretary of State for War whether the system hitherto followed in promoting Assistant-Surgeons to Battalion-Surgeons in the Foot Guards had not been regimental; whether there was any intention to change that system; and, if any change was to be made, under what Warrant?

The Marquis of Hartington said that up to the year 1858 the system of the promotion of Assistant-Surgeons to Surgeons in the Guards was undoubtedly a regimental system. In that year, however, a Warrant was issued which conferred several pecuniary advantages upon the Medical Department, and that Warrant also enacted that the mode of promotion as a general rule should be by seniority in the service. In 1860 a question arose as to whether the provisions of this Warrant would apply to the Surgeons of the household cavalry, and, after consideration, it was decided by Her Majesty, on the recommendation of the Commander-in-Chief and the Secretary for War, that in the household cavalry and the Guards also, in consideration of the Surgeons having accepted the Warrant, and being in the enjoyment of the advantages conferred upon them by it, the mode of promotion enacted by that Warrant should be carried out in both services, to the extent that the promotion from the rank of Assistant-Surgeons to Surgeons should not go in the regiment, but in the brigade. Until within a few days no case had occurred in the Brigade of Guards under the new system; the alteration, however, was not a recent one, but dated as long back as 1860.

In answer to a question by Mr. Read, Sir G. Grey said that the temporary provisions of the Cattle Disease Act—those affecting the slaughter of cattle—which were to expire on the 15th of April, would continue in operation till the 10th of May.

Mr. Hunt called attention to that portion of the Report of the Sea Fisheries Commissioners which, with the view of promoting the cultivation of oysters, recommends the appropriation of public grounds in estuaries and other places for the formation of oyster beds. He suggested the passing of a general Act for this purpose.

Mr. Gibson replied that the Government were fully alive to the importance of promoting the cultivation of oysters in the way suggested, and had a Bill under consideration which, when matured, would, as he believed, carry out the objects in view, and meet all the difficulties of the case.

The Chancellor of the Exchequer moved a string of resolutions on the Crown Lands Act, as a preliminary to the introtion of a Bill for the better management of the Land Revenues of the Crown. Among other provisions he explained that the Bill would transfer the forestal rights of the Crown over Epping Forest to the Board of Works.

On Tuesday, April 10,

Sir R. Anstruther gave notice that on May 11 he would call the attention of the House to the proposed alteration in the system of promotion among the Medical officers of the brigade of Guards, and move for a copy of the Warrant or order of 1860 under which such change was to be made, and for copies of any communications from the War Office or Horse Guards to the officers commanding the three regiments of Guards, intimating the proposed change of system to the officers affected by it.

On the motion of Colonel North, the Select Committee on the subject of mortality amongst the troops in China was nominated as follows:—Colonel North, Marquis of Hartington, Lord Hotham, Mr. Baxter, Mr. Adderley, Lord Frederick Cavendish, Mr. Roebuck, Colonel Percy Herbert, Mr. Dalglish, Lord Henry Percy, Mr. Calthorpe, Major Anson, Lord John Hay, Mr. Trevelyan, and Major O'Reilly.

In the House of Commons on Wednesday,

Mr. H. Bruce, in moving the committal of the Vaccination Bill, after sketching briefly the history of vaccination, and the legislation in regard to it, and quoting copiously from numerous Medical returns and reports to illustrate its efficacy in checking the spread and virulence of small-pox, described in detail the defects of the present system, which the Bill was intended to remedy. The Bill, he explained, besides consolidating the existing law, would enable the Poor-law Board to re-arrange districts and revise contracts periodically; it would provide for more complete and permanent registration, and would give increased facilities to boards of guardians to enforce a universal system of vaccination.

Mr. Henley, in criticising the Bill, pointed out two principal defects—the want of security for a due supply of healthy lymph, and the inadequate payment of the Medical officers, to which last cause he attributed the comparative failure of the system of compulsory vaccination.

Sir R. Peel agreed with Mr. Henley in censuring the niggardly payment allowed to the vaccinators, and enumerated nine or ten clauses in the Bill which he predicted would be inoperative. He suggested that it should be postponed to give time for further consideration.

Mr. Lewis moved that the Bill be referred to a Select Committee, and this amendment was seconded by by Sir J. C. Jervoise, and supported by Lord Henley, Mr. Barrow, and other members.

After some further discussion Mr. Bruce, having replied to various objections, accepted the amendment, and the Bill was ordered to be referred to a Select Committee.

## REVIEWS.

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### *Statistical Report on the Health of the Navy for the Year* 1862.

One can never open a volume of these Naval Reports without being struck with the large amount of Professional knowledge and scientific research which is devoted to the public service by the Medical Officers serving in various parts of the world. There is always, too, something to be found which is of general Professional interest in the midst of much that naval officers alone will in all probability be disposed to dwell upon. To the latter class these reports are invaluable, since they place these gentlemen, whose life on unhealthy stations is neither an easy one nor unendangered, in possession of the experience gathered by their predecessors, and deposited here in a condensed and available form for their information and guidance. A naval officer now can feel that wherever he may be sent he is visiting no place the Medical topography of which is unknown, and that he has, while availing himself of the legacy of those who have been there before him, the comparatively easy and promising task of following up by his own researches the observations recorded for his use.

In reviewing the present Report, we shall follow the same rule which we have previously adopted -namely, to select for special remark those portions which have a more general pathological or etiological interest. Before doing this, however, there is one point which we should like to suggest to Dr. Mackay, as the editor of the Reports, and that is the admirable opportunity there is for determining the period of incubation of certain maladies, the result of the introduction into the system of a specific poison. We may mention scarlatina as one of these, and we confess to a little disappointment at not finding in his report upon the outbreak of this disease in the *Boscawen* training ship the date of the first case that succeeded the arrival on board of the boy in the desquamative stage on October 27. We cannot have too many such observations recorded.

A confirmation (if any such was needed) of the connexion of enteric fever with sewage emanations is furnished abundantly by the returns of the Surgeons serving on the Mediterranean station. It is endemic in most of the large towns on the seaboard where the sewerage is generally defective, and it is especially prevalent in Malta, where the sewage of a densely populated district is actually discharged into the dockyard creek. The disease is in the habit of appearing in ships shortly after mooring near the open mouths of the drains, disappearing soon after leaving. This fever is of considerable urgency, and causes the largest amount of the mortality on the station. We are told, moreover, that the men serving on Mediterranean stations suffer much from a species of general cachexia characterised by steadily progressive debility, for which change to some other station is the only effectual remedy. There are many matters of far less national importance than the health and lives of our seamen which occupy (and shall we say waste?) the time of Parliament.

The beneficial operation of a strict supervision of brothels receives a striking illustration also upon this station. At Malta and Corfu, where this regulation is effectually carried out, venereal affections (originating at these places) are scarcely ever met with. During a period of twelve months, during which the *Marlborough*, with a complement of 1145 men, was stationed at Malta, only twenty-three cases of syphilis and four of gonorrhœa were observed, notwithstanding that the men had as much leave as they cared to have, and never went on shore without plenty of money in their pockets. During the quarter ending March, 1862, only four fresh cases were returned, and only two of these had any reference to Malta. Of the other two one had contracted the disease at Naples, where only a nominal surveillance is exercised, and where "privilege leave" is sure to be followed by a large accession of venereal cases.

We pass on now to the North American and West Indian station, in the report from which we find the following crucial proof of the infectious character of yellow fever:—"Nothing could better illustrate the advantages to be derived from a rigid quarantine in the prevention of the spread of yellow fever than the history of the epidemics in these three vessels (the *Peterel*, the *Landrail*, and the *Rinaldo*). The *Landrail* and the *Rinaldo* had been for some time stationed at New Orleans during the hottest and most sickly month of the year, the thermometer in the shade ranging during their stay between 88° and 92°; during this time the city was occupied by large bodies of Federal troops, who being chiefly from the Northern States were altogether unacclimatised. From the great trade which exists between New Orleans and those localities in the Gulf of Mexico where yellow fever most frequently prevails, it is constantly having that pestilence imported into it. To guard against so disastrous a visitation at such a time, the Federal authorities had taken the wise precaution to institute such stringent quarantine laws that no vessel that had been near an infected port was allowed to proceed above the quarantine anchorage (which is situated about fifty miles below the city), and for thirty days no communication was allowed to be held with the shore. The wisdom of this precaution was exemplified by the fact that, although yellow fever was raging at Key West and at Pensacola, a town only about 100 miles from the mouths of the Mississippi, it did not make its appearance in New Orleans during the whole of that year. Some cases of severe remittent fever did exist in the city, as will always be the case in such a locality in summer, but of specific yellow fever there was none. At Key West, on the other hand, where the season had been an unusually healthy one, and no yellow fever existed either in the town or in the vicinity, a collier barque which had been visiting infected localities had been obliged to put in on account of her leaky condition. She had had a severe form of fever on board during her passage from Havana, it appeared, and she was consequently placed in quarantine, and the sick were landed. One died, and the others recovered, and the Medical officer having asserted that the cases were not yellow fever, she was very soon allowed pratique and a new crew placed on board of her. On the arrival of the *Landrail* and *Rinaldo* at Key West, the former vessel proceeded to coal from this barque, and on the day following that on which the two vessels were placed alongside each other for that purpose, one of the new crew of the barque was seized with fever, of which he died on shore in a few days. The *Rinaldo* and *Peterel* likewise coaled from this barque, and within a few days all these vessels were visited with yellow fever. On shore the fever immediately afterwards broke out in the small town there, and also amongst the Federal troops holding the place. It spread with great rapidity and violence, and caused a large mortality."—P. 98.

A very interesting account is to be found in the report from the Cape of Good Hope Station of the fever which attacked the expedition engaged in transporting Dr. Livingstone's steamer, the *Nyassa*, up the Zambesi and Shire, on the West Coast of Africa. The *Gorgon* furnished the assistance requisite for this purpose, and the Surgeon to whom we are indebted for the account of the outbreak, Dr. David Ramsay, accompanied the expedition. We recommend naval officers proceeding to this station to study this admirable history, which may be taken as applicable generally to remittent fever as it appears in inter-tropical rivers. All we can do is to quote Dr. Ramsay's experience of quinine as a prophylactic, and we do so mainly because he seems to place a limit to its efficacy, which, if confirmed by future experience, it will be well to keep in mind. He says—"All these cases occurred while the men were using quinine as a prophylactic, in doses of three grains daily, the same as Dr. Livingstone has always used, and which was as much as my stock of quinine could afford. I regret much, however, that I could not give the full dose—eight grains a day—as it was such an excellent opportunity to try the efficiency of the remedy. But I doubt much its efficacy when it has to be continued so long, for in the *Pioneer* there are one or two men who have been in the habit of taking daily enormous doses of quinine, from ten to twenty grains; and these have suffered from the disease quite as much as the others. . . . Now, with regard to the fever itself, so fatal to some persons, and so innocuous to others, we have seen that though taking quinine regularly every day, only six out of fifty-four escaped it; not one of the *Pioneer's* crew, nor of the ladies escaped it, making the total number of attacks seventy-three out of seventy-nine within two months. . . . Many of these cases were very severe, attended with delirium and extreme prostration; yet we have not lost a single man." Another observation of the intelligent Surgeon of the *Gorgon* will interest syphilographers—namely, the immunity of Tamatave and its neighbourhood in Madagascar from the infecting variety of syphilis. The cases observed among the men were "so slight and easily cured as not to require entry on the sick-list. They were all of the soft, suppurating, and non-infecting species. Of these seven appear in the return, being cases of inflamed sores, produced by neglect and want of cleanliness. It is remarkable that constitutional syphilis seems to be unknown, not merely at Tamatave, but up the country, and at

Antananariso. Yet the Rimerisi, or prostitute class, at Tamatave compose almost the whole female population; and among no people can morality be less regarded than the Hovas and Betsimasaraka."—P. 194.

An illustration of the deleterious influence of bad water in the production of diarrhœa, dysentery, cholera, and remittent fever, together with the etiological relations of these diseases, is supplied by the Surgeon of the *Euryalus*, serving upon the East Indian and China station. In a few days after the arrival of the ship at Hong-Kong "diarrhœa broke out among the men to a rather alarming extent. I attributed the cause of the complaint," says the Surgeon, "to the water supplied to the ship by the contractor, who supplied it from a reservoir situated in a paddy field. The field was manured with human ordure and irrigated with the water which was ultimately supplied to the shipping. The Japanese inhabitants of a neighbouring village were seen to wash their soiled linen in the same reservoir." But this is not all. The ship having arrived at Shanghai in a very satisfactory condition, the expeditionary forces, consisting of 211 officers and men from the *Euryalus*, together with a number of men belonging to the Commissariat, Medical, and Military Train departments of the army, started for Kahding on the morning of October 22. "They proceeded in flat-bottomed boats along a shallow river, which was muddy and unwholesome. They lived in these boats, which came to an anchor at night, and drank freely of the river water. Not a case of sickness occurred among them until the night of the 25th, at 10 p.m., when the first case of cholera appeared. How did they contract the disease, the incubation of which in any case must have been limited to within four days after leaving the ship for the first time since we left Plymouth? Was it communicated to them by infection? They had no intercourse with the Chinese; they were not even allowed to enter within the walls of the captured city. The only medium of infection was confined to the 'chops' which carried them, and which were propelled by Chinamen; but their decks had been previously cleared of all articles of clothing belonging to the Chinese crew, among whom there was no trace of disease at the time. Besides, there were a number of men belonging to the Commissariat, Medical, and Military Train departments of the army, who were equally exposed in the boats to the same influence as our men; but the latter fact would militate equally against any other theory as to the cause of the outbreak except that of its being propagated through the medium of the river water. These men had taken the precaution of carrying with them a supply of good water from Shanghai, where they returned on the morning of the 26th inst. . . . It did not appear that there had been a single case of choleraic diarrhœa even among them. . . . . In a few days after the return of the men who had been on detached duty to the ship, another formidable disease broke out among them—viz., dysentery—and it was remarkable how the cases of choleraic diarrhœa, and two even of cholera, merged into dysentery. . . . Fever, both of an intermittent type and a formidable remittent fever, appeared about the same time in the ship as dysentery. The fact that many of the cases of the latter complaint were accompanied by paludal fever, and that the two diseases appeared at the same time among that part of the crew who had been on detached duty, led me to think that the fever and dysentery were produced by the same cause, and must have been taken about the same time. . . . I am inclined to believe that the malarious poison, as well as the choleraic poison, was conveyed in this instance through the medium of the river water, which the men freely drank of. . . . In regard to the incubation of these diseases, it may be remarked (as before noticed) that cholera appeared within four days from the 22nd of October, the day on which the men left the ship; and that dysentery and remittent fever appeared within eleven days after that date, the first cases of dysentery and remittent fever having appeared on the 2nd of November."—P. 229.

We need only add that the report of each station is accompanied by an outline map of the principal localities on the seaboard.

**Munificent Gift.**—Mr. Peter Pantia Ralli, of 5, Connaught-place West, Hyde-park, a Greek merchant, has just presented to the committee of King's College Hospital, through Dr. Priestley, the sum of £6000, for the purpose of establishing a ward for sick children in that institution. The ward is to be called the "Pantia Ralli" ward, in memory of the late Mr. Pantia Ralli, the father of the generous donor. It will contain about a dozen beds.

## GENERAL CORRESPONDENCE.

### LESSONS FROM THE CHOLERA AT JAMAICA.

Letter from Dr. Bowerbank.

[To the Editor of the Medical Times and Gazette.]

Sir,—Humanly speaking, there seems little doubt but that, ere long, this country will again be visited by epidemic cholera. It behoves us, then, to prepare to meet the enemy. If experience during the previous attacks of this dire disease has not taught us how to cure it, still I believe we have learned the necessity of trying to ward off its ravages by sanitary measures, the propriety of avoiding certain forms of treatment, and have been made aware of the necessity of exercising great caution ere we commit its apparent victims to the grave.

My experience of this disease was obtained during the epidemics of 1832 and 1849 in this country, and more especially in the island of Jamaica during its outbreaks there of 1850 and 1854.

In the epidemic in Jamaica in 1850 it was computed that 40,000 persons died of cholera, being in the proportion of one death to every ten inhabitants. An excellent report on this epidemic was drawn up by Dr. Gavin Milroy, who was sent out at the time as Medical Inspector by the Government.

From my own observations, I believe that cholera cannot be kept out or excluded from a district or a county by any so-called quarantine restrictions. I consider such restrictions to be useless, and worse than useless, as costing money to carry them out, but more especially as inspiring false confidence and preventing or cramping the adoption of other and more reliable measures of prevention.

I have had no proof that any of the visitations of cholera I have seen were traceable to importation by a particular vessel; but I have known cholera introduced into a district and an island, and the disease not extend itself; thus, at any rate, proving that something more than mere introduction of the disease was necessary to its extension, and over which quarantine restrictions could exercise no influence. That cholera attacks certain districts or places, certain towns and streets, certain houses and rooms, and during the prevalence of an epidemic nestles there, I am confident, and I believe that in every such instance a bad sanitary status will be found to exist.

The great preventives of cholera and all other epidemic diseases are pure air, pure water, plenty of daylight, and cleanliness in its widest acceptation. Where these essentials to health exist, cholera may come, and may proclaim its presence by the occurrence of diarrhœa, borborygmi, cramps, and other well-known symptoms, and it may seize as a victim a person predisposed to disease by intemperance or depression of body or mind, but here it will not nestle.

During the epidemic of 1850, I have known towns and villages nearly depopulated; whole yards and houses, ships in port, swept clean, and not an inmate left to tell the tale. But in all such cases neglect of sanitary measures and the open violation of Nature's laws explained the cause. It will thus be seen I am of opinion that we have no power to exclude epidemic cholera. This mysterious visitor will come to our shores in spite of us; but we have the power to lessen its ravages and to deprive it of its sting, and in effecting this we at the same time adopt the best means to rid us of those less dreaded (because more familiar and slower in their course) but more fatal scourges of our population, typhus and typhoid fever, and the entire class of tuberculous disease.

"Prevention is better than cure." In no instance is the truth of this adage more obvious than as regards a visitation of epidemic cholera. Experience in all parts of the known world has taught us that its ravages may be lessened or prevented by judicious sanitary measures; but that where these have been neglected, for a time at least, after its advent, this disease resists or is but little amenable to curative treatment. In case of the outbreak of cholera in a notoriously unhealthy district, I believe, as regards the mass of the people, instead of, as hitherto, adopting the house-to-house visitation system and the unprofessional and wholesale administration of medicines, it would be far better that arrangements should be made to transfer the inhabitants, or as many as possible of them, to another place, even though it should be requisite to provide tents or to allow them to remain uncovered.

If the Government could be persuaded of the truth of what I have stated, and if they would act upon it as regards sanitary measures in general, and the removal of nuisances, and the bettering of the habitations of the poor, and if the upper and middle classes of society, instead of being compelled by legislative enactments, would bestir themselves, and for their own safety adopt the necessary preventive measures as permanent and not temporary ones, there is little doubt that cholera and the whole class of epidemic and zymotic diseases would become less fatal and their attacks less frequent.

Hitherto, on the outbreak of a cholera epidemic, panic has always prevailed, and has, I believed, caused almost as many deaths as cholera itself. There can be no doubt that depression of spirits and fear during the prevalence of cholera is a predisposing cause. The best remedy for this evil is that the people should be made to understand the nature of the disease, and how each of them, individually and collectively, can assist in preventing it.

I have seen much mischief done by persons on the outbreak of cholera epidemics altering their mode of life, especially as regards their food and drink. I have known many to give up particular articles, as fish, vegetables, etc., others to stop meat, wine, malt, to which they were accustomed, and others again to partake most freely of spirits to which they were not accustomed. I believe the best and most proper plan is to live as usual, of course avoiding the use of any article which is known to disagree or which is likely to do so, such as long-kept or tainted meats, etc. On no account should any person on such occasions reduce their diet too much. Of the two errors this is the greatest.

I have known persons very much alarmed by the occurrence of borborygmi or slight cramps to fly to the physic bottle and to produce real illness by the use of purgatives or the abuse of opiates. I fear the common practice of prescribing for one's self and for others at these periods has tended very much to swell the list of deaths, and that many fall victims to poisonous doses of opium, lead, etc. On one occasion an old gentleman, hearing that sea water had been used as a remedy in the treatment of cholera, made sure that it must also be a preventive. He, therefore, before breakfast, went down to the sea-shore and drank off two large tumblers. He was attacked with diarrhœa, and for some hours his life was despaired of.

On such occasions, of course, it is of little use to tell persons not to be unnecessarily alarmed when they imagine that they are in the very grasp of the dreaded disease. But I think that it is the duty of members of the Medical Profession to do all they can to induce the people to make themselves acquainted with a disease over the prevention or lessening of which they themselves have so much influence, and which, for a time at least, after its outbreak is so little amenable to medicine or the Medical art.

As regards the prophylactic treatment of cholera, so cried up by some, I must confess I have no faith in it. I have heard of persons taking daily doses of tincture of rhubarb, chalk mixture, preparations of opium, etc., but I should very much doubt the efficacy of such; the only practice of this kind which appeared to me to be of service was the wearing of a flannel band round the abdomen, especially by persons predisposed to attacks of diarrhœa. With this exception, I believe the best treatment of the kind is to avoid all known causes of disease, and humbly to place our confidence and our trust in the goodness of an all-wise and all-merciful Creator.

As far as my experience goes, I believe many of the worst forms of cholera took place without any premonitory symptoms or diarrhœa, and there is no doubt that in the most violent cases of this disease, known as "cholera sicia," there are no alvine dejections at all.

In many cases I have known borborygmi and cramps of the feet and hands to be very troublesome, and to occur several times a-day, but not requiring any particular treatment. I myself during the outbreak of the epidemic in 1850 was much troubled with these affections.

As regards the attacks of diarrhœa so prevalent during the visitations of cholera, I have seen all sorts of treatment employed—as mercurials, opiates, ipecacuanha, the mineral acids, laxatives, antacids, and astringents; and I have seen each and all succeed and fail in checking the disease; in cases in which the looseness was troublesome and continuous, tending to dysentery, not infrequent after an attack of cholera, I have found strychnine of much service, either alone or in combination with iron. In prescribing strychnia in such cases, I generally gave it according to Marshall Hall's formula. In the majority of cases of diarrhœa I think a little ginger tea with a few grains of carbonate of soda, with attention to diet, proved sufficient. If there was pain, a few drops of some preparation of opium were added. In such cases, too, chloroform and chlorodyne prove of service; but in all cases, even of diarrhœa, the treatment should be suited to the particular case.

As to the treatment of cholera, my experience is, that at the commencement of an epidemic the majority of cases die, and appear to be unamenable to any curative treatment. I have seen drugs without number tried, and have heard each and every one cried up for a time as a specific and certain cure, but have seen them again fail and put aside. I have seen and tried small and repeated doses of calomel; also large doses of the same; also small and monstrous doses of acetate of lead, the mineral acids, the alkalies, opiates, quinine, ipecacuanha, belladonna, mineral and vegetable astringents, cajuput oil, croton oil, castor oil, turpentine, creosote, nitrate of silver, sulphite of magnesia, tartar emetic, mustard, table salt in large doses, "Stevens' saline powders," charcoal, chlorate of potash, Eupatoria or bitter bush, the fresh juice of the aloe, and many others; spirituous stimulants to intoxication, carbonic acid gas, the so-called "Liverpool mixture," and other boasted formulæ, warm baths, hot-air baths, external frictions, enemata of all kinds, saline injections into the veins;—but, nevertheless, I fear the results have been very unsatisfactory on the whole. Few of the first cases got well, and if they did I could not satisfy myself that their doing so was the result of what they had taken. I am quite certain that in the epidemic of 1850 I saw much mischief done by the use of spirituous stimulants and of opiates; so that in the epidemic of 1854 I almost entirely banished these remedies from my practice. Calomel and other mercurial preparations are, in certain cases and at certain stages of the disease, useful; but they have no specific effect, and in the hands of the unprofessional are calculated to do more harm than good.

I think I have seen more good to arise from the use of Stevens' powders than from any other mode of treatment—in fact, in 1854 I confined myself chiefly to this. Having read of the use of sea-water in the treatment of cholera, and from the difficulty of getting the saline powders prepared in sufficient quantity, Dr. Campbell and myself were inclined to give sea-water a trial among the prisoners of the General Penitentiary in Kingston. We had buckets of sea-water brought from a distance from the shore, and this well iced by pieces of ice thrown into it was doled out in small quantities to the sufferers; they drank it greedily, and strange to say of the seventeen cases who took it all recovered. Unfortunately it was not tried till towards the decline of the epidemic. In almost every case after the fourth or sixth dose the alvine dejections became tinged with bile, as also the contents of the stomach vomited.

From the result of this experiment, I made up my mind, in case of another epidemic breaking out during my time, that I would give sea-water a fair trial; and, indeed, should I suffer from the disease, I would from my own experience trust to the saline treatment, or, if I could get it, to sea-water well iced. The native nurses appear to have a great objection to allow the patient water to drink. I have frequently witnessed the most terrible sufferings from this cause. I may mention that in both the last epidemics I have witnessed I had great difficulties to encounter. The black prisoners for the most part fancying, that as the white population did not suffer in an equal degree with themselves they were being poisoned, often refused to submit to treatment; and again, in private practice among the negroes, great difficulty was often experienced to get them to take or to administer the remedies prescribed; partly because panic-stricken, at the mortality around them, they were ready to sit down and meet their destiny. The negroes of Jamaica, as a class, are fatalists. Often has it been my lot to witness a patient neglected and left to sink, and on remonstrating with relatives and friends have been coolly told—"Massa, what de use? him time da come." Again, there is a very prevalent notion among them that all the medicines ordered by Doctors are either emetic or purgative in their effect; it is, therefore, often impossible in cases of diarrhœa, cholera, or dysentery, to get the medicines regularly given, the patient and his friends declaring that the purging is from the physic. Another popular and most mischievous fallacy among them is, that in such cases the use of farinaceous articles of food as arrowroot, pap, etc., turns to water in them, and increases the evacuations, and that hard food, as they call it, as green roasted plantains, yams, and cocoes, have the contrary effect. In the wards of the Hospital of Kingston it is a common practice for poor debilitated, miserable creatures in the last stage of dysentery to refuse the diet ordered for them, and to importune the nurses and other attendants with their dying breath to give them one meal of plantain, yam, and salt fish.

In very many cases of cholera in Jamaica, after the patient had battled through the disease, he has died from the effects of a heavy meal off some fat greasy soup.

In the prisons and Hospitals, whenever such patients refused to submit to treatment or to take the medicines ordered for them, the rule was to put the mattress on the floor and to lay the patient there, placing by his side a bucket filled with ice water and a tin pannikin. For the most part, these patients received little or no further care; certainly they were not rubbed and covered up with blankets as the more tractable were. But my experience was that the majority of those thus left to their own resources got well.

My experience in Jamaica convinced me that during cholera many persons were buried alive. I say this advisedly, having myself seen cases of persons alive being considered dead. At the Cholera Hospital, in Spanish Town, in the year 1850 the attendants, to save themselves the trouble of carrying the dead down the steps, were in the custom of laying a plank along the steps, on which they placed the body, allowing it to glide to the bottom. On one occasion, as I was going up the steps, the body of an old man, supposed to be dead from cholera, slipped past me, head down; in doing so I was struck by the appearance of his eye, and on examining him I found he was alive; he soon, however, died. I thought at the time rather from concussion of the brain than from the effects of cholera.

In another case a man was placed in a badly-made coffin (luckily for him), and had been taken to the burial ground; while there, waiting to be buried, the sexton, a very heavy man, sat down upon the coffin to eat his lunch; the yielding of the top of the coffin pressed upon its contents, and the man groaned aloud, much to the surprise and horror of the sexton.

In another case a female was placed as dead in a coffin, and the person in charge, in nailing it up, awkwardly drove a nail into her hip, after which the coffin was placed with a number of others in the dead-cart, and taken to the burial-ground. Here she was found to be alive, and for some years after appeared as a crippled beggar in the streets of Kingston.

Other cases of premature coffining occurred, and I fear many were consigned to an untimely grave. As a member of the Board of Health, I did my best to check this by having a rule framed that all persons taken for burial should be placed for a given time previously to being buried under a shed, but the fear of contagion and infection, I fear, prevented this being carried out.

The idea that the dead body was more contagious than the living one was very prevalent in Jamaica, and gave rise to several shocking and revolting acts. On one occasion, as reported, a woman was attacked with cholera, and her husband appears to have remained with her till symptoms of sinking made their appearance. He then dug a grave, and having tied a rope round her neck he left her, and when he thought she was dead, by means of the rope he dragged her to the grave and covered her up. Again, this notion led friends to remove the apparently sinking patient from his comfortable bed, and to lay him on the ground; the idea being that if he died on the bed it would be necessary to have that destroyed. I have even known the last moments of a dying person taken up in having the body bedaubed with whitewash, for the purpose of preventing contagion after death. In one instance, the proprietor of a breeding-pen recommended his people to clean up their huts and yards, and to whitewash the walls, and to enable them to do this he procured a large quantity of lime and brushes, which he distributed gratuitously. This whitewashing was very much talked of, and Quashie became impressed with the idea that whitewash was the cure for cholera. A young man on the property one day made his appearance and requested to be supplied with some lime, as his father was taken ill. This was given to him, with instructions to use it freely. A few hours after he returned, stating that his father was worse, on which the owner of the property accompanied him to see the old man. On entering the hut he was surprised to find that the walls were dirty, and had not been whitewashed. On remarking this to the young man, he remarked,—Oh, yes, he had washed him well, and so saying pointed out the poor patient lying on the floor thickly smeared over with lime.

While writing this a Medical friend who was in Jamaica during the epidemics I have alluded to, mentioned to me that he was one fine morning called to see a man who was said to have had an attack of cholera. On visiting him he found him sitting up with a pipe in his mouth. The wife stated that he had been attacked on the previous evening, and that during the night she thought he was dead; but that in the morning she found he had come to life again. (No doubt, he observes, his death during the night saved his being buried.) On visiting this man he was recovering from the stage of collapse, and expressed great hunger, and a desire for soup (*i.e.*, a thick, heavy pottage or mixture of fat pork with yams, cocoes, etc.). He was warned not to take anything of the kind, but to confine himself to a little simple diet. He took his own way, and on his Medical attendant calling the same evening he found him dead.

Such, Sir, is a very hurried statement of my experience as to cholera. I regret I have not my notes by me. If you think it worthy of a place in the *Medical Times and Gazette*, you are welcome to it.

I am, &c.

London. L. Q. Bowerbank, F.R.C.P.E.

## THE RECENT OBSTETRICAL EXHIBITION.

Letter from Dr. Robert Barnes.

[To the Editor of the Medical Times and Gazette.]

Sir,—I should ill satisfy my sense of what is due to others if I did not beg of you to allow me the opportunity of sharing much of the credit you assign to me for the organisation of the obstetrical exhibition, soiree, and dinner, with my fellow-labourers. It cannot be necessary to say that the gathering together and arrangement of a collection of instruments so vast, varied, and instructive entailed labour enough to call for the zealous co-operation of several heads and hands. The conversazione committee, including the honorary secretaries, Drs. Meadows and Murray, Dr. Tyler Smith, Dr. Hicks, Dr. Greenhalgh, Dr. Graily Hewett, Mr. Traer, and Mr. Gaskoin, worked almost unremittingly, and in the most admirable spirit; but I am sure I express the opinion of all when I say that the chief praise is due to Dr. Meadows. To say that he worked with unwearied activity and energy is to fall very short of his desert. Without an intimate knowledge of the subject, marked ability in organisation, tact and promptitude in foreseeing and removing difficulties, much work would have been futile. These higher qualities Dr. Meadows displayed in a remarkable degree, deserving and commanding the success achieved in this arduous and most useful undertaking.

I am, &c.,

Finsbury-square, April 10, 1866. Robert Barnes.

## REPORTS OF SOCIETIES.

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## ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, March 27, 1866.

Dr. Alderson, F.R.S., President.

A paper by Mr. T. Holmes was read on

A CASE OF LUMBAR COLOTOMY (AMUSSAT'S OPERATION), SUCCESSFULLY PERFORMED FOR THE RELIEF OF A VESICO-INTESTINAL FISTULA.

Ulcerated openings sometimes take place between the bladder and either the large or small intestines, which have no connexion with previous stricture of the gut, still less with cancer. In those cases in which the fæces come from the lower bowel, and are consequently more solid, great suffering is produced, and the formation of calculus in the bladder becomes exceedingly probable. In such of these cases as are not dependent upon malignant disease, colotomy, by diverting the fæces from the fistulous channel, may possibly enable the latter to close, and is at any rate necessary in order to relieve the sufferings caused by the fæces passing into the bladder. The author read the notes of a case in which communication existed between the bladder and some part of the bowel above the rectum and in which Amussat's operation was performed eight months since; the patient being now in good health, and in a condition of tolerable comfort, with evidence of considerable contraction, if not complete closure, of the fistula. References were also made to some other cases of communication between the bowel and the bladder, with a view to support the opinions here put forward and the treatment adopted in the above case; and also with a view to the diagnosis of the seat of the communication with the bowel when out of reach of the ordinary means of examination.

Mr. Solly thought the Society was indebted to Mr. Holmes for his case. The Profession was not fully alive to the value of Amussat's operation in cancerous diseases of the rectum, and the case related would improve our knowledge of the operation in those malignant diseases. One peculiarity of interest in it was, that the operation was performed when the colon was not distended, which rendered the proceeding a difficult one. In his (Mr. Solly's) cases the intestine was full, and the operation very simple and easy. He would inquire whether the cavity of the abdomen was opened before the colon was reached?

Mr. Holmes Coote said that very few Surgeons had had personal experience of Amussat's operation. He had not operated upon the living, but had on the dead subject. The proceeding when the colon was distended was simple and easy; not so when, as in Mr. Holmes's case, the intestine was in a state of collapse. The case was interesting from the complete relief afforded to the patient, and from the fact that the disease was of a non-malignant character. Did the ulceration arise from tuberculous deposit, which might be only of temporary existence, and a complete cure follow?

Mr. Curling said that the remark made by Mr. Holmes Coote, a Surgeon to a large Hospital, that he had not yet had occasion to perform colotomy, seemed to confirm the observation of Mr. Solly, that the operation was not sufficiently appreciated by the Profession as a means of giving relief in many cases of painful disease. In the interesting case which had just been read, no doubt could exist as to the propriety of opening the lumbar colon, and as to the great advantage which might result from such a proceeding. We had only to contrast the great misery, ending in death, which existed in the case communicated by Mr. Morgan to the last volume of the Society's *Transactions*—in which the ileum opened into the bladder, Surgery being powerless in affording relief, with the comparative comfort and relief from all suffering now enjoyed by Mr. Holmes's patient,—to conclude that, in this instance, the operation was a triumph of Surgery. In his (Mr. Curling's) opinion, the principal interest of the case consisted in the diagnosis which had been so carefully and successfully made—in determining, chiefly from the solid character of the fæces which passed from the bladder, and from the free escape of urine by the rectum, that the opening from the bowel was in the larger bowel low down. He would endeavour to follow the author of the paper in confining his observations relating to colotomy to cases of non-malignant disease without obstruction. He believed that there were many cases of the kind to which this operation was applicable—cases of inveterate stricture of the rectum, with ulcerations and mucous growths, attended with an exhausting discharge, the patients going from Hospital to Hospital for relief, leading a miserable life, and ultimately dying of the disease. Mr. Pennell, whose interesting case of colotomy had been alluded to by Mr. Holmes, in his paper communicated to the Society sixteen years ago, remarked that he would have recourse to this operation in every case of incurable stricture of the rectum, which produced severe suffering, and was beginning to destroy the health and undermine the constitution. He (Mr. Curling) was not aware that this suggestion had ever been acted on, until six weeks ago, when he was induced to perform the operation in the London Hospital on a man only twenty-seven years of age, who had an obstinate stricture, and a diseased state of rectum such as he had described. The man was not pressed to submit to the operation, but when the circumstances of the after-condition were fully explained to him he begged to have it done. He recovered favourably, and under tannic acid and chloride of zinc injections the discharge from the rectum was greatly reduced; but it was too early to speak of the effect of diverting the channel for the fæces, and of other treatment, in bringing the rectum into a more healthy state. Colotomy was supposed to be a dangerous as well as a difficult operation. When performed in consequence of obstruction arising perhaps from cancerous disease, and delayed to the latest period, being resorted to only as a *dernier ressort* after a stoppage of three or four weeks, the operation was necessarily fatal in many instances. Owing perhaps to accidental circumstances, it had fallen to his lot to perform an unusual number of these operations. His experience extended to fourteen cases; eleven he had performed himself, and he had assisted in three other cases. Now in nine the operation was undertaken to relieve obstruction, in all from carcinomatous disease; five were fatal, and four recovered; but in none of the fatal cases could death be said to result from the direct effects of the operation. In the remaining five cases, in which there was no obstruction, the operation was performed to relieve the distressing symptoms of disease in the rectum. All of them recovered favourably. So that with this experience we are justified in saying that colotomy is not attended with any great danger. He had not met with any serious difficulty in opening the colon in the cases where no obstruction existed. He attached great importance to securing the bowel to the margins of the wound in the skin, so as to bring the gut near the surface, and to prevent feculent matter escaping into the sigmoid flexure below, as this was liable to be a source of trouble. He trusted that the satisfactory result of the author's case, and the discussion which had taken place that evening, would tend to remove much of the prejudice which existed against colotomy, being assured that it was capable of diminishing suffering and prolonging life in many cases of serious disease.

Mr. Holthouse could confirm the observations of Mr. Curling as to the great depth of the bowel from the surface in many of these cases, as well as to the necessity of securing the edges of the intestinal opening close to the cutaneous one. He (Mr. Holthouse) had had some experience in the performance of Amussat's operation, and nothing was more striking than the difference of depth at which the colon was situated in different cases. When this intestine was distended above the seat of operation, it pressed towards the surface, producing such a stretching and apparent thinning of the superimposed structures that a trocar might be thrust at once into the bowel without any fear of wounding the peritoneum. In other cases, on the contrary, the colon was empty and contracted, sometimes not larger than the finger, and lay at a great distance from the surface. This was the condition of the patient in the last case operated upon by him, and which indeed somewhat resembled that of Mr. Holmes, inasmuch as a communication had formed between the intestine and the bladder. With the view of acquiring a correct knowledge of the relative anatomy of the parts concerned in this operation, and the appearances which indicate the proximity of the colon, Mr. Holthouse some years ago made a number of dissections of the region implicated. The parts were dissected both from before and from behind, and the following was the mode of proceeding:—The abdomen being opened and the small intestines removed, a long carpet-pin was thrust directly backwards through the descending colon, one inch above the crest of the ilium, till it emerged through the skin in the loin. Taking the average of the cases examined, the lower end of the kidney was found to be two-thirds of an inch above the transfixed part of the colon, and internal to it. The intestine itself lay on a layer of fat and the anterior lamella of the lumbar fascia, which separated it from the quadratus muscle. In performing Amussat's operation, therefore, after cutting through the skin and subcutaneous tissue, together with the superficial muscles, one arrived at a very strong dense fascia (fascia lumborum) connected with the internal oblique and transversalis muscles externally, passing beneath the outer margin of the erector spinæ and in front of the quadratus. On dividing this and the last-named muscle, a layer of fat or omentum-like structure, which varies in thickness, comes into view, and immediately behind this is the uncovered portion of the colon. Mr. Holthouse regretted, with previous speakers, that colotomy was not more frequently resorted to, and, when performed, that it was not done earlier. He had on several occasions recommended its performance, but it was either declined or put off till too late. The case of Mr. Gracie (Mr. Pennell's patient), which had been referred to by Mr. Holmes and Mr. Curling, was a striking example of what the operation could effect. Mr. Holthouse had had the advantage of seeing that gentleman when he was in London some years ago, and as evidence of the completeness of his recovery it might be mentioned that he was in the habit of walking from his lodgings in Piccadilly to the Docks and back again without experiencing any inconvenience. His chief anxiety was lest the artificial anus should close up.

Mr. Curling rose again to state that he had under his care in the London Hospital, at the present time, two patients upon whom he had performed colotomy: one, to whose case he had already adverted; and another, a young man aged twenty, with cancerous disease of the rectum without obstruction. And he should be happy to show the cases to any Fellows interested in the subject. He would also add that he had once operated in a case of extreme lateral curvature of the spine, and had succeeded in reaching the bowel above the anterior-superior spinous process of the ilium without opening the peritoneum.

Dr. MARCET related a case of obstruction of the intestine, which was removed by injections of large quantities of olive oil.

Mr. HOLMES then replied. He said that the peritoneal cavity was not opened in the operation. The difficulty in reaching the colon depended upon its being in an abnormal position—quite different, indeed, from its ordinary situation; but he succeeded in reaching it in the mode described in the paper. Usually, as the colon was distended, there was no difficulty in finding it, and this without opening the peritoneum; though this cavity had in many instances been laid open in this operation, and often without the knowledge of the Surgeon. He thought with Mr. Coote that the case was one of ulceration of tubercular deposit, a form of disease by no means rare. He agreed that many cases in which Amussat's operation might be performed, with the result of prolonging life and affording much comfort, went now from Hospital to Hospital, and were submitted to instrumental and other interference. Occasionally, in these cases, the comfort of the patient was dreadfully interfered with from the difficulty of fitting an instrument to the opening, and from the constant escape of fæcal matter and its offensive odour. When the bowels acted at regular periods, and the pad could be well adjusted, the patient experienced much comfort.

## OBITUARY.

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### DR. THOMAS HODGKIN.

WE regret to announce the death of Dr. Hodgkin, in his 68th year, which occurred from dysentery, on the 5th of April, at Jaffa, to which place he had proceeded in company with Sir Moses Montefiore for the purpose of still further advancing the interests of the suffering Jews. It was only a few months ago that he succeeded, in conjunction with Sir Moses, in inducing the Sultan of Morocco to make important concessions to his Jewish subjects. He graduated at Edinburgh in 1828, and his thesis was not only characterised by his devotion to that branch of Professional science to which he afterwards devoted so much time and energy—the department of morbid anatomy—but was remarkable for the purity of its Latin. His early life called for the continuous care of his highly intellectual parents, for he was a seven months' child, and he never attained to anything like vigour of constitution; but his physical growth was outstripped by a development of remarkable mental power, to which his whole life bore testimony. He was elected Licentiate of the Royal College of Physicians, London, 1825, and Physician, Curator of the Museum, Inspector of the Dead, and Professor of Morbid Anatomy at Guy's Hospital. To have occupied such a position he must have possessed not only strict anatomical knowledge, but an amount of special scientific and general information which few men attain. His classified catalogue of the Pathological Museum of Guy's Hospital is a masterpiece of talent and industry. On the formation of the University of London, he was appointed by Earl Russell the first Senator, and was empowered to organise that University to which he never ceased to give his untiring attention. St. Thomas's Hospital, under difficulties, sought Dr. Hodgkin's assistance, and he reorganised the Medical staff, taking upon himself the responsibility of Curator of the Museum and Lecturer on the Practice of Physic. With this vast labour on his hands, he never lost sight of those studies which were dear to him. His valuable works on the Morbid Anatomy of the Serous and Mucous Membranes and on the Influence of Physical Agents on Life must always be works of reference; but he was as great at the bedside as in the study; and as a diagnostic Physician he was not surpassed.

We have now to speak of him as a naturalist and philanthropist. His love of Nature was such that there was scarcely a department in natural history that he did not cultivate; and his knowledge of languages, commanding, as he did, Greek, Latin, Italian, French, and German, all of which, with the exception of Greek, he spoke fluently (and speaking Latin is a rare attainment now) rendered his correspondence both extensive and valuable. As a philanthropist he has of late years more particularly distinguished himself. His love of natural history centered itself—master as he was of geography—upon the study of the uncivilised races of man; and if he was not the founder, he was mainly instrumental in establishing the Aborigines' Protection Society, and through the formation of that Society Ethnology took its place in science.

Dr. Hodgkin seems to have foreseen the cause of his own death; he maintained for years that the sigmoid flexure of the colon was diseased, and he was a great sufferer from this cause, though his sufferings were known only to his amanuensis. His most important works were written under extreme suffering, according to his usual custom, between six and eight o'clock in the morning, while reclining in bed.

Dr. Hodgkin was a member of the Senate of the University of London, and intimately connected with almost all the scientific bodies in this country. In addition he was member of the Lyncean Academy of Rome, the Physico-Critical Academy of Sienna, the Philomathic Society of Paris, the Royal Society of Medicine at Marseilles, the Society of Natural Philosophy and Medicine of Heidelberg, the Academy of Natural Sciences of Philadelphia, the Massachusetts Medical Society, the Geoenian Society of Catania, the Iatrophysical Society of Palermo, the Sandwich Islands' Institute, etc. His writings were of most extensive character, distributed through periodical literature both at home and abroad. We may mention amongst the most valuable of his works the following:—"The Pathology of Serous and Mucous Membranes," "Classified Catalogue of the Museum of Guy's Hospital," "The Means of Preserving Health," "The Influence of Physical Agents on Life."

## NEW INVENTIONS.

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### REW'S PREPARATIONS OF CARBOLIC ACID, CARBOLIC INHALER, AND APPARATUS FOR MAKING EFFERVESCENT BEVERAGES.

MR. REW, of Regent-street, seems to have been working for a long time at preparations of carbolic acid, in order to render this powerful agent more available for the treatment of disease. In the first place, there is an aromatised solution of carbolic acid, in which the inventor has striven to "cast a perfume" not on the "violet," but on the somewhat pungent and refractory antiseptic. Secondly, there is a new inhaler, in which the necessity for heat is done away with, for the volatile acid is carried up and inhaled at the ordinary temperature of the room. It may be remembered that the mere use of steam, or other heated vapour, is disagreeable to some patients, and prejudicial to others; consequently that a means of adding a tonic and balsamic ingredient to air of the ordinary heat may have great advantages. Thirdly, there is a lozenge impregnated with carbolic acid, of which the writer will only undertake to say that it is not more disagreeable than other medicated lozenges, and that he has heard patients compare it to paregoric and bitter almonds, thus indicating the kind of flavour it possesses. These lozenges and other preparations are available in cases of stinking breath, relaxed mucous membrane, ulcerated lungs, and the like; but there is one malady for which we do not see them recommended, but for which they surely should have full trial, and that is whooping cough. They *ought* to do good in this *opprobrium medicorum;* whether they will is another question, which we leave to be decided by experience.

The last apparatus on our list is one for making gaseous water, cheaply and easily, in a convenient vessel for table use, and one which has not the remotest possible chance of blowing up, or of spurting its contents over the costly toilettes of the fair sex. The vessel is double bodied; one part holds a solution of acid, the other a solution of alkali. The spout is single, so that the liquids combine and foam in issuing forth, even as oxygen and hydrogen do in the oxyhydrogen blowpipe. The contrivance is simple, but clever and effective for all that.

HYDROPHOBIA FROM THE BITE OF A BADGER.—M. Selle, at one of the recent sittings of the Turin Academy of Medicine, gave an account of an old woman who was attacked and severely bitten by a female badger, infuriated by the loss of its young. She was taken to the St. Giovanni Hospital and treated for her numerous wounds, but she died at the end of a month, having manifested during several days the symptoms of well-marked hydrophobia.—*Gaz. Méd.*, April 7.

# MEDICAL NEWS.

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**Royal College of Surgeons of England.**—The following gentlemen passed their Primary Examinations in Anatomy and Physiology at a meeting of the Court of Examiners on the 10th inst., and when eligible will be admitted to the Pass Examination :—

L. J. Moseley, A. H. Baines, C. J. Sells, F. S. Daldy, Charles Munden, J. G. Carruthers, W. B. Lewis, C. J. Worts, George Stokell, W. J. Bennett, and J. W. Barry, students of Guy's Hospital; William Kipling, John Lloyd, J. J. Bingham, William Price, and David Havard, of University College; C. H. Joubert de la Ferte, Inman Welsh, Friend Lewin, and T. A. Roberts, of St. Mary's Hospital; R. C. Sanders, W. H. Causton, and George Salt, of the London Hospital; W. J. Barkas, T. O. Wood, and J. T. Parkinson, of Newcastle; W. A. Cox and Edward Jackson, of St. George's Hospital; T. W. Lee, of St. Bartholomew's Hospital; H. L. Snow, of Birmingham; and William Dobson, of Leeds.

The following gentlemen passed their Examination on the 11th instant, viz. :—

Edward Hewer, R. M. Bradford, J. T. Williams, Thomas Smith, Richard Samuel, H. L. Williams, C. B. Crowfoot; and N. H. Jarvis, students of St. Bartholomew's Hospital; George Andrews, Richard Rendle, R. L. Wilson, J. G. Wiseman, J. B. Saundry, Frederick Taylor, and Edward Sunderland, of Guy's Hospital; A. H. Buck, Adam Wilkinson, and William Powell, of the Charing-cross Hospital; Edward Stephens and William Younghusband, of Liverpool; J. R. Haynes and C. C. Winkworth, of the Westminster Hospital; H. E. Hetling and T. D. Saunders, of Bristol; George Thompson, of Leeds; F. W. Wimberley, of the Middlesex Hospital; John Bately, of Birmingham; and Clement Dukes, of St. Thomas's Hospital.

The following gentlemen passed their Examination on the 12th inst. :—

William Roche, John Curnow, A. F. McGill, Daniel King, William Webster, and W. B. Kendall, students of King's College; John de Liefde, T. W. Joy, F. W. Sabzmann, Branford Edwards, R. M. Cole, and Charles Higgins, of Guy's Hospital; J. A. Lormier, Alexander McGregor, John Gosse, D. H. B. Anderson, and John Giles, of St. Bartholomew's Hospital; William Anderson, N. C. Dobson, and John Fairbank, of St. Thomas's Hospital; Alfred Hollis, J. J. Levindell, and Walter Maine, of the Middlesex Hospital; J. G. Black, of Newcastle; B. P. B. Burroughs, of Bristol; Anthony Foster, of Leeds; and Evan Williams, of Dublin.

It is stated that out of the 108 candidates who offered themselves for the Primary Examination, no less than 22 failed to acquit themselves to the satisfaction of the Court, and were consequently referred back to their studies for three months.

**Apothecaries' Hall.**—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, April 5, 1866 :—

William Thomas Cassel Pratt, Newport, Monmouthshire; Alexander Thorburn Macgowan, 5, Caversham-road, N.W.

The following gentlemen also on the same day passed their First Examination :—

George William Barroll, St. George's Hospital; John Bately, Sydenham College, Birmingham.

## APPOINTMENTS.

⁂ The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

**Bottle**, A., M.D., has been appointed Senior Resident House-Surgeon to the Leeds Public Dispensary.

**Butler**, T. M., M.R.C.S., has been appointed an Honorary Assistant Medical Officer to the Surrey County Hospital, Guildford.

**Cookson**, E., L.S.A.L., has been appointed Resident Assistant House-Surgeon to the Leeds Public Dispensary.

**De Tatham**, H., L.R.C.P., M.R C.S., has been appointed to the office of House-Surgeon, St. Mary's Hospital.

**Ellerton**, **John**, M.D., has been appointed Surgeon to the North Riding Infirmary, Middlesbro'-on-Tees.

**Fish**, R., M.R.C.S,, has been appointed Assistant-Surgeon to the London Rifle Brigade.

**Grubb**, R. T., M.R.C.S., has been appointed House-Surgeon to St. Mark's Hospital.

**Hayward**, **Sidney**, M.D., M.R.C.S., has been appointed Honorary Medical Officer to the Royal Pimlico Dispensary and Lying-in Charity.

**Morton**, J , M.B , has been appointed an Honorary Assistant Medical Officer to the Surrey County Hospital, Guildford.

**Mushet**, W. **Boyd**. M.B., M.R.C.P., has been appointed Physician to the North London Hospital for Consumption.

**Page**, W. J., M.R C.S., has been appointed Surgeon to the Peckham Rye Dispensary.

**Rigden**, G. W., M.R.C.S., has been appointed House Surgeon to the Taunton and Somerset Hospital.

**Schollick**, T. J., M.R.C S., has been appointed Honorary Assistant Medical Officer to the Surrey County Hospital, Guildford.

**Simpson**, J., L.R.C.P.Edin., has been appointed to the Leith Hospital and Edinburgh Humane Society and Dispensary.

**Veitch**, **William Young**, L.R.C.P. Edin., has been appointed House-Surgeon to the North Riding Infirmary, Middlesbro'-on-Tees.

## BIRTHS.

**Adam.**—On April 2, at 137, Princes-street, Edinburgh, the wife of H. Adam, Assistant-Surgeon, Madras Army, of a daughter.

**Buchanan.**—On April 7, at 63, Harley-street, the wife of G. Buchanan, M.D., of a daughter.

**Caldwell.**—On March 28th, at Dreghorn, Ayrshire, the wife of J. Caldwell, L.R.C.P.Edin., of a daughter.

**Fitch.**—On April 5th, at Chaddesley Corbett, near Kidderminster, the wife of F. Fitch, M.D., of a son.

**Fitzpatrick**, **John.**—On March 31, at 39, Elgin-road, Kensington-park-gardens, the wife of John Fitzpatrick, M.D., Retired Surgeon-Major Madras Army, of a son.

**Gamgee**, J. S.—On March 31, at Birmingham, the wife of J. S. Gamgee, M.R.C.S., of a daughter.

**Gell.**—On March 27, at Great Aycliffe, the wife of A. S. Gell, M.R.C.S., of a son.

**Harvey.**—On April 7, at 31, Grosvenor-street, the wife of John Harvey, M.D., of a son.

**Macann**, A. B.—On April 5, at 22, King-street, Portman-square, the wife of A. B. Macann, M.R.C.S., of a son.

**Morphew.**—On April 8, at Sevenoaks, the wife of A. Morphew, Staff-Surgeon, of a daughter.

**Perkins.**—On April 2, at Bentinck-terrace, Regent's-park, the wife of R. H. Perkins, Surgeon Bengal Army, of a son.

**Russell.**—On April 5, at Accrington, Lancashire, the wife of W. S. Russell, M.R.C.S., of a son.

**Slyman**, W. D.—On March 29, at 18, Warden-road, Kentish-town, the wife of W. D. Slyman, M.R.C.S., of a son.

## MARRIAGES.

**Drake—Elliot.**—On April 4, at All Saints', West Ham, T. Drake, M.R.C.S., to May, daughter of W. Elliot, M.D.

**Duncan—Thomson.**—On April 4th, at Mains Tillicoultry, John Duncan, M.D., of Edinburgh, to Jemima, daughter of Alexander Thomson, Esq.

**Pugsley—Oatway.**—On April 5, at Old Cleeve, Somerset, L. Pugsley, M.R.C.S., to Susannah Risdon, daughter of the late R. Oatway, Esq.

**Ward—Burnand.**—On April 10, at Cuckfield, W. P. Ward, Surgeon, Royal Artillery, to Eleanor, eldest daughter of H. Burnand, Esq.

**Welch—Slater.**—On April 10, at St. James's, Clapton, Charles H. Welch, L.F.P.S. Glas., of Cambray-villa, Clapton, to Ellen F. Slater, only child of the late Isaac Slater, of the Cape of Good Hope.

## DEATHS.

**Allardyce**, **James**, M.D., at Cambray-place, Cheltenham, on April 6, aged 84.

**Babington**, **Benjamin Guy**, M.D., at 31, George-street, Hanover-square, on April 8, in the 73rd year of his age.

**Brydone**, J. M., Retired Staff-Surgeon, R.N., at Petworth, Sussex, on March 29, aged 86.

**Cheesewright**, W., M.R.C.S., of Sturminster Newton, Dorset, on March 28.

**Finch.**—On April 9, at Slough, W. Finch, L.F.P.S. Glasgow, aged 34.

**Galindo**, R. M., M.D., M.R.C.S., at 19, Noel-street, Islington, on April 7, aged 72.

**Harland**, W., M.D., at Scarborough, on April 6, aged 79.

**Jones**, W., M.D., at Lutterworth, on March 27, aged 86.

**Moseley**, F. X., M.D., F.R.C.S., at Seymour-street, on March 31, aged 61.

**Woodward**, **Henry**, M.R.C.S., at Bicester, Oxfordshire, on April 4.

**Wootton.**—On April 9, at Harrold, Bedfordshire, W. Wootton, M.R.C.S., aged 63.

**Wylie**, **John Dick**, M.D., Civil Surgeon, at Nynee Tal, North-west Province, India, on February 19.

## POOR-LAW MEDICAL SERVICE.

⁂ The area of each district is stated in acres. The population is computed according to the last census.

### RESIGNATIONS.

*Chard Union.*—Mr. G. R. Burt has resigned the First Ilminster District; area 7032; population 4608; salary, £68 8s. 4d. per annum.

*Driffield Union.*—The Kilham District is vacant; area 13,880; population 2035; salary £16 per annum.

*Hartley Wintney Union.*—Dr. Ebenezer Diver has resigned the Heckfield District; area 7759; population 1492; salary £70 per annum.

*Keynsham Union.*—The Workhouse is vacant; salary £50 per annum.

*Uppingham Union.*—The Barrowden District is vacant; area 16,874; population, 3887; salary £45 per annum.

*Wrexham Union.*—Mr. J. F. Churchill has resigned the Fourth District; area 15,941; population 3299; salary £25 per annum.

### APPOINTMENTS.

*Kidderminster Union.*—Cecil Webster, M.R.C.S.E., L.S.A., to the Bewdley District.

*Louth Union.*—William D. Ditchett, M.R.C.S.E., L.S.A., to the Louth District and the Workhouse.

*Newcastle-upon-Tyne Union.*—Thomas C. Nesham, M.D. Edin., M.R.C.S.E., L.S.A., to the First District. John Hawthorn, M.R.C.S.E., L.S.A., to the Fourth District.

*Pontypridd Union.*—David W. Davies, M.D. and M.C. Aberd., to the Llantrissant District. Henry N. Davies, M.R.C.S.E. L.R.C.P. Edin., L.M. Lond., to the Cymmer District.

*Totnes Union.*—Thomas E. Owen, M.R.C.S.E., L.S.A., L.M., to the Stoke Gabriel District. Augustus Newman, M.B. Oxon., M.R.C.S.E., L.S.A., L.M., to the Townstal District.

*Whitechapel Union.*—Septimus Swyer, L.R.C.P., M.R.C.S.E., L.S.A., L.M., to the Spitalfields District.

The late Dr. Benjamin Guy Babington, F.R.S.—Our readers will receive with deep regret the news of the death of this accomplished Physician, which took place on April 8 at his residence, George-street, Hanover-square. Dr. Babington's name will be always connected with epidemiological science. His translation of "Hecker's Epidemics of the Middle Ages," and the foundation of the Epidemiological Society, of which he was President, gave the first impulse to the special study of widely-spreading diseases in this country. We shall give a biographical notice of Dr. Babington's career in our next number.

Charing-cross Hospital.—We have to announce the appointment of Professor Divers, M.D., of Queen's College, Birmingham, to the Lectureship on Natural Philosophy in the Medical School of Charing-cross Hospital.

Officers of the Hunterian Society for the Session 1866-7.—*President*—Stephen H. Ward, M.D. *Vice-Presidents*—S. W. Devenish, M.B.; Sigismund Sutro, M.D.; Thomas B. Crosby, M.D.; D. De Berdt Hovell, Esq. *Treasurer*—William Cooke, M.D. *For the Oration of* 1867—W. Sedgwick Saunders, M.D. *Librarian*—Robert Fowler, M.D. *Secretaries*—H. I. Fotherby, M.B.; W. Allingham, Esq., F.R.C.S. *Council*—Robert Barnes, M.D.; Henry Blenkarne, Esq.; Thomas Brown, Esq.; Thomas Bryant, Esq.; P. Lodwick Burchell, M.B.; Thomas Mee Daldy, M.D.; Esquire Dukes, Esq.; J. Hughlings Jackson, M.D.; G. Lightenberg, M.D.; C. F. Maunder, Esq.; W. S. Saunders, M.D.; Alfred Smee, Esq., F.R.S.

The Odontological Society held its monthly meeting at 32, Soho-square, on the 2nd inst. Dr. Rottenstein, of Paris, sent for exhibition a stomatoscope for illuminating the mouth as well as the larynx by galvanic means. A paper was read by Mr. Sydney Longhurst on "Lateral Abnormalities." The irregularities of the lateral incisor teeth, the frequent additional number, their absence, their being occasionally germinated, and their tendency to produce abscess of the palate, were the chief points considered.

The Ophthalmological Congress for 1866.—Professors von Jäger, senior, Arlt, and Gulz, as the official managers of the next Congress, to be held in Vienna, have issued a cordial invitation to the ophthalmologists of all countries, assuring them that a rich material awaits their inspection at Vienna, where every attempt will be made to render their stay profitable and agreeable. The first general meeting of the Congress will take place August 25, at the Academy of Sciences.

Death of a Veteran.—Mr. J. M. Brydone, Surgeon R.N., died at Petworth on the 29th ult., aged 86. He was at the battle of Trafalgar, and never had a day's sickness till within a fortnight of his death, with the exception of an attack of yellow fever.—*Guardian.*

It is officially announced that a separate department has been formed for the transaction of business relating to the cattle plague, under the superintendence of Colonel Harness, R.E., C.B., at 7, Westminster-chambers, Victorial-street, S.W.

Closure of a Hospital.—The Roman Catholic Hospital of St. John and St. Elizabeth, Great Ormond-street, which was founded in 1856, has just been closed by the unanimous resolution of the Committee. Want of funds was the ostensible reason for closing it. Sir George Bowyer has circulated a letter amongst the subscribers, in which he condemns the management of the charity by the Committee, and stigmatises the closing of the Hospital as "cruel, unwise, and mischievous."

The Public Medical Services.—From the report of the committee on Army and Navy Medical officers' affairs it appears that the total number of candidates examined for the Army Medical Service since 1856 is 922. Of these 713 were passed and 209 rejected. The total number of candidates examined, for the Naval Medical Service since 1856 is 596, of whom only 389 were found qualified. During the past year there were only 17 candidates, of whom seven were rejected. That the public Medical Service is distasteful to the Profession is shown in the small number entering, and in the large number of resignations after, as since 1850 up to the present time no less than 137 Medical officers have left the Royal Navy, and during the same period 117 have voluntarily left the Army, even after 17 years' service. The average age of Army Assistant-Surgeons on promotion to the rank of full Surgeon, for the last 11 years' has been 33 years, and the average length of service 9½ years.

A Lunatic and his Keeper Drowned.—On Friday afternoon, while a number of the patients of the Abbey Lunatic Asylum were employed working in an adjoining field, it was discovered that a patient named Thomson, and one of the male attendants, named Lachland Vas, were missing. Search was immediately made, when the cap and wig of the keeper were discovered floating in an old quarry hole partially filled with water. After a few hours spent in dragging the hole, both of the bodies were brought up. It appears that Thomson (who was a dangerous and at some times almost ungovernable patient) had made an attempt to escape from the keeper, and being acquainted with the ground had leaped over a fence into the quarry. Vas followed, with the intention of rescuing him, but not being aware of the depth of the water, they were both drowned.

London Super-Mare.—Few of those whose avocations do not lead them to visit the poorer parts of this wealthy town would imagine how great and serious has been the neglect of the fundamental conditions of public health. Not only is there a very general absence of drainage and very deficient water supply, but the accumulation of refuse and filth, the overflow of cesspools and closets, the absence of domestic arrangements of a kind essential to decency and health, and the accumulation of water in yards and cellars are all to be found in numerous localities—tending alike to the promotion of fever and epidemic diseases.—*Sixth Annual Report of the Brighton Ladies' Sanitary Association.*

Hydrophobia.—A fatal termination of the bite of a dog has occurred near Manchester. In August last Mr. Charles Budd, a clerk employed at the Manchester and Liverpool District Bank, was bitten by one of his own dogs, a bull terrier, which, as it had exhibited signs of madness, he was about to shoot; but before he could do so, it flew at him and inflicted a wound on the leg. He continued at his business up to Monday last without any alarming symptoms being developed, but on that day he complained of a strange feeling, and on asking a drink of water from the housekeeper, he found he could not swallow. On arriving at his home in Withington the same evening, he experienced equal difficulty in swallowing a glass of porter which was offered to him, though suffering from intense thirst, and all the indications of hydrophobia quickly supervened. He grew rapidly worse, and died on Wednesday night, with all the symptoms attendant on hydrophobia.—*Manchester Courier.*

Heavy Railway Damages.—In the case of Elkington *v.* London and North-Western Railway Company, which was tried at Gloucester on April 6, the plaintiff was high bailiff of the County Court at Birmingham; the salary attached to his office is £1200 per annum. He was travelling to London on February 3, and when near the junction at Rugby the train in which he was was run into by another train with so severe a shock that the train was sent from the rails on to the sleepers. He felt that his back was hurt, but, nevertheless, went on to London. When he got there he sent for his father-in-law, Dr. Elkington, and he found himself too ill to perform the duties of his office three days afterwards. On the part of the plaintiff, Dr. Elkington stated that he was suffering from a nervous shock to the brain, and had indications of paralysis and that his spine was injured. Mr. Cheshire said there was a slight extravasation in the right eye, arising from a shock received by the retina in the accident. Dr. Bell Fletcher thought there was a general affection of the nervous system of the brain and spinal marrow. Dr. Gilchrist, of Torquay, saw a general disturbance of the nervous system, and Mr. Erichsen a subacute inflammation of the brain and irritability of the spine, with paralysis of the legs. On the part of the defendants, Dr. Heslop, of Birmingham, thought that, though there was a general disturbance of the nervous functions, there was no organic disease of the spine or brain. Dr. Blount agreed with him. Mr. Haynes Walton, Mr. Pemberton, and Sir W. Fergusson gave evidence in support of the theory that the plaintiff's injuries were temporary, and not permanent. Verdict for the plaintiff, damages £3500. In the case of Hubbert *v.* Lancashire and Yorkshire Railway, tried at Liverpool, April 4, the action was brought to recover damages for injuries sustained in a collision which took place on the defendants' line at Wigan on June 20 last. The negligence was not disputed, and the inquiry became an assessment of damages. The plaintiff is a draper carrying on business at Birkenhead, and on the day in question he had taken a second-class ticket from Liverpool to Manchester. On his return journey, when the train got to Wigan, a second train ran on to the same line of railway, and both came in collision with each other and with a coal train. The consequence was to inflict most serious damage upon the plaintiff, resulting in paralysis of the right leg, and inability to transact or attend to business. The plaintiff at the time of the accident was a young man of 34, with a wife and children, and a thriving business. Medical evidence was given to show the grave nature of the injuries sustained by the plaintiff; also evidence that his income from his business amounted to £340 per year; and the jury found a verdict for £4000. In the case of Perelle *v.* the Great Western Company, tried at Liverpool on April 7, a ship chandler claimed damages on account of injury of the spine. The jury returned a verdict of £1600 damages. In the case of Vowles *v.* the Great Western Company a verdict of £700 damages was obtained, the plaintiff having sustained fracture of the leg. In the case of Sewell and Wife *v.* the South Devon Railway Company, the action was settled for £550.

At a meeting of the Yorkshire Registrars of Births and Deaths, held at Leeds on March 10 to take into consideration the New Vaccination Bill introduced by Mr. Bruce into Parliament, Mr. J. K. Heaps in the chair, the various clauses of the New Vaccination Bill having been read, it was resolved, "That this Meeting considers that the Remuneration Clause, No. 23, is very unsatisfactory." The Clause is as follows:—"Every registrar shall keep a book in which he shall enter minutes of the notices of vaccination given by him as herein required, and also register the certificates transmitted to him as herein provided, and shall at all reasonable times allow searches to be made therein, and upon demand give a copy under his hand or under that of his deputy of any entry in the same, on payment of a fee of one shilling for each search and sixpence for each copy; and every registrar shall receive a fee of one penny in respect of every child whose birth he shall have registered, and in respect of whom he shall give the notice, as aforesaid, and another fee of *Threepence* in respect of every such child whose certificate of vaccination he shall have registered as herein provided, and he shall receive a fee of *One Penny* in respect of each child whose certificate of vaccination he shall have registered without having registered the birth: provided that no fee shall be charged for any search made by a public vaccinator or any officer of the guardians, authorised by them to make such search, or any Inspector appointed by the Poor-law Board or the Lords of Her Majesty's Council." It was resolved, "That in the opinion of this meeting the remuneration should be *Threepence* for giving the notice and entering the particulars required in the Vaccination Book, and the further sum of not less than *Twopence* for completing the entry on receipt of the vaccinator's certificate."

The following are the last week's Cattle Plague Returns.

| Census Divisions. | 1. Attacked. | | | 2. Result of reported Cases from the Commencement of the disease. | | | | |
|---|---|---|---|---|---|---|---|---|
| | Week ending March 31. | Week ending March 24. | Week ending March 17. | Attacked. | Killed. | Died. | Recovered. | Unaccounted for. |
| 1. Metropolitan Police District . . | 92 | 60 | 34 | 7841 | 3389 | 3510 | 336 | 606 |
| 2. South Eastern Co. . | 8 | 6 | 12 | 5050 | 1610 | 2785 | 442 | 213 |
| 3. South Midland Co. | 526 | 542 | 584 | 16861 | 5051 | 9874 | 1546 | 390 |
| 4. Eastern Counties . | 217 | 190 | 233 | 10317 | 4389 | 4768 | 762 | 398 |
| 5. South Western Co. | 42 | 10 | 35 | 1608 | 562 | 775 | 199 | 72 |
| 6. West Midland Co. . | 513 | 444 | 831 | 11547 | 3353 | 6162 | 1226 | 806 |
| 7. North Midland Co. | 587 | 671 | 873 | 13332 | 5621 | 6030 | 1060 | 621 |
| 8. North Western Co. | 880 | 1492 | 1504 | 54164 | 9482 | 33948 | 5732 | 5002 |
| 9. Yorkshire . . | 534 | 683 | 999 | 32312 | 5501 | 18257 | 5789 | 2765 |
| 10. Northern Counties. | 281 | 264 | 547 | 7105 | 3556 | 2488 | 941 | 120 |
| 11. Monmouthshire & Wales . . | 122 | 85 | 160 | 7721 | 404 | 5928 | 1072 | 317 |
| 12. Scotland . . | 204 | 257 | 449 | 45817 | 5590 | 27046 | 10636 | 2545 |
| | 3956 | 4704 | 6261 | 213675 | 48508 | 121571 | 29741 | 13855 |

*Note.*—19 Inspectors who reported cases last week have not reported in time for this return—viz., for the county of Chester, 1; Lancaster, 3; Lincoln, 4; Northampton, 1; Stafford, 2; East Riding of York, 1; Metropolitan Police District, 3; and Scotland, 4. These Inspectors returned 290 cases last week.

**Treatment of Fever by Sulphites.**—In No. 51 of the *Glasgow Medical Journal*, October, 1865, there is a communication by Dr. De 'Ricci, of Dublin, in which he advocates the use of sulphites and hyposulphites in the treatment of zymotic diseases. "Physiology," he says, "leads us to believe that all zymotic diseases depend on a fermenting or catalytic principle in the blood. Chemistry teaches us that in the presence of sulphurous acid and the sulphites no catalytic action can take place, and practical experience confirms the teachings of science, by showing us palpably that zymotic diseases, even in their most virulent forms, become completely neutralised by this remedy." This discovery he ascribes to Professor Giovanni Polli, of Milan. I may here remark, that it is much to be regretted that Medical men are so frequently in the habit of making such unqualified assertions respecting the use of various remedies. One might suppose that with such a remedy in hand the treatment of fever would become a very simple matter indeed—neutralise the poison, and, as a natural consequence, the fever must cease. Being satisfied that the bi-sulphite of soda—the preparation chiefly recommended—is, at all events, innocuous, I determined to test its efficacy in typhus. After carefully watching the progress of at least a dozen cases in which scruple doses of the bisulphite of soda were administered every three or four hours, I am led to the conclusion, that in typhus fever, at least, no amelioration of the disease is produced by it; as to its action in scarlatina, small-pox, and puerperal fevers, for which it is so highly lauded in the paper just referred to, I am not prepared to speak, having had no experience of it in such cases. Had I been so rash as to have given an opinion upon the use of the sulphites without giving them a full trial, I might have fallen into the mistake of supposing them capable of completely neutralising the poison of typhus, because in one of the first patients who got this treatment, there was a very remarkable fall of the pulse, accompanied with an unusual defervescence or diminution of temperature on the eighth day of the fever. In none of the other cases did I observe the smallest degree of benefit from the use of the bisulphite of soda; all I can say is, that while it does not appear in the slightest degree hurtful, it is by no means an agreeable Medicine to the poor patient.—*Observations on the Present Epidemic of Typhus, by Robert Perry, M.D.*

## BOOKS RECEIVED.

The Australian Medical Journal. August, 1865. Melbourne: Wilson and Mackinnon.

*** Dr. Burn Malcolm gives a case of empyema cured in a novel manner. The affection was on the left side, the patient was extremely exhausted, the heart displaced, and by the end of a month there seemed no resource, save paracentesis. But the risk of tapping was too great, and the following ingenious method pursued:—There was already an opening between the pleural cavity and the upper and front part of the lung, and when the man leaned forward he expectorated profusely. Dr. Malcolm asked himself "Why not turn the man upside down, and allow the pus to escape through the opening already made?" He was made to hang his head over the side of the bed, when about a quart of horribly offensive pus ran out of his mouth. This was repeated night and morning, perseveringly but cautiously, the pus was gradually drawn off, the heart began to return towards its normal condition, the lung to expand, and in twenty-two days there was no further need of a Doctor. In another month he was out driving, with his chest wonderfully little fallen in, and now weighs fourteen stone. There are cases of hydatids by Mr. MacGillivray; a case, by Mr. Butler, of intestinal obstruction, with recovery after fourteen days, and expulsion of a gangrenous portion of small intestine seven inches long; and a paper, by Dr. Neild, on feigned hæmoptysis.

Bathing: How to do it, When to do it, and Where to do it. By Edgar Sheppard, M.D. 2nd edition. Pp. 39. 1866. London: Hardwicke.

*** Dr. Sheppard has used the Turkish Bath in the treatment of cases at the Colney-hatch Lunatic Asylum with "unqualified success." Its power in many forms of disease, especially in melancholia, has been found most remarkable; sleep is induced, morbid fancies dispelled, and the violence of acute mania mitigated. It softens the dry skin and gives out the odour by which "you may smell a madman anywhere," and gives satisfaction to the patient. Dr. Sheppard enters into his subject with the enthusiasm of a Turk or an Urquhart, and we recommend our readers to study this pamphlet.

The First Annual Report of the Hankow Medical Mission Hospital, in connexion with the Wesleyan Mission Society, under the charge of F. Porter Smith, M.B.Lond., M.R.C.S., from July 1, 1864, to June 30, 1865. Pamphlet. Presbyterian Mission Press, Shanghai. 1865.

*** An exceeding interesting pamphlet, showing that the benefits to be derived from this Medical mission are highly appreciated by the Chinese. From its earnest and scholarly tone it leads us to expect longer and more valuable communications from Dr. Porter Smith.

Traitement des Maladies des Voies Respiratoires par l'Inhalation des Emanations des Epurateurs, du Gaz D'Eclairages; Reproduction Chimiquement et Physiologiquement identique des Mêmes Gaz dans la Chambre d'un Malade à l'aide d'un Nouveau Liquide qui en est la Synthêse, le Gazeol. Préparé G. M. Burin de Buisson, Laureat de l'Academie de Médécine de Paris. Paris: Victor Goulz. 1865. Pp. 16.

*** Has a list of volatile substances which may be inhaled in diseases of the respiratory apparatus, as whooping cough, and a description of the manufacture of gazeol, a fluid having ammonia for its base, which evaporates spontaneously at a temperature of 15° to 24° Centig., and fills the atmosphere of the sick room, according to the patient's pleasure.

Annali di Médicina Pubblica Igienica, etc. Firenze. No. 3.

⁂ The sanitary papers are continued. Professor Luigi goes to the physiology chair of Bologna. Dr. Francis Cami has left a large sum to endow a deaf and dumb asylum at Monga. The municipality of Ancona has given silver medals to fifteen Army Surgeons for services during the cholera epidemic. Signor Thuri, Professor in Verona, believes he has discovered the art of propagating the different sexes at will.

What Food to Eat? By M. W. Ireland, M.D., late of H.M. Bengal Army. 1s. Pp. 52. London: Pitman.

⁂ Dr. Ireland, we regret to observe, is incapacitated by a wound received in India from the active duties of his Profession. He is already well known as the author of several popular works on general subjects, and the present essay, which is learnedly and pleasantly written, discusses and describes the questions of food and eating always interesting to omnivorous man, and important in their relations to public health and public institutions. We recommend this essay to our readers.

Local Museum Notes. No. 1. Pp. 16. Edited by the Treasurer of the Wimbledon Local Museum. (Communications may be addressed to the Editor, Beech Holme, Wimbledon-common, S.W.) London: Hardwicke. 1866.

⁂ The object of these "Notes" is to recommend a practical plan for the commencement of any local museum.

Reports on the Extent and Nature of the Materials Available for the Preparation of a Medical and Surgical History of the Rebellion. Philadelphia: Lippincott and Co. 1865.

⁂ This handsome quarto volume, abundantly illustrated with woodcuts and coloured engravings, gives, as it were, a *precis* of the whole Medical history of the late American Civil War.

The Chemist's Desk Companion. The Year-Book of Pharmacy: a Practical Summary of Researches in Pharmacy, Materia Medica, and Pharmaceutical Chemistry during the Year 1865. Edited by Charles H. Wood, F.C.S. London: Churchill and Sons. 2s. 6d. Pp. 175, with index.

⁂ A most useful book. For half-a-crown, all the novelties in therapeutics, in the manipulation of remedies, tests for poisons, etc., that have appeared in English and foreign journals during 1865.

Thoughts on the Value and Signification of Statistics. By Daniel Noble, M.A., M.D., F.R.C.P. Read before the Manchester Statistical Society, January 10. Manchester. 1866.

⁂ Is a highly successful effort to bring out the true function of statistics in thoughtful inquiry.

Bulletin de l'Academie Royal de Médicine de Belgique. Nos. 5 and 8.

⁂ Dr. Hyernax communicates some curious obstetric notes.

Rhinoscopy and Laryngoscopy: their Value in Practical Medicine. By Dr. F. Semeleder. New York: W. Wood and Co. Pp. 191.

⁂ Translated from the original German by Dr. Edward T. Caswell.

A Radical Operation for Procidentia. Read before the New York Obstetrical Society, Dec. 28, 1864. By Dr. Thos. Addis Emmet. New York: Bradstreet. 1865.

⁂ Very similar in its details to the proceeding of Dr. Marion Sims.

De la Résection du Genon. Par M. León de Fort, in the memoirs of the Society of Surgery of Paris.

⁂ Shall receive a notice in a subsequent number of this journal.

Nouveau Traitement de l'Angine Couenneuse, du Croup et des Autres Localisations de la Diphthérie par le Baume de Copaiba et le Poivre Cubèbe Medication Anticatarrhal, Substitutione Genéral. Par M. H. Trideau d'Audouillé (Mayence). Paris: Baillière. 1866. Pp. 32.

⁂ The author and his friends seem to have used copaiba in croup with great success.

The Endoscope as an Aid in the Diagnosis and Treatment of Disease. By Francis Richard Cruise, B.A., M.D. Dublin, etc., etc. Dublin: Fannin. London: Longman. Edinburgh: Maclachlan and Stewart. From *Dublin Quarterly Journal* for May, 1865. Pp. 43.

⁂ The endoscope—"What," said one of his pupils to M. Desormeaux, "is the use of it?" "It enables us to see parts which, without its aid, are wholly beyond the reach of vision." It is well described by Dr. Cruise.

Contributions to Practical Medicine and Surgery, including the Treatment of Cancer, Stricture of the Urethra, Rheumatic, Neuralgic, and Epileptic Affections, and of Surgical Hæmorrhage. By James Arnott, M.D., late Superintending Surgeon St. Helena. 2nd edition. London: Churchill and Sons. 1865.

The Sanitary Condition of the Poor in relation to Disease, Poverty, and Crime. By B. Baker, M.R.C.S. London: W. Tweedie. 1866. Pp. 30.

# NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

*The Workhouse Infirmary Movement.*—We said last week that Dr. E. Smith's position, as Medical Inspector of the Poor-law Board, "placed him above the temptation to be sensational, and the suspicion of interested motives." We did not mean to imply that any one connected with the movement for reforming Workhouse Infirmaries was actuated by interested motives; neither can any such construction be fairly placed upon our words.

Mr. Campbell De Morgan's case of Injury of the Brain shall be put in at once.

*Palperro, Cornwall.*—The egg of the great auk is very scarce; some were recently sold at Stevens's for £30 each. Consult Yarrell's Birds.

*A Third Year's Student.*—Under the circumstances mentioned by you, we have no doubt a declaration made before a magistrate by either of your parents will satisfy the authorities.

*Jackson.*—The result will be declared at a meeting of the Council next week, and the subjects of the new essays made known.

*Dr. Farr's Calculation of the Progress and Decline of Rinderpest.*—In the *Medical Times and Gazette* of March 17 we published a full account of Dr. W. Farr's calculation of the progress of the Rinderpest, and we gave the figures, which, in full reliance on the soundness of his data, he believed would represent the numbers of fresh cases in the succeeding weeks. It was there stated that "stamping out measures" might be expected to produce a more rapid decline than the calculated one. Every calculation refers to fixed data. Shift your data, and the result *cannot* be the same. In this case the substantial truth of the calculation is shown by the fact that the decline began before the legislative measures were brought into full activity.

### Early British Skeleton.

In the autumn of last year, in order to erect a new and permanent viaduct across the Derwent valley, near Malton, the North-Eastern Railway Company commenced the formation of cofferdams on each side of the river. In the first formed, on the Malton side, as reported at the time, after ten feet of the fluviatile post-tertiary clay had been excavated, a three-feet bed of alluvial silt was entered, which abounded with water, and caused the cofferdam to burst. Beneath this sand was the Kimmeridge clay of the Vale of Pickering, and upon it, at a depth of thirteen feet, the femoral and pelvic bones of a human being were thrown out, the skull then being left within the piles forming the dam. An enlarged dam having been formed, operations were re-commenced last week, when the skull so much desired was fortunately obtained, and is now deposited in the collection of pre-historic *crania* of the Rev. William Greenwell, of Durham. The bones, from long steeping, have become blackened and devoid of lime, resembling leather more than bone, and are much impregnated with vivianite. The body has been that of a male of small stature, apparently from 40 to 45 years of age. The teeth have all been present, and are not much worn, but the sagittal suture of the skull is almost obliterated, and so is the coronal suture. It has been supposed that the body was one of an early British race, but the skull is not at all typical, and not in the least like those obtained from either the long or the round barrows of the Britons. It is very broad in the occipital region, and rather narrow in the frontal; but the main characteristic is flatness. Mr. Greenwell says the skull is very like some he has from a Kentish Roman cemetery, but is relatively broader in the occipital region. He can offer no conjecture as to race, but the supposition that the man may have been a dependent on the Romano-British camp at Malton, probably an auxiliary. This view is strengthened by the finding, in another excavation, but on the other side of the river, and also below the clay and silt, a rudely-formed vessel upturned. This is about six inches high, and is irregularly hand-made, entirely without ornament, but is not like British ware at all. The material is more like the ordinary bluish Roman pottery, and is hard-baked, but there is neither the form nor finish of Roman ware, nor any trace of the potter's wheel. The shape is that of the "food vessel," and if Romano-British, is extremely rude indeed. Up to the present time no further object has been found. The skeleton and the pot seem to have reference to the same date, being both found at the same depth (10ft. clay and 3ft. silt), both also being below the bed of the river Derwent considerably. During the human period there has been considerable alterations in the geological deposits on the surface, as was recently illustrated by the section of the cutting for the Norton drainage close by, where an ancient (supposed) British trackway was found beneath water-borne sand and gravel. The local antiquaries and geologists consider that the skeleton and urn mark the level of the British period, and that the super-imposed beds have been left by the river accumulations since that period. A look-out is being kept for any objects likely to give further light.—*Times*, April 10.

### The Alleged Case of Manslaughter at Middlesborough.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In your last number it is intimated (upon what authority I know not) that I was instrumental in setting the law in motion. This I beg most distinctly to deny, also to inform you that the "colour" so appropriately referred to, was imparted to the affair by a perverted report of a conversation which took place between myself and another person.

April 9, 1866. I am, &c., Edward Husband.

⁂ Our notice was founded on the report of the evidence given at the trial. We quoted Mr. Husband's statement that "he did not write to the coroner to procure an inquest, nor take any step beyond the fact of giving a sort of certificate." We stated that we accepted in full Mr Husband's account of the matter.

### Late Menstruation?

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Knowing that you are always desirous of making anything peculiar in the Medical line public, should you think the following worthy a space in your valuable journal, I give it for your approval. I was called in to a patient in her 77th year suffering from uterine hæmorrhage, which had produced great exhaustion, and upon inquiry I found that she had regularly menstruated monthly up to the present time; the discharge lasted four to five days, and then left her, as it would in its natural course with a person of younger years, but that this time the hæmorrhage had been so severe that alarming symptoms had shown themselves. I ordered her the same astringent as I should in similar cases, and, I am glad to say, with the same beneficial result, and she is now quite well. I am, &c.

J. Whitehead, M.D.

10, Park-place, Liverpool-road, Islington, April 4.

### The Amended Vaccination Act.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—It is to be hoped that this bill will provide for the enforcement of vaccination by some responsible executive, which is not at present the case. All Medical men must more or less feel the want of obtaining fresh lymph in their own neighbourhoods, and their dependence on dry lymph from London. And why? People in general disregard the Act, and vaccination seems very little influenced by it. If the Act were enforced, I conceive, children being vaccinated in succession, we should always have lymph at hand, and the children could be properly looked after,—which they cannot be now,—often vaccinated in multitudes, under a visitation of small-pox. One evil attendant on this is that many children, from imperfect examination, break out in skin complaints, and the parents, in consequence, give cow-pox a bad name, and become averse to vaccination. The Act has not been carried out because nobody was specially called upon to do it, and individuals would be naturally unwilling to act. I have always thought the Boards of Guardians the most proper persons to enforce the Act, for they appoint vaccinators and registrars under it; and if they were legally charged with this duty, I can see no reason why vaccination should not go on satisfactorily to the Profession and the public. A meeting respecting Mr. Bruce's bill I see is advertised for the 10th inst., Dr. Richardson presiding, when I trust the question I refer to will receive attention. I am, &c.

A COUNTRY PRACTITIONER.

### ACUPRESSURE.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In your last number you have inserted some cases of acupressure, and perhaps you will allow me to call your attention to a case that occurred to myself some little time ago. A patient was brought to me who had, in bottling some wine, broken the bottle and divided his ulna artery. The hæmorrhage was most alarming, and being single-handed, I found it impossible to secure the ends of the artery. However, it occurred to me to pass a hare-lip pin deeply through the tissues and transversely to the course of the artery, and then pass a thread round the needle in the ordinary figure-of-8 manner. This entirely controlled the bleeding, and in the course of a few days the man was perfectly well, no swelling or inconvenience resulting. I have reason to know that this satisfactory result was lasting, and not temporary. The case is peculiarly valuable to Practitioners who are deprived of Professional assistance when such accidents occur. I am, &c.

20, Kingsland-crescent. WILLIAM HEWITT.

### AN ASYLUM FOR AN IMBECILE CHILD.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Can you, or any of your numerous readers, help me? I have a son between 14 and 15 years of age, who, though not an idiot, is yet mentally very imbecile. He can write a little (from a copy), can spell easy words, is fond of figures, and never tired of watching the movements of clocks, watches, or mechanical apparatus; is good tempered and amiable, requires close watching in his habits, as regards personal cleanliness, and commonly wets his bed at night; his health is not robust, though he is rarely ill, and is then very patient.

I should be glad to place him in any good institution where his mental weakness would be relieved. I do not stand in need of other help than advice, being able to meet any reasonable expense; but I do not know of any institution of the kind except those of a benevolent character; and to those I am not entitled. If you will direct my attention to any that are well conducted, and fitted for a boy of the grade to which he belongs, I shall be very much obliged. I am, &c., M.D.

COMMUNICATIONS have been received from—

THE ROYAL INSTITUTION; W. HEWITT; H. MATTHEWSON; A SURGEON; A COUNTRY PRACTITIONER; H. A. P.; N. B.; APOTHECARIES' HALL; DR. CHARLES KIDD; DR. N. G. MERCER; B. BALL; DR. FOTHERBY; CORK MEDICAL PROTECTIVE ASSOCIATION; E. HUSBAND; J. M. GOODIFF; J. E. MORGAN, M.D.; DR. BENCE JONES; DR. E. FLEMING; Professor LAYCOCK; DR. BALLARD; DR. HUGHLINGS JACKSON; MR. E. BELLAMY.

BOOKS RECEIVED—

Flint's Practice of Medicine.—The Mental Journal (April).—Ball du Rheumatisme Visceral.—Horsley's Toxicologist's Guide.—Copland on Bronchitis.—The Westminster Review (April).—Local Museum Notes (No. 1).—Griffin on the Chemical Testing of Wines.—Transactions of the North of England Obstetrical Society.—The Medical Reporter (March).

NEWSPAPERS RECEIVED—

The Sunday Gazette—The Scotsman.

## VITAL STATISTICS OF LONDON.

*Week ending Saturday, April* 7, 1866.

### BIRTHS.

Births of Boys, 1175; Girls, 1099; Total, 2274.
Average of 10 corresponding weeks, 1856-65, 1883·6.

### DEATHS.

| | Males. | Females. | Total. |
|---|---|---|---|
| Deaths during the week .. .. .. | 809 | 765 | 1574 |
| Average of the ten years 1856-65 .. .. | 685·7 | 652·2 | 1337·9 |
| Average corrected to increased population .. | .. | .. | 1471 |
| Deaths of people above 90 .. .. .. | .. | .. | .. |

### DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

| | Population, 1861. | Small pox. | Measles. | Scarlatina. | Diphtheria. | Whooping-cough. | Typhus. | Diarrhœa. |
|---|---|---|---|---|---|---|---|---|
| West .. | 463,388 | 1 | 12 | 2 | 3 | 7 | 7 | 3 |
| North .. | 618,210 | 19 | 11 | 6 | 2 | 21 | 17 | 2 |
| Central .. | 378,058 | 5 | 15 | 5 | — | 4 | 7 | — |
| East .. | 571,158 | 6 | 16 | 8 | 2 | 12 | 10 | 2 |
| South .. | 773,175 | 5 | 17 | — | 1 | 28 | 10 | 2 |
| Total .. | 2,803,989 | 36 | 71 | 21 | 8 | 72 | 51 | 9 |

### METEOROLOGY.

*From Observations at the Greenwich Observatory.*

| | |
|---|---|
| Mean height of barometer .. .. .. .. .. .. | 29·573 in. |
| Mean temperature .. .. .. .. .. .. .. | 42·4 |
| Highest point of thermometer .. .. .. .. .. | 54 6 |
| Lowest point of thermometer .. .. .. .. .. | 34·2 |
| Mean dew-point temperature .. .. .. .. .. | 38·6 |
| General direction of wind .. .. .. .. .. .. | Variable. |
| Whole amount of rain in the week .. .. .. .. | 0·62 |

## BIRTHS and DEATHS Registered and METEOROLOGY, during the Week ending Saturday, April 7, 1866, in the following large Towns:—

| Boroughs, etc. | Estimated Population in middle of the Year 1866. | Persons to an Acre. (1866.) | Births Registered during the week ending April 7. | Deaths. Corrected Average Weekly Number.* | Deaths. Registered during the week ending April 7. | Temperature of Air (Fahr.) Highest during the Week. | Temperature of Air (Fahr.) Lowest during the Week. | Temperature of Air (Fahr.) Weekly Mean of the Mean Daily Values. | Rain Fall. In Inches. | Rain Fall. In Tons per Acre. |
|---|---|---|---|---|---|---|---|---|---|---|
| London (Metropolis) | 3067536 | 39·3 | 2274 | 1400 | 1574 | 54·6 | 34·2 | 42·4 | 0·62 | 63 |
| Bristol (City) . . | 163680 | 34·9 | 121 | 73 | ‡100 | 58·5 | 31·7 | 42·3 | 0·28 | 28 |
| Birmingham (Boro') | 335798 | 42·9 | 234 | 163 | 205 | 51·3 | 31·4 | 41·2 | 0·27 | 27 |
| Liverpool (Borough) | 484337 | 94·8 | 373 | 281 | 386 | 51·3 | 37·3 | 43·5 | 0·39 | 39 |
| Manchester (City) . | 358855 | 80·0 | 299 | 203 | ‡242 | 52·0 | 32·0 | 41·3 | 0·07 | 7 |
| Salford (Borough) . | 112904 | 21·8 | 80 | 57 | 96 | 51·6 | 31·0 | 40·8 | 0·07 | 7 |
| Sheffield (Borough) . | 218257 | 9·6 | 144 | 115 | 140 | 47·6 | 32·7 | 38·9 | 0·80 | 81 |
| Leeds (Borough) . | 228187 | 10·6 | 95 | 116 | 154 | 52·7 | 30·6 | 40·7 | 0·58 | 59 |
| Hull (Borough) . | 105233 | 29·5 | 87 | 49 | 52 | .. | .. | .. | .. | .. |
| Nwcastl-on-Tyne, do. | 122277 | 22·9 | 71 | 65 | 59 | 50·0 | 32·0 | 39·3 | 0·82 | 83 |
| Edinburgh (City) . | 175128 | 39·6 | 135 | 84 | 95 | .. | .. | .. | .. | .. |
| Glasgow (City) . . | 432265 | 85·4 | 322 | 252 | 274 | 48·6 | 29·1 | 39·4 | 0·17 | 17 |
| Dublin (City and some suburbs) . | 318437 | 32·7 | 184 | †156 | 129 | 52·5 | 29·0 | 41·8 | 0·89 | 90 |
| Total of 13 large Towns . . . | 6122894 | 34·4 | 4419 | 3014 | 3506 | 58·5 | 29·0 | 41·1 | 0·45 | 45 |
| | (1863) | | | | Week ending Mar. 31. | Week ending Mar. 31. | | | | |
| Vienna (City) . . | 560000 | .. | .. | .. | .. | .. | .. | § .. | .. | .. |

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·573 in. The barometrical reading increased from 29·26 in. on Monday to 29·89 in. on Friday.

The general direction of the wind was variable.

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* The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.

† Registration did not commence in Ireland till January 1, 1864; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in that city were the same as the averages of the rates in the other towns.

‡ The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

§ The mean temperature at Greenwich during the same week was 49·3°.

## APPOINTMENTS FOR THE WEEK.

### *April* 14. *Saturday* (*this day*).

*Operations* at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free Hospital, 1½ p.m.

ROYAL INSTITUTION, 3 p.m. G. Scharf, Esq., "On National Portraits."

### 16. *Monday.*

*Operations* at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.

MEDICAL SOCIETY OF LONDON, 8 p.m. Clinical Discussion. Dr. Broadbent, "On Chorea."

ROYAL INSTITUTION, 3 p.m. Professor Du Bois Reymond, "On Muscular Contraction."

### 17. *Tuesday.*

*Operations* at Guy's, 1 p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; St. Peter's Hospital for Stone, 3 p.m.

PATHOLOGICAL SOCIETY, 8 p.m. Meeting.

ROYAL INSTITUTION, 3 p.m. Professor Frankland, F.R.S., "On the Non-metallic Elements."

### 18. *Wednesday.*

*Operations* at University College Hospital, 2 p.m.; St. Mary's, 1¼ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.

HUNTERIAN SOCIETY, 8 p.m. Dr. J. Braxton Hicks, "Remarks on the Local Treatment of Malignant Diseases of the Uterus."

ROYAL INSTITUTION, 3 p.m. Professor Du Bois Reymond, "On Muscular Contraction."

### 19. *Thursday.*

*Operations* at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.

HARVEIAN SOCIETY OF LONDON, 8 p.m. Dr. H. C. Stewart, "Some further Remarks on Embolism of the Great Vessels of the Heart."

ROYAL INSTITUTION, 3 p.m. Professor Frankland, F.R.S., "On the Non-metallic Elements."

### 20. *Friday.*

*Operations*, Westminster Ophthalmic, 1½ p.m.

ROYAL INSTITUTION, 8 p.m. G. Macfarren, Esq., "On the Music of the Church of England."

# ORIGINAL LECTURES.

NOTES ON

## SOME OF THE MORE RARE FORMS OF FRACTURES AND DISLOCATIONS,

BEING EXTRACTS FROM LECTURES (CLINICAL AND OTHERWISE)
DELIVERED AT
The London Hospital.

By JONATHAN HUTCHINSON, F.R.C.S.,
Surgeon to the Hospital and Lecturer on Surgery.

(Continued from page 361.)

*Dislocation at the Elbow backwards—Dislocation at the Elbow forwards—Dislocations of the Radius only forwards—Lateral Dislocations at the Elbow—Fracture of the Coronoid Process—Fracture through the Humerus, just above the Elbow.*

When after injury to the elbow you find the olecranon prominent behind, the forearm shortened, and the tendon of the triceps curved and conspicuous, you know at once that one of two lesions must have occurred. Either the bones have been dislocated or a fracture has occurred just above the joint. You put a finger upon the tip of the internal condyle and ascertain its position in relation to the olecranon, and your differential diagnosis is made. If a dislocation, the olecranon will project beyond the condyle; if a fracture, the two will still keep their normal position in regard to each other, being almost on the same level. The diagnosis may be strengthened by several other valuable symptoms. If there is fracture, the motions will be abnormally free, you can either extend or flex the arm as you like; if dislocation, the patient will prefer a position between extension and a right angle, and the movements practicable without force will be very limited. The deformity is greater in dislocation, whilst in fracture you will usually also be able to obtain the decisive symptom of crepitus. Lastly, you will observe the relations of the head of the radius to the external condyle, and if dislocation be present, you will easily feel the projecting end of the former below and behind the joint; this last is usually a most conspicuous symptom. Again I have to urge that the diagnosis is of the utmost importance both to your reputation and your patient's welfare, and if by reason of the muscularity of the arm and the swelling which has resulted you cannot appreciate the points satisfactorily, give the patient chloroform, and do not rest till you are quite certain as to the nature of the injury with which you have to deal.

If a dislocation at the elbow be overlooked in the first instance, it is improbable that it will ever be reduced. During the next fortnight the swelling will probably be such as to prevent any rectification of the error in diagnosis, and after that period, if discovered, the error will be for the most part irremediable. I have often seen the reduction of dislocations backwards at the elbow attempted after periods varying from three to eight weeks from the injury, and I scarcely recollect a single instance of success; on the other hand, the reduction in recent cases is usually easy.

Amongst the more rare events in relation to the common dislocation backwards at the elbow which I have to mention are two cases in which the bones slipped out again after reduction. If we consider the formation of the elbow-joint, the height of the coronoid process, etc., we shall be prepared for the general result as to displacements—that after reduction there is no liability to return of deformity. The latter is, indeed, usually, and very rightly, held to imply the probability of fracture either of the end of the humerus or of the coronoid process. In the two cases to which I refer, however, I am convinced there was no fracture of moment.

The first case was that of a man of about 30, who was brought to me at the Hospital by Mr. Griffiths, of Hoxton. The accident had occurred a few days previously. Mr. Griffiths told me that he had diagnosed dislocation by the usual signs, and had effected reduction with tolerable ease, but the deformity had recurred. Although the parts were now much swollen, yet I felt no hesitation in agreeing with Mr. Griffiths in the opinion that the injury was an ordinary dislocation backwards and without fracture. I could not detect crepitus. We again reduced, and again the bones slipped back when the flexion of the forearm was remitted. On a second trial we effected reduction, and carefully kept the elbow bent at an acute angle. This time the bones were retained in position. The forearm was not allowed to be brought down for upwards of a fortnight, and the subsequent progress was, I believe, quite satisfactory.

A few months after I had seen the case above mentioned, a man was brought into the Hospital under my care who had dislocated his left elbow ten days previously. As the House-Surgeon had failed to reduce by the usual method, after a vigorous trial, we had the man into the theatre and gave him chloroform. I now succeeded in getting the bones well reduced, and the motions were perfectly restored. Having requested the House-Surgeon to satisfy himself that reduction was complete, he proceeded to extend the arm, and at once exclaimed, "The bones have slipped out again!" All the symptoms were reproduced. I reduced again, and, for experiment's sake, again extended the arm, and found them again slip back in the most definite manner. No crepitus could be detected, and as difficulty in reduction had in the the first instance been encountered, it is very improbable that fracture existed. We now reduced for a third time, and keeping the elbow well bent, no further displacement took place. The man did perfectly well. We were careful not to allow him to extend his arm for several weeks afterwards. Probably in both these cases the coronoid process was unusually low, and the ligaments torn to an unusual extent. It is quite possible that the extremity of the coronoid may have been broken off, but of this I did not detect any evidence. The cases are valuable in support of the clinical rule to keep the elbow bent after reduction of this dislocation, and also to examine the position of the bones carefully at the end of a week, so as to guard against the possibility of a recurrence of displacement.

Amongst the very rarest of dislocations is that of both bones of the forearm forwards.

*Dislocation at the Elbow forwards.*—It might indeed have seemed almost impossible that this displacement should occur; yet some well-accredited reports of cases are in print. Dr. Hamilton refers to eight cases, and to these I now have to add another. I do so on the authority of my friend and late pupil, Mr. E. Greenaway, by whom the case was examined and the dislocation reduced. Mr. Greenaway informs me that the symptoms were very definite, the forearm lengthened, the condyles of the humerus prominent below and behind the olecranon, the projection of the latter bone being quite lost. On bending the limb the bones slipped into place almost spontaneously. The motions of the joint were quite restored after reduction, and the man did well.

The accident had occurred from a fall in a bar-room in which the extremity of the elbow was struck.

If you will look at the bones, or still better, at this dissected specimen, you will see that extreme flexion is almost the only position in which this dislocation could occur. Supposing a man to fall heavily backwards with his elbow bent to the upmost, and to strike on the end of his olecranon, you will see that it is easy to understand how the weight of his trunk received by his humerus might displace the latter over the tip of the olecranon. If he were at the same time clinging to something with his hand the dislocation would be yet more facilitated.

In the cases described by writers the amount of displacement appears to have varied much. In some the olecranon had slipped high up over the inner or outer condyle; in others, as in Mr. Greenaway's, its end rested against the articular end of the humerus.

A few years ago I saw a man who had just been admitted under Mr. Curling's care with a compound fracture of the humerus into the elbow joint, and with dislocation forwards at the latter. In this case the end of the olecranon was exposed to view, and rested in front of the humerus, but the condyles of the latter had been crushed, and the damage to the parts was so extensive that displacement in almost any direction would have been possible.

*Dislocations of Radius only forwards.*—This accident is not very rare, and when it does occur is almost always attended by fracture of the ulna, and is a consequence of direct violence. In a few instances it may possibly occur from falls on the hand. Its reduction is usually easy, but to keep it in place is often difficult. If it is overlooked in the first instance, and the fracture of the ulna allowed to unite, the forearm will be shortened, and reduction almost impossible. Ten years ago I admitted a man at the Metropolitan Free Hospital who had just been discharged from one of our largest charities after a complicated injury to his forearm. He was a most unruly and violent fellow, and I have no doubt had in the first instance resisted examination. His arm had been very much swollen, and the swelling was now, at the end of four weeks, only beginning to subside. I found evidence of a fracture of the ulna near its middle with overlapping, and of dislocation forwards of the radius. The head of the latter could be easily felt in front of the external condyle. Under chloroform, by traction on the forearm, I reduced the displacement, and we then put a pad over the head of the bone in front, and kept the elbow bent at a right angle. The bone, however, again slipped, and on two later trials I obtained only the same temporary success. Thinking that the biceps might be the cause of displacement, I next divided the tendon of that muscle. Still, however, I could not by any contrivance keep the bone in place, and was at length obliged to let the man leave the Hospital in *statu quo*. His chief inconvenience was inability to flex the arm beyond a certain point a little short of a right angle. I am convinced that one impediment to reduction was the shortened condition of the ulna.

Of *lateral dislocations at the elbow* I have little to say, except to urge the great advantages which accrue from the use of chloroform both in the correct estimation and in the treatment of these complicated forms of displacement.

I have had but one opportunity for dissecting a recent lateral dislocation of the elbow. The case was that of an adult and very muscular man who had died of injury to the head. Mr. Dawson, the House-Surgeon in office, had reduced a dislocation outwards of the left elbow, but on the post-mortem table we could easily reproduce the displacement. The bones could be made to pass either outwards or inwards, and when pressure was made to effect reduction it was quite as probable that they would pass too far, into the opposite form of dislocation, as that they would stop in the normal position. When displaced inwards the sigmoid notch of the ulna rested against the inner condyle, and the bones were twisted, so that the head of the radius was below the level of the articular extremity of the humerus, and the finger could be pressed into its shallow cavity from behind. When displaced outwards the sigmoid notch rested against the trochlea for the head of the radius, and the latter projected beyond the external condyle; there had been no displacement backwards; the lateral ligaments, both external and internal, were completely torn away, and there were several rents in the anterior ligament. Small portions of cartilage were broken off from several places on the head of the radius, the coronoid process, and the head of the humerus. The orbicular ligament was entire; it had been so much stretched, however, that it allowed the radius to leave the ulna for a considerable extent. Even when complete reduction was effected, the head of the radius projected below the articular surface of the humerus, and required to be pressed into place. This condition might have been very puzzling after reduction during life, and might have led to the suspicion that the reduction was incomplete.

I have never had an opportunity for dissecting a recent specimen of *fracture of the coronoid process*, nor have I ever, with any great confidence, diagnosed this injury in a living patient. It is, I think, a plausible conjecture that in many of the examples of dislocation backwards at the elbow, so frequent in children, the cartilaginous extremity of the coronoid is broken off. It would be impossible to diagnose such a condition of things, since no crepitus would be produced.

*Case of Dislocation Backwards at the Elbow, in which very free Movement was Permitted, and Reduction was very Easy.—Probable Fracture of the Extremity of the Coronoid.*—A case of dislocation at the elbow which I examined a week ago—through the courtesy of our House-Surgeon, Mr. Dove—was, in some respects, peculiar. The patient was an adult man who had fallen some little height, and struck and twisted his right arm. The deformity was conspicuous. The man supported his right forearm with his left hand, and held it at an obtuse angle, and declined to make any attempt to move it. The olecranon projected a little, and it was nearly double its normal distance from the inner condyle, whilst there was a remarkable hollow between the latter and the tendon of the triceps. The head of the radius could be felt to the outer side and behind the outer condyle; but it did not appear to have completely left its articulation—*i.e.*, it was not quite behind. Taking the forearm into my hand, I found that the bones at the elbow moved with the greatest ease, and that the olecranon could be pushed almost an inch further back with very slight force. I thought also that I detected crepitus in the joint, and in this opinion Mr. Dove concurred. We conjectured from the ease with which the ulna slipped backwards, that the coronoid process must be broken off; a supposition which was favoured by the fact that when first we examined the part, the olecranon, although considerably displaced outwards, was but very little backwards. In order to examine the state of things more carefully, we put the man under chloroform; I then confirmed the observation as to the great ease with which the olecranon could be made to project backwards. Suddenly, whilst I was examining the position of this part, and, perhaps, making a little pressure on it, complete reduction occurred. The freest normal movements were now practicable, and no re-displacement took place, nor could we now elicit crepitus. I think it probable that the case was one of incomplete dislocation backwards and outwards, with fracture of the extremity of the coronoid process. Had the base of the coronoid been broken through, the arm would scarcely have borne the free movements which we made after reduction without a recurrence of the displacement.

*Fracture through the Humerus just above the Elbow.*—When fracture occurs just above the elbow joint the displacement is almost always of the elbow and lower fragment backwards. This leaves the lower end of the shaft of the humerus resting on the coronoid process, and allows of simulation of the symptoms of dislocation of both bones backwards. Occasionally, however, the displacement is the reverse, the upper fragment being behind the lower one. Of this we have a specimen in the Museum, and I show you a second from my own collection. I have already alluded to the means of diagnosis when the displacement is the usual one (of the elbow backwards), but must now say a few words respecting the treatment. These cases are not of very infrequent occurrence, and are very difficult to manage. Often most unsatisfactory results are obtained. I can call to mind at least half-a-dozen cases in which adults have come into this Hospital during the last few years with an arm rendered almost useless by mal-union of this form of fracture. In several the inconvenience has been such that we have seriously discussed the expediency of an excision, and the dread of pyæmia and erysipelas has been the only deterring motive. These patients always have the elbow at an obtuse angle, and are quite unable to bend it to right angle, the arm consequently being useless for a majority of its employments. In one case which tempted me much to an excision the arm was at a very obtuse angle, in fact almost straight. The man was a German gold-digger from San Francisco, where the accident had occurred. As I found on experiment that he could still handle a spade vigorously with the injured arm, I told him that it was not worth his while to run the risk of an operation, and there was clearly no room for any other treatment. The impediment to flexion is the mass of bone in front of the elbow, partly the end of the upper fragment displaced forwards, and partly new bone effused about it. The triceps has little or nothing to do with the deformity, and I cannot think that in any of the cases which I have seen division of its tendon would be of any benefit.

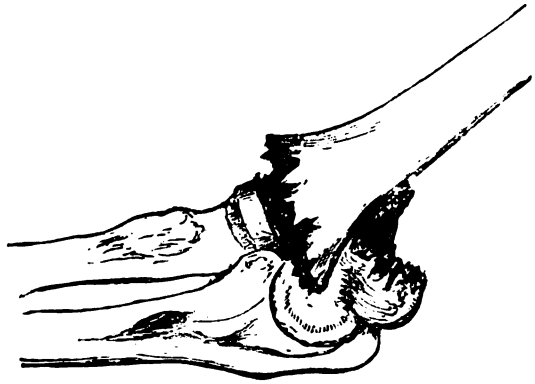

*Diagram of malposition of fragments after transverse fracture through the humerus just above the elbow joint. Displacement of forearm and lower fragment backwards, the lower end of upper fragment resting on the coronoid process.*

The knowledge that this kind of malposition is apt to occur and to be permanent, leads us to careful consideration of the best plan of treatment. First, I think we must acknowledge that if a transverse fracture has occurred just above the joint, and the fragments have been displaced from each other, a real reduction—in the sense of making the fragments again fit each other—is scarcely to be hoped for. Extension with much force is the only agency which could effect this, and without it they are certain to overlap. Now, such extension could be made only in the straight position, and if this is used the fragments will be at right angles to each other; for the muscles attached to the condyles will always maintain the lower fragment erect in the greater sigmoid notch, and at right angles to the shaft of the ulna. Here, then, are our Scylla and Charybdis. If we flex the elbow, the bones will overlap; if we extend, they will be mal-placed in a yet more serious manner. I think that clearly the less evil attaches to the flexed position, and that we ought to take care to keep the arm well bent, maintaining as much extension as we can in that awkward position. If union with overlapping occurs (as it will do almost necessarily), at any rate, the elbow will be in the most useful position. Of course you will warn the patient that the accident will entail permanent consequences, which he must make up his mind to. Very often these injuries are complicated by vertical lines of fracture through the lower fragment. The rule that the elbow should be put up well bent is only absolute when the fracture is transverse. When it is oblique, sometimes a different position may be better. Of this I will relate an instance in the next lecture.

(To be continued.)

# THE PHYSICAL AND CHEMICAL CHANGES IN LIVING BEINGS FROM A MEDICAL AND PHYSIOLOGICAL POINT OF VIEW.

By Dr. LIONEL BEALE, F.R.S.,
Fellow of the Royal College of Physicians, Professor of Physiology and of General and Morbid Anatomy in King's College, London, and Physician to King's College Hospital.

(Continued from page 362.)

Plants and animals have been oftentimes compared to machines, but no one has yet taught us in what particulars the plant or animal is like the machine. For my part, I cannot discover the slightest resemblance in origin, form, composition, or mode of action. I have looked over and over again at the matter of the living plant and animal in which or by which the wonderful changes characteristic of it are effected, but I have seen nothing save a little transparent, structureless, colourless, semi-fluid stuff. I even see this move, and while under my observation various substances of complex chemical composition may be formed through its agency. It may increase in size, and I may see it divide and subdivide so as to give rise to others like itself. But how it *moves*, how it *grows*, how it *forms*, and why it *divides*, I cannot tell. I know it does not move like a machine, for it moves in any and every direction, and every minute portion exhibits movements of its own accord, not by being pushed or pulled by others. Nor does it *grow* like a crystal, for the stuff of which it is made cannot be detected in the solution around it, nor is the matter deposited particle after particle upon the surface. Nor does it produce chemical compounds like the chemist, for there is nothing like a laboratory, chemicals, apparatus, or chemist there. It may be childish in me to attribute this *movement*, this *growth*, this *formation*, and this *multiplication* to some mysterious force or power, or agency, of the nature of which I know nothing, and to call it *vital power*, because it works in *living* matter only; but is not anything better than leading people to imagine that you have explained to them the whole matter, when you have really given no explanation at all, and do not understand the thing you have attempted to explain? The words *machine*, *mechanism*, *machinery*, certainly might be applied to soft, colourless, structureless, growing, moving matter; and watches, and mills, and steam-engines might be called "living things," but it is not easy to see what would be gained. At any rate, the same term ought not to be applied to that which lives, and moves, and grows without our help, and came from something which did the same before it, and to that which was constructed by us and cannot make another like itself, and has no power to move itself.

It would be absurd to point out the various attributes which belong to the thing machine; but I may be permitted to draw attention to the essential actions in which living matter differs entirely and absolutely from every kind of machinery whatever. In order to avoid giving any special name to this matter, we may call it *a*. It *grows* by taking up pabulum different in composition from itself, and converting it into matter like itself. This pabulum shall be *b*; and, thirdly, the clear, transparent, colourless structureless stuff, *a*, may become converted into matter which may exhibit distinct and peculiar *structure*, and characters and properties, resident neither in *a* nor in *b*. This matter which is *formed* shall be *c*. Now, *b* cannot become *c* without *a*, and *a* comes from pre-existing *a*. There is nothing that has ever been made by the chemist or machinist which possesses the properties and powers of *a*, neither is it likely that anything of the kind will ever be made by either of them. The mere suggestion of such a thing is as monstrous as it would be to talk of the possibility of a watch making another watch like itself from the solutions of the metals entering into its composition. Nothing that we make can make another thing like itself. Of the chemical composition of this matter *a* we know absolutely nothing; for if we attempt to analyse it, it becomes changed, and we examine, not the living growing matter itself, but *substances resulting from its death*.

The chemist boasts that ere long every animal and vegetable principle will be built up artificially in the laboratory, although he has not yet succeeded in ascertaining the composition of the most important substances which are to be obtained from *all* living organisms. There is not a living thing from which a substance having the reactions of albumen cannot be obtained, and nothing like albumen has been prepared artificially. Surely the facts do not at all justify the confident boastings in which many chemists and physicists have recently indulged. The step from that which has been actually achieved to that which it may be possible to effect, is, it seems to me, far too wide to be bridged over in our time; and is it not probable that its width will seem to increase as science gradually reveals to us little by little the vast and increasing extent of that which is really interposed?

If "the constructive power of chemical art" be "*unlimited*" there can be no doubt of the chemist's ultimate ability to reproduce "all animal and vegetable principles whatsoever," but is it not rather early in the day to talk thus confidently? One of the lowest, simplest things in nature is the common yeast fungus. It forms a clear, transparent matter, which chemists have termed "cellulose." What substance yet produced in the laboratory by synthesis approximates to this, the product of the lowest, simplest plant? But my friend, like many who have written from the same point of view, manifests an indisposition to discuss the nature of the changes which occur in the simple cell. "However valuable might be the study of the more minute and elementary forms of life," etc., there are, on the other hand, some *great truths* which can "only be appreciated by comparing the most highly specialised forms of life with one another, not in their minute details, but in their broad general features." The new philosophy deals only in broad generalities. It is advanced as the philosophy of the general, and its supporters invariably avoid "minute details." It is the philosophy of mass, and has nothing to do with the characters of the particles of which the mass is made up. By statements about *broad general features*, the mind of the reader is cleverly led away from the consideration of the real question. He is asked to consider what is taking place in a fully formed plant or complex animal, but is never told what occurred in this same plant or animal before it reached its fully developed form. He is told about the great truths which apply to the plant or animal as a whole, which nevertheless cease to be truths at all when applied to the several parts of which the whole is made up.

Now, if it were possible to divide the simple from the specialised—if the lower forms of life and the higher were separable by any distinct line of demarcation—if we could really account for the changes taking place in any one part of a living thing of the $\frac{1}{100}$ of an inch in its extent, such a course might be supported by mere argument, but the facts of the case render the position taken up absolutely untenable.

There is not one portion of a living thing much more than $\frac{1}{500}$ of an inch in diameter, in which living matter cannot be demonstrated, and in this living matter changes occur which physics and chemistry do not explain. In every change characteristic of living things this living matter takes a part. Chemists and physicists cannot imitate the changes because they cannot imitate what takes place in the living matter. In the formation of every tissue, in its disintegration, in its repair, living matter is concerned. Nor does the slightest morbid change take place without the phenomena occurring in the living matter of the part being modified. No formation of structure, no action occurring in the structure after it has been produced, no secretion can be accounted for without considering what goes on in living matter. In every form of inflammation, in every kind of fever, in hypertrophies, in atrophies, in every general disease, and in every local disease, this "living matter," which physicists and chemists completely ignore, plays or has played a most important part.

It is very well for the advocates of the new doctrines to laugh at physiologists and Physicians, but it would be better if they would come into our work-rooms and wards and meet the difficulties in the face. Let them observe the movements in some of the simplest living things, as an amœba, and then explain to us if they can how these movements occur. The movements and multiplication of a monad, the movements and multiplication of a pus corpuscle, seem beneath the notice of the new philosophy. Grand indeed must that philosophy be which solves all the great wonders of the universe, and tells us how worlds and suns and systems and faunæ and floræ are formed, but cannot teach us how a trumpery monad "grows" and gives rise to a number of other monads like himself, or explain why movements occur in a living amœba, or white blood corpuscle, or pus corpuscle, and not in a dead one. It is not surprising that the advocates of such a philosophy should have made vigorous efforts to shunt the vital question off the main line of intellectual inquiry; but hitherto neither the force, dexterity, nor combinations employed have been sufficient to effect the purpose.

My friend seeks support from Mr. Mill, who says that for a long time "fictitious entities continued to be imagined as means of accounting for the more mysterious phenomena; above all, in physiology, where, under great varieties of phrase, mysterious *forces* and *principles* were the explanation, or substitute for explanation, of the phenomena of organised beings." Here, however, is a physiological *hypothesis* which Mr. Mill considers "well calculated to light the path of scientific inquiry!"—"that the brain is a *voltaic pile*, and that each of its *pulsations* is a discharge of electricity through the system!" And here is the observation advanced in support of it—"*It has been remarked that the sensation felt by the hand from the beating of a brain, bears a strong resemblance to a voltaic shock!*" (a) The path of scientific inquiry may have been sadly darkened in times past by mysterious forces and imaginary entities; but what, I would ask, has physiology gained from hypotheses supported by such observation as this, and what is it likely to gain?

For my part, I only desire to have that which has been stated to exist—the "machinery" of the cell or living thing—shown to me, or to be taught how I may demonstrate it for myself. I have sought for it long and diligently, and under great advantages, but, in vain. I have found nothing, save a little transparent, structureless, colourless, semi-fluid, moving matter. If it is by this that force is "conditioned" in living beings, the mode of "conditioning" is essentially different from that of any machinery I am acquainted with. The matter is not *machinery*, and the "cell" is not a *machine*. But still, if any one can explain the phenomena occurring in living matter as in that of a fungus, or an amœba, or in a cell of any healthy or diseased tissue, by any laws of physics and chemistry only, I pray him to do so at once, and simply, that I may learn, and then impart my knowledge to my pupils without exciting in them the reflection that "there is such a thing as a man endeavouring to persuade himself, and endeavouring to persuade others that he knows about things when he does not know more than the outside skin of them; and he goes flourishing about with them."

THE old College of Physicians in Warwick-lane, which was built by Sir Christopher Wren, is to be pulled down in a few days.

**THE INTERNATIONAL STATISTICAL CONGRESS.**—This important body, which has held its meetings successively at Brussels, Paris, London, Vienna, and Berlin, will assemble in the ensuing autumn at Florence, under the presidency of the Prince Royal. The Italian Government has nominated a numerous Commission, upon which are placed six Physicians, to make the necessary preparations.

## ORIGINAL COMMUNICATIONS.

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# NYCTALOPIA, WITH PARTIAL DEAFNESS, IN FIVE CHILDREN OF THE SAME FAMILY.

By THOMAS LAYCOCK, M.D.,
Professor of the Practice of Medicine and Clinical Medicine; and Lecturer on Medical Psychology and Mental Diseases in the University of Edinburgh.

MY friend, Mr. Alderman Richardson, Surgeon, of Stockton-on-Tees, asked my opinion lately on the cases of five children of the same family affected with nyctalopia and with dulness of hearing from infancy.

The eldest was a healthy, rather handsome, young lady of 17, who, since the age of 12 years, has experienced a difficulty in distinguishing objects so soon as twilight came on in the evening. Previously during the day she can see perfectly well. She had been somewhat deaf in childhood, but her hearing had gradually improved as she got older. No morbid change of any kind could be discovered in either the organ of vision or of hearing.

The second case was that of a boy, aged 15, who, like his elder sister, had imperfect vision when evening twilight came on, and experienced difficulty in consequence in going about. His hearing was more impaired, but not seriously.

The third was a boy, aged 13, of a nervous, timid disposition, pale and delicate-looking, who had nyctalopia to the same extent as his elder brother and sister, but who was much more deaf. Beyond a free excretion of cerumen, nothing was discoverable in the ears, nor was the throat affected.

The fourth case was that of a girl, aged 10 years, healthy in appearance, but with deafness and nyctalopia like her younger sister.

The fifth case was also a girl, aged 7 years, who is extremely deaf, and has had nyctalopia for the last two or three years in the same way as her elder brother and sisters. She also suffers from severe attacks of ophthalmia during the prevalence of cold north-easterly winds.

What was the cause of these conjoined defects of vision and hearing? Five other children of the same family, living under the same roof, were wholly exempt from them. The defects were first noticed in all the cases at periods of dentition; so that it seems probable they are in some way connected with development. There was no reason to think that the organs of vision and hearing were at all involved in any constitutional inflammation or degeneration. The ears and throat appeared to be healthy in all, and the ophthalmia to which the youngest was subject seemed to be due simply to irritability of the conjunctiva. I had not the opportunity of examining the eyes of these patients by means of the ophthalmoscope, nor during the accession of nyctalopia. But the fact that during the day the vision in all was in every respect satisfactory, precluded the idea of any organic defect whatever, and led to the conclusion that the nyctalopia was due either to a defect of accommodation, or else to some retinal change of a purely functional character, or to both. As it seems necessary to class the two defects together in connection, I incline to think that both are due to a paresis of the muscles of accommodation of hearing and vision induced temporarily in vision by defect of the stimulus of light at sunset. So far as I am aware, the group of cases is unique in Medical literature, and may serve to try the ingenuity of our scientific oculists.

4, Rutland-street, Edinburgh.

### CASE OF

# INJURY TO THE BRAIN, WITH DEATH FROM EXTRAVASATION OCCURRING TEN DAYS AFTER THE INJURY.

By CAMPBELL DE MORGAN, F.R.S.,
Surgeon to the Middlesex Hospital.

IN the *Medical Times and Gazette* of January 13 last, I reported a case of injury of the head, in which symptoms of an anomalous and severe character came on suddenly some hours after the accident, the man being up to that time apparently free from any cerebral injury. The ultimate recovery of the patient, James H., left the question as to the nature of the injury and the cause of the symptoms one of conjecture. My own impression was, that a trifling injury had been done at the time of the accident to the base of the brain, probably in the neighbourhood of the pons Varolii, and that at the time of the occurrence of the cerebral symptoms a slight effusion of blood had taken place.

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(a) The italics are my own.

A case has recently come under my notice which, I think, throws light on the one referred to, and is of great interest in itself.

A gentleman, aged 40, was brought into the Middlesex Hospital on New Year's day, in this year. It appears that he had been confined to his room for some weeks previously owing to an injury to the leg. He went out for the first time on the day of the accident, felt faint, and fell with his face on the pavement.

When brought to the Hospital the limbs were rigidly flexed, and the lids tightly closed. This state very speedily passed off. He was not insensible, and could be made, with some difficulty, to answer questions. He was irritable, and complained of pain in the head. Retching and vomiting were present. The right malar bone was beaten in. There was slight bleeding from the nose, and ecchymosis of the right upper eyelid. The pupils were normal, and acted freely. The pulse was very feeble. There was no paralysis of any part of the body.

From the 1st of January to the 10th his condition was so generally uniform that it would be a waste of space to give a daily report. He was sensible, talking readily, and for the most part correctly, but complaining of confusion of ideas. It may be mentioned that he was a gentleman of considerable attainments and mental power, and he felt greatly distressed at his being unable to control his attention. At times he wandered, but was at once brought to his senses by being talked to. He was generally restless, especially at night, and liked to have some one sitting by him constantly. At times he complained much of headache, and was seldom free from an unpleasant sensation in the head. There was not the slightest indication of paralysis or loss of sensation in any part of the body, nor did any tendency to rigidity recur. The pulse usually ranged from 70 to 80; it was weak, and occasionally irregular. The bowels were always obstinately constipated.

So little was there of any marked indication of cerebral injury that on the 9th he was lying in bed on his back, and reading the newspaper, which he held up before him with both hands. He complained that he could not fix his attention on what he read, but it kept him quiet.

On the night of the 9th he was restless, as usual, but in other respects in much the same state as on the previous nine days. On the morning of the 10th, at 9 a.m., he became rapidly insensible; the countenance was blanched, the limbs perfectly relaxed. There was some paralysis of the left side of the face at first, but it was soon lost in the entire relaxation or paralysis of the whole muscular system, save that of respiration. The pupils were dilated, the right more so than the left; the pulse was small and irregular, and the surface cold. In this state he remained—the respiration becoming stertorous, and the surface getting colder—till 4 p.m., when he died. The remarkable appearance about him was the extreme flaccidity and loss of tone of all the muscles. No difference existed between the two sides. There was not the slightest trace of reflex action in any part. Even the respiratory muscles were involved in this loss of power; the breathing was carried on almost entirely by the diaphragm. The rapid and general cooling of the body, although well covered with bed clothes, was very remarkable.

A post-mortem examination was made by Dr. Cayley, to whom I am indebted for the account, twenty-two hours after death. There was no effusion between the dura mater and the bone. The outer surface of the right hemisphere was covered by a soft recent black clot, spread out as a layer on the arachnoid. It extended to the under surface of the middle lobe, and was not distinctly circumscribed. There was also a small quantity of loose black clot and fluid blood beneath the arachnoid in the meshes of the pia mater; this extended across the base of the brain to the left side. On the under surface of the right middle cerebral lobe, close to the fissure of Sylvius, the cerebral substance for a considerable space appeared soft and discoloured, and on making an incision a large cavity was found immediately beneath the surface filled with loose black clot mixed up with lacerated brain substance. At one point the blood had escaped into the Sylvian fissure, which was filled with it, and it had passed beneath the arachnoid over the side of the hemisphere, and across the base to the left side, and backwards over the pons and medulla oblongata, which, especially on the right side, were covered with loose clot. Large quantities of fluid blood welled up from the subarachnoid space of the spinal cord when the head was depressed. The brain substance for some distance round the clot in the middle lobe was softened, and of a yellowish pink colour. Hyperæmia extended from this softened substance as far as to the inferior parts of the corpus striatum and thalamus; there was no hyperæmia on the left side. Microscopical examination of the reddened parts near the clot showed great engorgement of the capillaries and intermixed with the nerve elements were large numbers of compound granular cells. The capillaries and arteries themselves appeared normal; there were a few small patches of atheroma in the basilar and intracranial carotid arteries. The right malar bone was depressed, and there was fracture at the inner angle of the lower margin of the orbit. There was no fracture of the base of the skull.

This case, I believe, illustrates the very interesting one to which reference has been made. That the cerebral injury took place at the time of the accident, and not at the moment of the accession of the fatal symptoms, does not admit of a doubt; and yet for nine days the symptoms were only such as might follow slight concussion; they were not, at any rate, with the exception of the transient and general rigidity of the limbs, indicative of lacerated brain. On the tenth day a vessel gave way, and extensive and rapid extravasation took place. We can readily conceive that with a minor degree of injury in the same situation there might be traces of it as slight as those which existed in the case previously recorded; and supposing that instead of the great extravasation which took place in the present case a trifling amount of blood had been suddenly extravasated in the same situation, we should probably have had symptoms of much the same character and severity as were present when James H.'s attack took place some hours after the injury. That in his case congestion and inflammation may have subsequently set in, as suggested by Dr. Brown-Séquard, is highly probable, but I cannot but think that the first seizure was due to some more rapid cause—such as effusion of blood.

The present case is of practical interest in itself, as showing how slight may be the symptoms even when a severe injury is done to some part of the brain. The existence of large compound granular cells, mixed up with disorganised brain substance, showed that the disorganisation had been of some days standing. The piece of brain so injured was at least as large as a large nut. Whether the whole of this was lacerated at the time of the injury, or there had been extension of disorganisation afterwards, still we have the fact of the existence of a considerable lesion of the brain, with very slight and by no means characteristic symptoms.

The symptoms which followed the extravasation are worthy of comment. At the moment of the attack, and for a very brief space of time afterwards, there was paralysis of the left side of the face. This corresponded with the time when the effusion was limited to the right side; but the effusion must very rapidly have extended to the opposite side and into the subarachnoid space of the cord. The paralysis then became general, and it was more complete than I remember ever to have seen. The singularly flaccid state of all the muscles of the face and limbs, the rapid loss of temperature, and the total absence of any reflex power, were, I think, due to the general pressure on the cord and medulla, more even than to that on the brain. They were more marked than is seen in cases of intra-cranial effusion of far greater extent.

## CASE OF OBSTRUCTION OF THE BOWELS,

### SUCCESSFULLY TREATED BY THE USE OF THE STOMACH PUMP, AFTER FAILURE OF ORDINARY TREATMENT, WITH REMARKS.

By EBENEZER FLEMING, M.D., L.R.C.S.E.

H. S., Esq., æt. 59 years. Previous to present illness, had three different attacks of obstruction of the bowels, in one of which, after the desired relief, gout appeared in great toe of left foot. The attack yielded to repeated doses of calomel and opium. Is of constipated habit.

22nd November, 1865.—Bowels not having been moved for four days—a thing not unusual—he took a dose of castor oil. Next morning, the medicine not having acted, he sent for his Medical attendant, Dr. J. G. Dickson, of Newton Stewart. He prescribed a laxative pill, then eight grains of calomel, followed by castor oil, laxative saline mixture, warm bath, and repeated injections, but these all failed. I was requested to meet Dr. Dickson in consultation on Saturday afternoon (25th). The countenance indicated suffering. Pain occurred in paroxysms. Frequent vomiting of dark bilious substance, urine in small quantity and highly ammoniacal. Tongue dry and furred; pulse 72, of good volume; abdomen much distended; considerable dulness on percussion over right iliac region; no pain on pressure. We agreed first to inject a quantity of soap and warm water, by means of the long tube attached to stomach pump. The tube, measuring a yard long, passed freely and without pain its whole length, but from the distended state of abdomen, the injected fluid caused considerable uneasiness. It was retained. A small quantity of frothy mucus was passed. No other result. The following pills were prescribed, to be used during the night:—℞ Sub. mur. hyd. gr. xij., ext. hyoscy. gr. xviij. M. et div. in pil. xii. One every three hours. Abdomen to be well fomented and rubbed with Ung. hydr. mit.

26th, 12 noon.—Dr. D. White, of Whithorn, who had attended Mr. S. in some of the former attacks, was now associated with us in the case. No vomiting since last night; abdomen more distended; other symptoms unchanged. We agreed again to pass the long tube, and throw into the colon a pint of infusion of salts and senna, with ℥ss. ol. terebinthinæ. Retained, but no result. 4 p.m.—Distension of abdomen much increased, so as to impede respiration; pulse continued good. Hab. pulv. jalapæ ver., ℈ij. 6 p.m.—Repeated last injection, with addition of tinct. assafœtidæ, ʒij. The ordinary enema apparatus was on this occasion used. After an ineffectual attempt at the night chair, the pulse suddenly increased to 132, and became feeble; respirations 48; abdomen distended to its utmost limit; outline of colon distinctly perceptible. The symptoms now became more and more alarming. We thought of putting patient into a warm bath, and dashing a pitcher of cold water over the abdomen, but he became so depressed that we could not attempt it. Dr. Dickson suggested that the long tube should be passed, with the hope of drawing away flatus. At our subsequent deliberations this gave the cue to our agreeing to pass the tube into the colon, and applying the stomach-pump, to try whether it would relieve the distension. 10 p.m.—The long tube being attached to the pump, as for emptying the stomach, I again pass it its whole length without difficulty into the colon. The first result of the syringe was to bring away flatus, then semi-fluid fæces until a wash-basin was filled. Dr. White supported the tense abdomen, and he felt it distinctly subsiding under each action of the syringe. Complete relief was immediately experienced. Habent ol. ricini, ℥j. During the night the bowels were two or three times very copiously relieved, and all the severe symptoms subsided. Next day gout appeared on great toe of left foot (as on a previous attack), for which he was treated by Dr. Dickson.

A letter, dated 6th inst., from Mr. S., now residing in a distant part of the country, informs me that he is keeping well, but that he requires to take great care, and adds, "My left foot still looks gouty, and swells slightly in the evening."

*Remarks.*—The progress of the case corroborated our opinion that the cause of the attack was gout seizing upon some part of the bowel, causing primary contraction, but more extensive dilatation. Dr. Wood, of America, in his first volume of Practice of Medicine, refers to such cases of obstruction of the bowels, and considers them less dangerous than other forms. In this particular case, however, the symptoms became so alarming, and the ordinary treatment so inefficient, that we all felt that at any moment fatal inflammatory action might set in. In our experience or course of reading, none of us had ever seen or even heard of the stomach pump being used in this way; but it is very probable that other Practitioners have applied it similarly, although I have not been able to find a published case. Before reporting this case, I intended to have more experience of this application of the operation. Such cases, however, do not often occur in a country practice; and should similar cases be treated on this principle by other Practitioners after the failure of the ordinary routine of treatment, I should be much obliged by receiving brief reports of the result. In mechanical occlusion of the bowel, whether caused by intussusception, twist, internal hernia, tumour, gallstone, or structural change, this operation would most probably fail; but in many cases of obstruction we cannot determine the real cause during life; and other means having failed, the stomach pump might be applied as herein recommended—viz., to inject a warm fluid as a solvent or diluent, allow it to remain two or three hours, reverse action of pump, and eject—with the hope that in the worst forms of obstruction it is possible, and in the simple forms probable, that it will be successful.

Stranraer, Wigtonshire, N.B.

# REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

## SPECIAL REPORT ON THE TREATMENT OF FRACTURES IN THE LONDON HOSPITALS.

*Bandaging—Fractures of the Femur—Modifications of Liston's Long Splint—Treatment of Fracture of the Femur at St. Bartholomew's, the Middlesex, University College, and Charing-cross Hospitals.*

Before passing to the proper subject of the present paper, we will refer to a fact of considerable practical importance which has forced itself upon our observation while we have been engaged in collecting materials for our report. We find that many Surgeons dispense as far as possible with bandages of all kinds in the early treatment of fractures. In the various handbooks on Surgery there are found a number of woodcuts representing limbs very neatly and artistically bandaged: the affected part is cunningly covered by a roller, whose successive turns exactly correspond with each other—not a wrinkle or irregularity is to be seen. One of the earliest tasks that the student of Surgery sets himself is to learn how to "bandage neatly," and it is in consequence common to see in the different Hospitals excellent specimens of this kind of workmanship. It is at least a question whether the welfare of the limb is not sometimes forgotten in the effort to please the eye of the manipulator and the bystander. "Neat bandaging" is often rather a piece of handiwork than a means nicely calculated to meet the requirements of the injured part. The great error into which a "neat bandager" is apt to fall is that of not distributing pressure evenly and to the same amount over the different parts of the surface. It is not rare to see, when a limb which has been bandaged for twenty-four hours is uncovered, a regular series of parallel lines of indentation corresponding with the edges of the roller, with a more or less œdematous condition of the intervening soft parts; or a considerable œdema of the toes and dorsum of the foot, or of the parts below the ankle. Such a condition indicates an amount of interference with the circulation which is certainly opposed to the favourable repair of an injury. We venture to offer one suggestion as to the application of a bandage—it is not advanced as new, but as important enough to justify its repetition.

The bandage should be laid upon the limb inch by inch, with that degree of tightness or firmness which it is deemed expedient to impart to it. It should not, as is frequently the case, be passed round the limb, and be then tightened, for it is by this latter plan almost impossible to secure an equal distribution of pressure. Pressure applied to a part is always a powerful agent, and in many instances is a very valuable resource; but as it is beneficial in some conditions, so it is injurious in others. As we have said, some of our most prominent Surgeons prefer to conduct the early stages of the treatment of fractures with as little pressure as possible. In our next we shall describe a method by which Mr. Paget, at St. Bartholomew's, puts up fractures of the bones of the leg, whether simple or compound, transverse or oblique, or comminuted, wholly without bandages. At the Middlesex Hospital we found that no bandages were employed in the management of fractures of the femur. The chief advantages of this method appear to be that the circulation is left wholly uninterrupted; there is no wasting of the limb, such as is caused by firm bandaging; the muscles, while they are naturally at rest, are allowed to retain their tone, so that the limb the sooner regains its usefulness when the patient begins to exercise it; and lastly, the progress of the repair of the fracture can be carefully watched, and the relative position of the fragments can be exactly known.

### FRACTURES OF THE FEMUR.

The apparatus which is in almost universal use for the treatment of fractures of the femur is Liston's long splint, or some modification of it. Mr. Wormald, at St. Bartholomew's Hospital, and some other Surgeons, still employ the "double inclined plane;" but as a very general rule, this is wholly discarded. We will first mention the various modifications of the long splint which we find in use, and then refer to some points relating to the application of the apparatus. Mr. Paget is in the habit of employing a long splint (first used, we believe, by Mr. Busk), jointed opposite the hip, so that the part between the hip and the axilla can, by means of a screw, be fixed, either in a line with the rest of the splint or at any required angle. What is gained by this arrangement is, that when union of the fracture has advanced to a certain degree, the patient can be allowed some change of position. He can sit up, for a longer or shorter time, propped by pillows to any angle not greater than 45° with the plane of the bed. It is important to bear in mind that the body must not be raised beyond this, for in the sitting posture the relation of the fragments would be disturbed by the thrusting of the upper downwards over the lower. We have seen excellent results obtained by this arrangement, while the patients have found great relief from the temporary alteration of position. Mr. Bloxam, Mr. Paget's House-Surgeon, has contrived a splint which has the following peculiarities: it is shorter by several inches than the Liston, reaching only a little above the crest of the ilium; it is kept securely to the side, and is prevented from passing upwards to the axilla by means of a strong abdominal belt, into the side of which, where there is a kind of pocket, open below and closed above, its upper extremity is thrust. As fixing the level of the abdominal belt is equivalent to fixing the upper end of the splint, since they move together, the perineal band is fastened by buckles to the belt, and thus is very readily altered. At the lower extremity of the splint, and about eight inches below the foot, is a strong cross-piece; through this, and corresponding with the middle line of the foot, there passes an iron screw: at that end of the screw which projects towards the foot is a hook turning on a swivel, and this catches the strapping-stirrup, by which extension is now so commonly made. From a description this splint may appear complicated, but practically it is simple enough. It is very strong and firm, without being cumbersome, and by means of the screw any required extension can be made without any disturbance of the limb.

At the Middlesex Hospital Mr. Worthington has fitted up an apparatus which deserves a special notice. An outside long splint has a strong cross-piece passing inwards eight or ten inches below the foot. Pancoast's stirrup is first applied. A cord, one end of which is tied into the stirrup, runs round a peg in the cross-bar, and then, changing its direction, turns over the lower end of the splint, and is continued upwards along its outer surface. Just above the knee it is interrupted by the insertion of a piece of india-rubber cording about eight inches long, and as thick as the little or ring finger. Now continuing its course, it passes over the top of the splint, and is looped into the perineal band (which is made not to tie, but as an ellipse), and being again reflected over the end of the splint, is fastened to its ascending portion by means of a "tent tightener." The foot and ankle are bandaged to the splint, and generally, but not always, a chest-belt fixes the splint to the side. At those parts of its course at which the extending cord changes its direction, small rollers are placed so that it runs easily and smoothly, and does not catch. No bandage or other appliance is used to fasten the limb to the splint higher than the ankle. We are afraid of prejudicing the various apparatus in the eyes of our readers by the, we fear, tedious and incomplete descriptions which we give of them. We are sorry should this really be the case. The splint now referred to is most simple, and is very readily managed; any amount of extension of the limb can be made by means of the tightener. We were surprised to see the limb left so unsupported at the seat of fracture, but we were assured that very good results were obtained by means of this arrangement. The necessary movements, as in the use of the bed-pan, were said to be accomplished without leading to any mischief. The chief peculiarity, however, of this apparatus is that it provides for *continuous* extension by the column of india-rubber which is let into the cord. We cannot but think it a defect in the common appliances that continuous extension is not provided for. Ordinarily, when the perineal band is just tightened or when the stirrup is newly bound to the lower end of the splint, no doubt extension is efficiently made; but this to a great degree ceases upon any, even a slight, movement of the patient, or as soon as the bandages have had time to "give." We have especially noticed the state of the perineal band in the different cases we have seen, and we have almost without exception found one of two conditions to prevail. When the band has just been tightened the patient has complained of uneasiness or even of pain, and when it has not been altered for twenty-four hours it has been obviously so loose that no extension was being made. In Holmes's "System of Surgery," Mr. Holthouse states (a) that while he was writing his article he could find only three instances among the fractured femurs in adults then under treatment in the London Hospitals in which there was no shortening of the limb. In two of these cases the fracture had happened only a very few days, so that the ultimate result as to shortening was uncertain, while the third case was somewhat apochryphal, as the limb was still enclosed in splints, so that "one could not be sure that the limb had been fractured."

There appears to be nothing either in the fracture or in its method of repair which renders shortening thus apparently inevitable, and the difference in its amount in different examples of the same kind of fracture and in the practice of different Surgeons certainly seems to show that it depends on the means employed to prevent it. That it is in part, at least, explained by the usual condition of the perineal band, any one, we think, may readily convince himself. By means of the india-rubber cord, however—unless something should give way, or the splint be thrown out of place—constant extension is secured. Mr. Quain at University College has for a long period made extension by a strong india-rubber band fastening the foot to the end of the splint. A very efficient and very simple way of making extension is by a weight fastened by a strong cord to the stirrup and hanging in the air at the foot of the bed. By it a known and easily regulated amount of extension is provided which must, as long as it hangs in the air, be continuous and always equal. The common objection raised to this appliance (which, we may remind our readers, was very strongly recommended by Sir B. Brodie for making extension in hip disease)—namely, that the patient slides down in bed till the weight lodges on the floor, is easily met. The occurrence is prevented by raising the foot of the bed six or eight inches by blocks of wood or some such contrivance. It is advisable in the use of the weight that there should be some kind of pulley or roller over which the cord may run, so that it is not entangled in the bedclothes. In a French bedstead a hole bored through the footboard will answer quite well, but in any case some simple means will be at hand. The weight recommends itself as a means of extension by the fact that with it no perineal band is required. To be able to dispense with the latter is always a gain, but it is especially so where the skin is irritable, or where there is, along with fracture, bruising of the groin, or when the habits of the patient make frequent washing necessary. At the Charing-cross Hospital Desault's splint is commonly used. This differs from Liston's only in having a foot-piece corresponding with the sole. At the Dreadnaught we saw a splint recommended by Mr. Busk. It is an ordinary long splint with a joint at the middle of the thigh, so that it can be adapted to the arch of the femur. It has a complimentary joint at the knee. In some Hospitals three short splints are adjusted—one in front, one behind, and one in the inside of the thigh, at the seat of fracture, the whole being fastened by straps and buckles. In several Hospitals, however, these are seldom or never used.

The following points in the application of the apparatus, whatever this may be, seem of importance. (*a*) A cross-piece of sufficient length, and projecting on either side, should always be fixed to the lower extremity of the splint. This gives great firmness to the splint, and prevents any rolling of it outwards or inwards. (*b*) The best way of making extension is undoubtedly by means of the strapping-stirrup invented by Professor Pancoast, of Philadelphia. This, as the great majority of our readers are aware, is thus applied:—A long piece of strapping, about four inches wide, is bent upon itself at its middle, and made to adhere to the inner and outer surfaces of the leg as high as the knee, a loop or "stirrup," between four and five inches deep, being left below the foot. The two ends running up the leg are fixed by means of circular strips and a lightly applied bandage. The loop is fixed to the extremity of the splint. The simplicity, safety, and efficiency of this contrivance leave nothing to be desired. If good strapping is employed—Professor Pancoast uses a material much stronger than that in ordinary use—it will remain in place for two months, or even longer, and as it diffuses pressure over a large surface, it can scarcely inflict any injury on the soft parts. American Surgeons, in order to protect the malleoli from pressure caused by the sides of the stirrup, are in the habit of using what they term a "spreader." This consists of a thin piece of wood, a little longer than the foot is wide, which they place transversely in the stirrup, just below the sole, like the "set stick" in a horse's trace.

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(a) Holmes's "System of Surgery," vol. ii., p. 613.

There is a difficulty, however, in keeping this "spreader" in place. Mr. Worthington, whose name has been already mentioned, places instead of this a rolled-up bandage of the requisite thickness in the stirrup. This simple means will be found to answer excellently. (*c*) The perineal band should be very carefully made. Our Transatlantic brethren use a tubular india-rubber band carefully covered with chamois leather. The elasticity which this material possesses seems to us to be a great recommendation. In the London Hospitals, however, it does not find many advocates. The band we commonly see is made of a strong piece of bandage, around which a sufficient quantity of cotton wool is carefully rolled, the whole being covered with chamois leather or gutta-percha tissue. The former covering is preferable, as the latter frequently irritates the skin. (*d*) The perineal band is often too small, and meagre, and cord-like, so that it is apt to excoriate the skin. Those which answer best are as large as the wrist, and are made by winding a long, narrow piece of cotton wool transversely round and round upon the central strip of bandage, the whole being afterwards covered with chamois leather. (*e*) It is advisable every few days to remove the band, while extension is carefully maintained by an assistant, and thoroughly to wash and dry and powder the skin in the groin. This adds very greatly to the comfort of the patient, and materially helps to keep the soft parts in a safe condition.

We have not made any reference to the treatment of particular fractures of the femur, for we have found the same method employed in all cases. From fractures of the neck of the bone (except in very feeble old persons, who are left with the limb simply supported by pillows) to fracture through the condyles, the long splint variously modified is all but universally used.

We may, however, refer our readers to a lecture lately published in our columns by Mr. Hutchinson, in which he describes the treatment of separation of the condyles in young subjects.

(To be continued.)

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# Medical Times and Gazette.

## SATURDAY, APRIL 21.

◆

## DECLINE OF THE CATTLE PLAGUE.

The official return of the Veterinary Department for the week ending April 7 shows the number of attacks in that week as having declined to 3361, and thus it appears we may regard the disease as fairly in process of extinction. For there is no ground for the statement which has appeared in nearly all the daily papers that the downward course of the epizootic has been arrested. The attacks in the last three weeks have numbered 4704, 3956, and 3361 respectively, and the decline has therefore progressed gradually at the rate of 19 and 18 per cent. in the past fortnight, which proves that the slaughtering is less influential as a disturbing element than might reasonably have been expected.

If our readers will turn to Dr. Farr's diagram, which we printed five weeks ago, and will draw the ordinates in continuation of the "reported cases" up to the present time, they will find that the two curves—the calculated curve and the curve of fact—are going downwards so simultaneously that if one leg of a compass be made to follow one curve, the other leg will describe the other curve almost to a nicety.

The *Times* has ascribed the diminution of the weekly attacks solely to the effects of recent legislation, and this view is of course in keeping with the doctrines to which that journal has become converted, although at the outset it was their most doughty opponent. It seems incomprehensible that the champion of the cause of Medical science and skill against the rough-and-ready practice which Professor Gamgee has consistently recommended should have so completely gone over to the other side, and become the most vehement opponent of any attempt to subdue the disease by curative treatment.

Now, it appears to us that if the official returns are worth anything at all, they show incontestably that the gratifying decline of the disease is not primarily due to the interference of the Legislature, inasmuch as the tide had turned before a single head of cattle was slaughtered under the new Act.

The attacks reached their maximum elevation in the week ending February 17, and then fell 44 per cent. in the succeeding fortnight, up to which time the disease was running its natural course; whilst in the two following weeks ending March 17, when the poleaxe was in full play, the attacks diminished at the greatly reduced rate of 17 per cent.

Two opposite theories have been propounded regarding Rinderpest: one that the plague will never die out until it has killed all the animals it can reach, less a small percentage of recoveries; the converse, that the disease, like contagious diseases of human beings, is subject to a law of increase and decrease, and that as an epizootic it will, like a fire, burn itself out if no further fuel be added. We had the opportunity of conclusively establishing the truth of one or other of these positions, but in consequence of the attempts to "stamp out" the disease by summary slaughter, the natural course which it would have followed is left undetermined. The second theory is proved up to a given point, but from thence we can only reason by analogy as to what would have happened subsequently.

Objection has been taken to the doctrine, that epidemic disease is so essentially exhaustive of its own virus that irrespective of human agency it will die out like a fire unreplenished, on the ground that it savours of the Oriental idea of fatalism; in fact, it is held to imply that when epidemic disease manifests itself, either in an individual or in a community, Doctors should stand aside, and let the poison work its will unchecked.

If this were correctly put, it is perhaps needless to say that we should fight against it *à l'outrance*, as being repugnant to every principle of scientific action; and we venture, therefore, to point out wherein, as we conceive, Dr. Farr's views have been misunderstood. On such a subject we, of course, speak subject to correction, and not *ex cathedra;* but an illustration of what the doctrine means may be found in this: supposing we throw a stone into the air, the height to which it will attain will depend on the resistance of the atmosphere, and its descent will be quickened or retarded just in the degree that the force of currents or of density is augmented or diminished at different times. And whatever law may be deducible from the progress of epidemic disease amongst human beings, that law *ex necessitate* implies interference with the disease in the form of Medical treatment. It was therefore strictly applicable to Rinderpest, so long as the legitimate mode of attempting to check or modify its virulence by curative measures was permitted, the bane and antidote being both in the natural order of things. But directly such measures were suspended, and the (certainly not *Medical*) system of slaughtering all the animals attacked was substituted in their stead, all reasoning on the applicability of any law of epidemics to such an abnormal state of things was at once made impossible, and fatalism in an unmitigated form—that of admitting an element of evil to be unconquerable—was stamped with the hall-mark of Parliamentary approbation.

That the most stringent provisions of the Act have been already greatly modified in practice is quite certain, else there would have been no "recoveries" in the last month, nor would there be any left under treatment, as we gather there must be at the date of last return.

## DR. FARR'S LAW OF EPIDEMICS.

NEARLY four months have now elapsed since Dr. Farr enunciated the proposition commented upon by us about a month ago—that the behaviour of the cattle plague during the last nine weeks in 1866 warranted the belief that Rinderpest would speedily attain the height of its severity, and then rapidly subside. The Rinderpest is rapidly subsiding, and we are all congratulating ourselves that this piece of good luck is entirely owing to the measures which have been adopted by Government for the "stamping out" of the disease. This we believe fallacious, and wish to put before our readers what we conceive to be the true state of the case. Dr. Farr states that Rinderpest offers no exception to the general rule which obtains amongst all epidemics—viz., that their zymotic poisons tend by transmission through species of the same kind to lose much of their virulence, and we have already shown that this is the case with Rinderpest virus. Now the Rinderpest attained its height about March 17, and the weekly returns showed a decrease of attacks for the week ending Feb. 24 of nearly 3000 cases, and it was not till after this time that stamping out measures were adopted. It will be remembered that during the last century Rinderpest seized upon the cattle of Italy, and it has been erroneously supposed that its spread was effectually checked by the adoption of stamping out measures suggested by Lancisi. This is quite erroneous. The Rinderpest ran its course, rising and falling —speaking figuratively—in the form of a curve, and subsided entirely in nine months. Rinderpest has behaved in an exactly similar manner now. In March of the present year the stamping out system began to be put into full operation. Before that time the calculations of Dr. Farr and the weekly returns of the Privy Council exhibited a wonderful agreement during the increasing stage of the epidemic. On Feb. 24, just before the play of the stamping out measures—just after the attacks of Rinderpest began to fall in number—there was actually only a difference of 98 between the two totals; but just after the adoption of the stamping out system the actual number fell considerably below the calculated attacks of Dr. Farr.

The following table will show this:—

| | Calculated series. | Actual reported attacks. | Difference. |
|---|---|---|---|
| February 17 . . | 10,327 | 13,001 | |
| ,, 24 . . | 10,098 | 10,767 | scarcely any |
| March 3 . . | 9706 | 7310 | 2396 |
| ,, 10 . . | 9171 | 6518 | 2653 |
| ,, 17 . . | 8518 | 6261 | 2257 |
| ,, 24 . . | 7777 | 4704 | 3073 |
| ,, 31 . . | 6980 | 3956 | 3024 |
| April 7 . . | 6158 | 3361 | 2797 |
| ,, 14 . . | 5340 | | |

It will be seen that the reported attacks are very much less than the calculated attacks of Dr. Farr. But what did we say ourselves in reference to this matter? We anticipated as much in the *Medical Times and Gazette* for March 17—"If certain additional circumstances that have lately arisen in reference to the spread of cattle plague, such as stamping out measures, were considered, and a series of calculations deduced from the actual observations, embodying the latest data, that the new corresponding curve would exhibit a much more marked fall than that represented in the diagram."

Before, then, the adoption of stamping out measures, the Rinderpest has begun to decline. Up to the date at which such procedures were in action there had been a marvellous agreement between the prophetic proposition of Dr. Farr and the returns of actually reported attacks. Subsequently to that time there has been a marked difference, but this difference has been proportionately marked from week to week, ranging between 2500 and 3000; and if the element of back cases were properly assigned its influence, the chances are that the agreement would be all the more curious still.

Hence the curve formed now by the actual returns contrasted with that representing Dr. Farr's calculations, runs a *parallel* curve. We know that a new and additional influence was brought to bear upon the epidemic at the time the first marked difference between Dr. Farr's totals and those of the Privy Council were observed; this has continued to be in operation ever since, whilst an exactly comparative difference has been observed week by week. As the new factor has been uniformly at work, and has produced a uniformly continuous difference, other things remaining the same, it is only fair to suppose that the alteration from the original curve is due to the action of the new factor. The stamping out system, in other words, produced a sudden decrease, which we can recognise week by week in the returns of the Privy Council, when contrasted with those of the calculated series of Dr. Farr.

We have the best reason to think that the Rinderpest has a very natural tendency to die out, but that this is hastened to some extent by the stamping-out system; and this is in harmony with all we know of epidemic diseases in general.

It has not unlikely occurred to some to suppose that Dr. Farr's law underrates the importance to be attached to the use of preventive and curative measures; but this is the result of hasty conclusion and careless thought. Dr. Farr's law expressly supposes the possible occurrence of new factors and influences. To imagine that it encourages any doctrine tending or merging towards fatalism is proof that its meaning has not been grasped. It does not imply that a disease will run a given course, whatever we may do. It signifies that there are certain circumstances that cause a diminution in the activity of every zymotic poison and others that increase the resistant power of those attacked or exposed to the risk of attack, and that these may be approximately calculated.

These are most important considerations in reference to treatment, and indeed Dr. Farr's law really paves the way for the clearer elucidation of therapeutic data. Though the conditions upon which we base our calculations of the progress of any epidemic may alter and new agencies may be introduced, yet in all cases antiseptics can alter the character of the poisons; tonics afford increased resistant power; a patient may be removed away from the influences that court the action of any poison; and it is possible to rectify any hitches that occur to the human machinery or remove local complications. There is plenty of stern work for the Physician to do, and the natural course of the disease is but favourable to the success of the treatment he employs.

The question of diminution in the intensity of a poison produced by its passage through the organisms of animals or human beings is one of no little general practical interest. Let us take vaccination for illustration. Some of us believe that vaccination is retrograding in quality; or, whether this be true or not, that the enemy variola is recovering some of its lost power. It may be well for us to inquire whether the present system of lymph manufacture is not faulty? Is it possible that by the long continued transmission through the human system the vaccine matter may have lost much of its efficacy, and perhaps have acquired new properties of an objectionable nature? Such questions are involved in the law enunciated by Dr. Farr, and if there be any truth in it the affirmative must be admitted; at all events, we are justified in demanding a thorough experimental inquiry.

We only claim for the theory of Dr. Farr a legitimate degree of importance, and have, therefore, attempted to point out the limits within which its application may be made, and to show that the remarkable co-relation between the predicted and actually observed occurrences is something more than the result of accident.

## THE THERMOMETER IN PHTHISIS.

Mention was made in our last article of the influence sleep exerts on the appetite. If the sleep be broken, the appetite, with digestion and assimilation, are greatly impaired. Indeed, too much attention cannot be paid to this point, for from the loss of appetite patients rapidly waste, and the reparative powers of the system are greatly lessened, and thus the recovery is greatly retarded. Indeed, the loss of appetite resulting from want of sleep may completely wear out the patient, and be the chief influence causing death. It is thus of the utmost importance to secure to patients sufficient sound and refreshing sleep. This should always be accomplished when possible without the administration of medicines. The ventilation of the room should be carefully looked to, the diet must be carefully regulated, and regard must be paid to the amount of stimulants given. Often sleep is prevented by these latter being administered too late in the evening, or, on the other hand, if patients be very weak their absence may cause wakefulness, and patients previously restless not unfrequently fall into a refreshing sleep when stimulants are freely administered. All undue excitement before the usual time of sleep must be avoided. If pain prevents sleep, this must be allayed; and if the restlessness be caused by cough this should be remedied. The cough of phthisical patients not infrequently results from sore-throat. This is then red, injected, and it may be ulcerated. In such cases local applications to the throat are efficient remedies; one of the best is that recommended by Dr. Edward Smith. An eighth or tenth of a grain of morphia dissolved in a drachm of syrup or glycerine should be either painted on the throat with a soft camel's-hair brush, or, which is better, swallowed slowly. This application frequently allays the cough, and allows sleep. If the cough proceed from irritation in the chest, this may often be allayed by counter irritation under either or both clavicles. For this purpose either a mustard poultice, or a blister, or a strong solution of iodine may be applied. Inhalations, moreover, often succeed when given to allay cough: iodine or creosote inhalations are often of greater service than those of simple steam. The patient should be directed to rinse out a jug with boiling water to heat the vessel, and then to pour into it a pint or a pint and a half of boiling water; into this twenty drops of the tincture of iodine or the same quantity of creosote should be dropped. The vessel should then be covered over with a towel, and the patient must put the mouth and nose under the towel. This inhalation should be continued for five or ten minutes. If the cough be paroxysmal and violent, a mixture of laudanum with some chloric ether and tincture of lobelia inflata may often be given with advantage.

Sleep should always be obtained if possible without the use of large doses of opium, for this medicine itself lessens the appetite and often greatly interferes with the other functions of the body. The Practitioner has to decide whether greater harm will result from want of sleep or from the administration of opium. Patients exhibit great individual peculiarities in respect to the action of opium, and thus the above question can only be decided by a trial of the action of this medicine. With many patients this causes much excitement, sometimes of a pleasant, at other times of a disagreeable, kind. With many it destroys the appetite or constipates the bowels; in such cases the opium may inflict even more harm than the want of sleep. On the other hand, some patients under its use fall into a refreshing sleep, and are in no other way affected by its administration. It should be the anxious endeavour of the Physician to cure his patient with the smallest amount of medicine possible.

## THE WORKHOUSE INFIRMARY MOVEMENT.

The objects of the Association for Promoting the Improvement of Workhouse Infirmaries are so good, and the conditions of some of these public institutions so unsatisfactory, that every well-wisher to the coummunity must look, and will not look in vain, for good results from the agitation now existing on the subject. We think it no small contribution to the general good if we offer, as we have already done, a few criticisms on the "movement," in order to point out the dangers which may be incurred from injudicious and over-zealous friends, who are apt to forget that it is possible to be unjust even in a work of benevolence. We have already pointed to the forensic spirit displayed by the Archbishop of York at the public meeting of the Association, and the effects of this on the guardians of at least one important parish are well known. And we would ask whether it were worth while to begin a public movement in such a way as to wound the feelings of noblemen and gentlemen of all shades of politics and grades in society whose benevolent devotion to the sick and poor of their own parish is unquestionable?

A second act of injustice was committed—no doubt unintentionally—towards the body of gentlemen who hold the office of Medical attendant to the London parishes and workhouses. We clamour as loudly as possible for the increase of their salaries, for the elevation of their status, for relieving them from the expense and drudgery of dispensing medicine, and for conferring on them all the facilities and appliances of good Hospital organisations. Workhouse Hospital wards, well and scientifically worked by good men, publicly, as cliniques, with pupils, would be as foci of skill to the Profession of a whole district, and should be honourable objects of ambition to the best men. But it must be remembered that the gentlemen who attend the sick in workhouses are the regular Medical attendants of the middle classes, of the ratepayers themselves; and are the ratepayers to be led to believe that their own Medical attendants are not good enough for the poor, or that they are likely, as is asserted, to stoop to the sordid impulse to defraud the sick poor of necessary drugs?

There seems no doubt but that every large Workhouse Infirmary should have a resident House-Physician or Surgeon, as every Hospital should. But the superior and responsible Medical attendant should be the best man who will accept the post. Are we to understand that the future Medical officers are to be unsalaried, and that general Practitioners, who cannot afford to accept unsalaried places, are to be shut out? Is the pernicious system of unpaid Medical officers to be extended?

So also with regard to nurses. Of course, the head nurses should be skilled and paid. But is it intended that no pauper is to do any of the functions of a nurse? Supposing that pauper not to be in the house (but, as many of them are, an infirm or decrepit family servant), is she to be entrusted with no work at all?

The space in some workhouses is doubtless insufficient, but will any one be ready to throw all the blame on the guardians who knows the restrictions which the law placed on the raising of money for such purposes?

By all means let there be new Hospitals—State Hospitals worthy of the name—supported out of funds to which all classes contribute; but let us ask, why should these Hospitals be governed by a *layman?* which is said to be the proposition.

We must return to this subject shortly, in order to sift some of the statistical and other details which find their way into the newspapers, and to take care that the first ideas thrown out by impulsive benevolence may not be worked out in such a manner as to be unjust to the benevolent and hard-working part of the public, nor to the Medical Profession.

# THE WEEK.

## THE NEW CATTLE PLAGUE DEPARTMENT.

**Perhaps** it would be as well, now that a new department has been formed for the transaction of business relating to the Cattle Plague, that we should suggest to Colonel Harness to amend the Weekly Return, which, it is presumed, will in future be issued under his authority, so as to render it more intelligible. As an instance of what we mean we may point out that for the last twelve weeks from 12,000 to 15,000 cases have been returned weekly as "unaccounted for." Now, either the greater part of these animals must have died or been killed, or they have recovered, for it is not reasonable to suppose that so large a number are, under present regulations, still remaining diseased. The greater probability, for many reasons, is that the major part of them have recovered, and in such case the general rate of recovery would be largely increased. Any way, they are an element of confusion as they stand now. There is another point. In the first columns of the Return are professedly given the cases "reported as having commenced" during the current week, but the detailed return for the week ending March 31 shows under that heading, 3956 attacked, and yet that there were 4139 killed, died, and recovered in the week. And we have again to reiterate that the calculated ratios which are now appended to the Returns are, for the reasons we have before adverted to, utterly useless, and, in fact, mischievous, as leading to erroneous conclusions. We trust that the head of the new Cattle Plague Department will not think it beneath him to notice suggestions which are offered on public grounds alone.

## ELECTION OF MEDICAL OFFICERS TO THE NEW SURREY COUNTY HOSPITAL AT GUILDFORD.

**This** institution is now completed, and will be very soon opened for the reception of patients. The election of Medical Officers took place on Tuesday, the 17th, when the three gentlemen at the top of the poll were elected. The number of votes stood thus:—Mr. Henry Taylor, 174; Dr. J. R. Stedman, 162; Mr. R. Eager, 122.—Mr. F. Yate, 97; Mr. T. J. Sells, 58.

## THE ALDIS TESTIMONIAL.

**We** are glad to learn that the project for presenting a substantial testimonial to this veteran worker in so many a good cause is now in full activity, under the direction of Dr. Synnot, of Eaton-square. Dr. Aldis's Medical brethren have subscribed liberally, thus stamping the movement with the approbation of the Profession, and testifying to the reality of his services. But now the time has come to appeal to the public. Dr. Aldis has for long years filled the office of Physician to at least three important Dispensaries. He has thus been the instrument or agent of those benevolent persons, who establish these institutions for the sake of the sick poor. But we would appeal to the noblemen and gentlemen, and to the rich manufacturers, whose contributions are represented by an annual guinea, whether they do not think it but just to give something in recognition of the long, weary, often unthanked duties of the Physician who devotes day after day to the string of miserable people who attend the Dispensary?

## REGISTRATION OF SUCCESSFUL VACCINATION.

**The** other day, happening to saunter down Old Bond-street, we joined a small knot of *dilettanti* who were gazing into the window of a print shop. What particularly excited their admiration was a set of photographs of Mother and Child in various attitudes, which looked very much like photographs of classical pictures. In fact, one looker-on, pointing to one group, said, "This here is a Madonna by *Raffle*." On scrutinising and looking into it rather closely, however, we could not help seeing that the naked arm of the Child exhibited four very well-marked vaccination scars; hence it was evident that the photographs were not copies from "Raffle," but had been taken from some cleverly-posed sitters in the 19th century. A vaccinated arm in the 16th century was a thing not *in esse*. This little incident set us thinking what better "certificate of successful vaccination" could any one desire than this? Dr. Gibbon seems to be of the same opinion, if we may judge from the following extract from a report which he has recently presented to the District Board whose Medical Officer of Health he is. Still we do not see why every parent who registers a birth should not be required to register vaccination of the infant within four months. The worst of it is, however, that the vagrant and reckless part of the population, who are constantly shifting their quarters, could not be reached without a very well-organised police agency, and very stringent penalties:—

> "The Vaccination Bill.—A Bill to consolidate and amend the Statutes relating to vaccination in England has been introduced into the House of Commons by the Government and read a second time, (says Dr. Gibbon). At the present time, when small-pox is prevalent, every one feels that it would be a great blessing if vaccination could be made universal. The provisions of this Bill are almost identical with those of former Acts on the subject, and I fear that if it becomes law it will do little to promote vaccination. It still prescribes an elaborate and costly machinery for effecting a registration of all vaccinated children. The attempt to do so has now for years proved futile, and even if a complete register could be made in every sub-district, it would be worthless; the only use it could be put to—a use, by the way, it never has been put to—would be to check the fees of the public vaccinators. The only registers of vaccination ever consulted by the Medical examiner for schools; army, navy, insurance companies, or the Medical officer of health, are the arms of the examined; where, if it has been successful, it is always found indelibly registered. Even in the case of legal proceedings, in the absence of a Medical witness, it is unnecessary, for the *onus probandi* lies upon the accused, and the Act provides that certificates of successful vaccination shall be given free of charge by the public vaccinators. If this attempt at registration were given up, the Government might make the other provisions more effective."

## GAS-WORKS.(a)

**The** appointment of a Parliamentary Committee for the purpose of considering the proposal of the City Corporation to supply gas for public and private consumption in the City of London, and of reporting on the whole subject of gas manufacture and supply, is, we hope, the first step towards a reform of abuses of power on the part of the great gas companies which exercise an equally disastrous influence on the sanitary condition of the population of London and on the pockets of the consumers. The charges against the gas companies are that they carry on their manufactures in the midst of town populations; that they are constantly attempting to force bills through Parliament to enable them to increase their capital and extend their obnoxious works in urban districts; that they thus imperil the lives of the population, not only by the chance of accident such as the recent explosion at Nine Elms, but by charging the atmosphere with large quantities of noxious vapours and gaseous impurities; that the quality of the gas they supply is indubitably bad, and that for it they charge extravagant prices; and lastly, that their profits are so large as greatly to exceed the rate of return on their capital allowed by law—viz., 10 per cent. It is now indisputably proved that gas may be conveyed for almost indefinite distances; there is no reason, therefore, why the air of London should be rendered poisonous to animal and vegetable life by contamination with ammonia, sulphurous acid, sulphuretted hydrogen, tarry matter, soot, and carbon evolved from gas factories, or why large numbers of people should be exposed to the risk of sudden death from the bursting of gas-holders containing a million feet of gas. The spirited opposition which has defeated the Imperial Gas Company's proposed extension of their works at Fulham and Chelsea, shows that at least the Upper House of Legislature are not prepared to sacrifice the health and comfort of a large mass of people to the greed of a powerful company. The majority of the House of Commons, also, which passed the second reading of the City Corporation Gas Bill, proves that, however influential these companies may be in that House, there are enough independent members remaining who will listen to the dictates of science and common sense, and will honestly protect the public interest and welfare. The bad quality of the gas supplied, and the extravagant prices charged, are only such as might be expected when a monopoly of manufacture is legalised. The Corporation of the City undertake to furnish gas at a maximum price of 3s. per 1000 cubic feet, or at least 25 per cent. cheaper than the metropolitan gas companies are now supplying it. The ground for their manufactory is already chosen at West Ham. For ourselves, on sanitary as well as on economic grounds, we wish success to their proposal, and we trust that the labours of the Committee on their Bill may lead to the banishment of this poisonous manufacture from our great cities, and a limitation of the powers which the great gas companies have so openly abused.

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(a) "Gas-Works- the Evils Inseparable from their Existence in Populous Places." By Thomas Bartlett Simpson. London: William Freeman, 102, Fleet-street. 1866.

## THE PURCHASE OF A PRACTICE.

THE more a practice partakes of the nature of a business the more certainly and justly can it be appraised at a money value and transferred for a money consideration from hand to hand. The practices of Consulting Physicians and Surgeons are manifestly unsaleable; the income derived from them depends entirely on the reputation and Professional acquirements of their owners. A barrister could as readily sell his connexion amongst the attorneys as a leading Physician his patients. In either case were the attempt made it would be tabooed by the respective Professions, not merely as a proceeding contrary to Professional etiquette, but, to say the least, as morally a very equivocal one. On the contrary, a practice founded on a retail shop in a great thoroughfare can, as a rule, be bought or sold with thorough *bonâ fides* on the part of the vendor, and with the reasonable expectation that the purchaser will not be disappointed. Few young Professional men, however, now-a-days relish the idea of keeping a retail for drugs, and it is only the select minority who can hope to succeed in the highest lines of consulting practice. The great mass of young Professional men want practices which only partially partake of the nature of businesses, and the farther the practice recedes from the business—the more purely Professional it is—the greater will be the risk of investing money in its purchase. An introduction from the present possessor may be bought, but the opinions and predilections of his patients cannot. The purchase of a practice is therefore proverbially an uncertain venture. Yet with a very large number of men entering the Medical Profession it is a necessity. To live whilst a man makes his own practice requires the possession of a private income for a certain number of years. The young Surgeon with only a few hundreds at his disposal may easily exhaust his means whilst his practice is still unmade. The same amount of money fortunately expended in a purchase would give him work and income for life. It is for this reason that purchase has become so common. The greater number of men entering our Profession are not wealthy, although they possess sufficient if wisely expended to give them a start in life. To such we would say—Buy a practice, but be very careful how you do so. Recollect that the retention of any practice which is not partly a trade must depend entirely upon your obtaining the confidence and esteem of the patients who compose it. Human nature is truly much the same in all ranks of society; but, nevertheless the same individual will succeed admirably with one class of patients, whilst he will not be tolerated by another. We have lately seen a little pamphlet(a) on the purchase of practices, by Mr. J. Baxter Langley, in which the moral we are hinting at is well illustrated by the following story:—

> "A few years ago an Edinburgh graduate, who had obtained the highest honours in the Northern Athens, settled in a good town in Cumberland, where he was personally known, and succeeded in three years in making a good practice there. Flushed with success, he came to London, and resolved to practise in the metropolis at the West End. Nothing could convince him that London was difficult to move. Other Scotchmen had succeeded, and therefore he should succeed also. The writer warned him firmly, yet delicately, that his broad Scotch brogue and terrible strabismus were likely to be impediments; but received as a reply that obstacles which destroyed small men were the opportunities of great ones. He took a partnership with an invalid in one of the best squares at the West End, and paid a large amount for it. At first the patients tolerated him as the *locum tenens* of their former attendant, but no sooner learned that he was partner than they flatly refused to see him. Ultimately, after a good deal of ill-feeling, the partners separated, and the unfortunate and accomplished Scotchman learned that Professional acquirements are not the sole condition of success in aristocratic English practice."

Mr. Langley's pamphlet is of course written from an agent's point of view; nevertheless, it contains a great deal of sound sense, exposes a good many popular fallacies, and offers capital advise both to purchasers and vendors. The notion that superannuated Practitioners are often ready to give away their practices to deserving young men is not an uncommon one. Here is Mr. Langley's experience on the subject:—

> "Among the prevalent fallacies perhaps the most common is, that an old gentleman who has a good practice in a very eligible locality is very anxious to find an amiable and intellectual young man upon whom to bestow a partnership without premium. The amiable (and I may add innocent) young man who is looking for this benevolent myth always urges that he is prepared to do a large share of the work, etc., etc, but he forgets that the 'old gentleman' can readily obtain a good premium for such a partnership, and will make arrangements for the lessening of his own labour, so far as his patients will permit. No Profession is so liberal or charitable as ours, but it is rather too much to suppose that our senior Practitioners will forget the interests of their own families for the benefit of some young aspirant to Æsculapian fame, who, having taken a few prizes at College, thinks that the world is now at his feet. People will not usually give away that which they can readily sell for a considerable amount. In fact, the old gentleman in declining health sighing for a junior partner without a premium is a myth."

Bills accepted by firms trading on the principles of "Disinterested Benevolence," or "Professional Feeling," would not find much favour in the money market; and if buying and selling practices be a recognised commercial proceeding, the more strictly both buyers and sellers treat it so the better. It is on this ground that Mr. Langley argues that the services of a respectable trustworthy agent, who thoroughly understands the business, should be invariably sought by Professional men who wish to buy or to sell.

## ROYAL INSTITUTION.

THE Friday evening discourse last week at the Royal Institution was by Professor Emil du Bois Reymond, on the "Rate of Transmission of Sensation and Volition along the Nervous Structures." A very large audience assembled to listen to the remarks of the learned Professor, which were interspersed with a series of elegant experiments in illustration of the propositions enunciated.

The Professor began with some general observations on the use of the nervous system in bringing us into relation with the external world, and rendering us capable of appreciating the manifold physical phenomena which go on around us. He likened the nerves to telegraph wires, for without any apparent external effect which was appreciable to our senses, a something was transmitted along them in obedience to certain stimuli, the transmitting cords being, however, like the wires, necessarily entire. The Professor then showed that the effect of the application of stimuli to nerves in connexion with muscle, was contraction of the latter. This was shown by a charming experiment,—one end of the muscle of a frog, in connexion with its nerve, was made a fixed point; to the other was attached a thread running over a pulley, and suspended from the thread was a little pail full of shot and a moveable disc. When the muscle was made to contract, the disc described the sweep of a half circle, and the little pailful of shot was raised. The next step consisted in showing that the analogy between the telegraph wires and the nerves as transmitting agencies was not a perfect one. A nerve was connected with two electrodes, and its muscle with a disc moveable by the shortening or contraction of the muscle as before; at one part a string was placed ready for tying; on sending a current through the nerve, contraction ensued and the disc moved; the ligature was then tightened, and the bruised part of the nerve was found to be incapable of transmitting the excited nerve force and no contraction ensued. The inference drawn was this,—that a certain something travelled along the nerve; if it were only electricity it would have skipped over the ligature.

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(a) "A Few Words of Advice on the Buying and Selling of Medical Practices." By J. Baxter Langley. Published by the author, 50, Lincoln's-inn-fields.

The Professor then turned to the question of the velocity with which this *nervous agent* travelled from brain to muscle or, *vice versâ*, from the outer surface to the brain itself. In the ordinary occurrence in which volition and sensation are concerned, we do not, for instance, appreciate any delay between the reception and the perception of a sensation. In the exercise too of the faculties of the special senses, the same holds good. We fancy we see and hear, as it were, instantaneously, coincidentally with the impression made by any given object, but this is probably an error. Experiments with heat and light have shown that there is a difference, but it is such as we do not generally notice; a delay of about one-tenth of a second is the least degree of time that we can appreciate.

There is a delay in the transit of nervous impressions, though we are not usually aware of it. Only fifteen years ago, Professor du Bois Reymond observed, Müller in his lectures was wont to declare that we should never be able to make out the rate of transmission, because we had so small a compass to deal with, and that in the human body we could not get space for the purpose. The lecturer proceeded to show that the rate of transmission through different lengths of nerve was really appreciable by artificial means. He contrived an apparatus by which the exact commencement and ending of the time and the current were registered. He fixed the end of a muscle, and from the other supported a lever by a table at such a height that the muscle itself just supported the lever without being put upon the stretch. The nerve was then put in connexion with a secondary coil. If the muscle contracted it would act on the lever, and this being lifted breaks the current by the first action of the muscle. The whole was connected with a galvanometer, and when the current was excited it was deflected slightly. A weight was then attached to the lever, so that a greater contraction—in other words, more time—was required for the muscle to contract so as to lift the lever sufficiently, and the deflection of the needle, in consequence of the long-continued current, was greater than in the previous experiment. The next point was to show that a stimulus applied to two different parts of the nerve more or less distant from the muscle was appreciable on account of the comparative difference in the distance which was necessarily travelled over in the two cases. Professor Reymond used a myographion, which registered a certain curve corresponding to the muscle in action, and he stimulated the nerve near and at a greater distance from the muscle. He got two different curves, which showed the variation in the speed of transmission due to the varying length of nerve through which the stimulus travelled. The following rates are taken from a table exhibited:—

| | Millimetres in one second. |
|---|---|
| Electricity . . . . . . . | 464,000,000 |
| Light . . . . . . . . | 300,000,000 |
| Sound in iron . . . . . . | 3,485 |
| „ water . . . . . | 1,435 |
| „ air . . . . . . | 332 |
| Cannon-ball . . . . . . . | 552 |
| Wind . . . . . . . . | 1—20 |
| Eagle's flight . . . . . . | 35 |
| Greyhound or racehorse . . . | 25 |
| Nervous agents . . . . . . | 26—30 |
| In throwing a stone 24 in. high . . | 21·9 |
| Muscular contraction . . . . . | ·8—1·2 |
| Arterial wave . . . . . . | 9·25 |

From this table it appears that a man can move his foot, an eagle can fly, a greyhound or racehorse run, as fast as the nerve action travels. The lecturer observed that it takes about a second before the penetrating harpoon which strikes the tail of the whale is felt, and another second before the mandate from the brain arrives at the creature's tail with orders to upset the boat. The velocity in man can be measured. Schelske has shown that the velocity in a living man is not greater than that of the nervous agent in the frog, about 80 feet per second. More than this, the time that thought and other mental operations take to travel has been measured. By means of certain specially constructed apparatus, a certain signal can be produced to indicate the occurrence of sensations. For example, a sensation is felt: this is answered by the production of a signal. Now, it is very curious that if the answer required be known beforehand, the time occupied in the transmission is shorter than when the answer is unknown. The following table shows this. For example, the same signal is given, but in one case the face is touched, and you know it will be; in another the foot is touched, and you are not aware of it beforehand.

Time required for answered signal, as given by the sense of touch—

| | Second. |
|---|---|
| Place of body known . . . . | ·204 |
| „ unknown . . . | ·272 |
| Eye—colour known . . . . | ·201 |
| „ unknown . . . . | ·355 |
| Ear—sound known . . . . | ·215 |
| „ unknown . . . . | ·307 |

The lecture concluded with a reference again to the fact that the transmission of nervous influences was not like that of the electric fluid through a telegraph wire, chiefly because as in the first experiment a ligatured nerve ceases to transmit, and secondly, on account of the difference in the rates of transmission of the two kinds of influence, as shown by experiment —the one, nerve force, about 26 millimètres a second; electricity, 464,000,000 in a second.

## FROM ABROAD.—THE FRENCH MEDICAL CONGRESS—SINGULAR PROPERTIES OF ACETATE OF SODA—CHOLERA RECOMPENSES IN FRANCE.

The French Medical Congress, which held such successful meetings at Rouen and Lyon, is this year to meet at Strasburgh, on Monday, August 27, and the six following days. It will be managed by the Medical officers of the Strasburgh Society of Medicine, having M. Herrgott as President and M. Hecht as Secretary, to whom, 42. des Grandes-Arcades, communications are to be addressed. The Practitioners inhabiting the Departments of the Bas-Rhin and Haut-Rhin become members by subscribing 10 francs each, but all other French and foreign Practitioners, on application, are admitted without contributions. The Committee has determined that the following subjects shall be brought before the Congress for discussion:—1. On the mode of propagation in cholera, and on the suitable measures of public and personal hygiene; 2. The treatment of constitutional syphilis; 3. Ovariotomy and the extirpation of fibrous tumours of the uterus; 4. Histology and its relations to pathology and clinical observation; 5. Anæsthesia in Surgery. Any member of the Congress who may wish to address a verbal or written communication either on any of the above questions or on some other subject, is requested to forward to the Secretary a resumé thereof at least a week before the opening of the Congress. The Committee reserves to itself the power of deciding whether any other subjects shall be introduced than those specified above, and the order of their sequence. The last day will be reserved for communications not contained in the programme, and twenty minutes will be the maximum time allowed for reading each of these.

Professor Jeannel, of Bordeaux, at the last meeting of the Académie des Sciences, presented a note illustrative of the "History of Acetate of Soda," in which some curious physical and allotropic properties of this substance are detailed. We have not yet had an opportunity of seeing the paper, but M. Legrand, in the *Union Méd.* for April 14, gives a brief account of some of its contents. From this it appears that crystallised acetate of soda melts in its water of crystallisation at a temperature of + 58 Centigrade, and when it is exposed to cold, after being dissolved, it crystallises at this temperature, which remains stationary during the whole time that the crystallisation continues, so that acetate of soda in crystallising presents a fixed point at 58° C., just as water, in the crystallised state, presents in melting a fixed point at 0° C. Dissolved acetate of soda which is exposed to cold but secluded from the air, either in a vessel that is corked or one that is simply covered over, does not crystallise; but what is in the highest degree surprising is that, while cooling thus protected from the air without crystallising, it retains in a latent condition the greatest portion of the caloric which it had absorbed when entering into a state of solution. This caloric reappears and is disengaged when the crystallisation of the salt is induced by simply exposing the solution to the air on uncorking or uncovering the vessel which contains it.

This singular property leads to a curious result. The temperature of 60° C. is easily obtainable from the sun's rays concentrated under a glass frame, and therefore the solar heat suffices for the solution of acetate of soda. But if this solution be effected in a corked or covered vessel, it will retain the greater portion of the caloric absorbed, and will restore this when convenient on the vessel being opened. And the quantity of caloric so absorbed is considerable, for 1 kilogramme of the acetate melted and cooled down to 0° C. will disengage, on removing the crystalline condition, sufficient caloric to melt 360 grammes of ice or raise 360 grammes of water from 0° C. to 79° C.

> "In fine, here is a means of magazining solar heat. What will come of it in practice? Will human industry be able some time hence to store up for winter a provision of caloric which has been collected during summer? Why not? The observations of M. Jeannel are, as it were, the first steps on this seemingly fantastic path."

M. Behic, Minister of Agriculture, Commerce, and Public Works, has just published the Report he has addressed to the Emperor concerning the recompenses recommended to be decreed to persons who have exhibited exemplary devotion in the late epidemic of cholera. Besides several bestowals of the Cross of the Legion of Honour, there is a whole shower of medals — gold, silver, and bronze, between 400 and 500 in number. In fact, so numerous are the occasions on which a French Practitioner may reckon to be in receipt of medals, for even very ordinary proceedings, that we suppose a *boite a medailles* must form a necessary part of his outfit. They are decreed to industrious vaccinators, mineral-water inspectors, reporters of epidemics, and numerous other Practitioners in such profusion that one would have thought that long ere this their distinctive value must have undergone a deterioration that rendered them well nigh worthless. That Medical students should derive some satisfaction from such distinctions at the onset of their career is intelligible enough; but we must confess feeling a little astonished at finding that no less than twenty-five Paris Hospital Physicians considered themselves honoured in receiving silver medals for the performance of what after all is one of the ordinary duties of the Medical career. Certainly our own Government is chary enough in the recognition of services, but we think that it indicates a more healthy state of affairs to leave the appreciation of these to the public and the Profession rather than submit them to so puerile a system of recompense which prevails not only in France, but generally on the Continent. However, if medals they must have, we have no doubt that our *confrères* on this occasion deserved them, for there seems to have been no lack of devotion and no sparing of exertion. The mechanism by which the respective merits were judged of, and impartiality in the distribution of the favours secured, we are ignorant of; but it is evident that there must be ample room for the exercise of official patronage and favouritism.

### PARLIAMENTARY.—SURGEONS IN THE GUARDS—THE COMMITTEES ON THE CONTAGIOUS DISEASES AND CITY CORPORATION GAS BILLS—THE EMPLOYMENT OF CHILDREN IN MANUFACTURES AND AGRICULTURE.

ON Friday, April 13, in the House of Commons,

Captain Vivian asked the Secretary for War whether he would object to lay upon the table of the House a copy of the Warrant of 1860, under which the system of promotion of the Assistant-Surgeons of the Brigade of Foot Guards had been altered, and whether a copy of such warrant had been forwarded to officers commanding those regiments.

The Marquis of Hartington said the hon. baronet the member for Fifeshire had given notice of his intention to move for the documents bearing upon the subject in question, and until then he should abstain from making any remarks upon the matter.

On the motion of Lord C. Paget, it was ordered that Lord Hotham be discharged from further attendance on the Select Committee on the Contagious Diseases Bill, and that Sir C. Russell be added to the committee.

Mr. Otway suggested that one of the members of some of the towns affected by the Bill should be appointed on the committee.

Lord C. Paget acceded to the suggestion, and hoped the hon. gentleman would give a notice to that effect.

Mr. Crawford moved the Select Committee on the London (City) Corporation Gas Bill:—Mr. H. Russell, Mr. Dutton, Mr. Woods, Colonel North, Mr. Morrison, Mr. Westropp, and Mr. Waldegrave-Leslie, be appointed.

On the motion that Mr. Waldegrave-Leslie form one of the committee,

Mr. Ayrton said, as his hon. friend objected to serve, he begged to give notice that he would propose to substitute the name of the hon. member for Finsbury (Alderman Lusk).

The name of Mr. Waldegrave-Leslie was then omitted.

In the House of Lords, on Tuesday,

Lord Shaftesbury referred to the disclosures contained in the report of the Commissioners upon the employment of children in particular trades and manufactures, and asked whether the Government intended to carry out the recommendations of the Commissioners.

Lord Russell said the subject was under consideration.

In the House of Commons,

Mr. Fawcett asked the Secretary of State for the Home Department when the Government would introduce their promised measure for the extension of the Factory Acts, and whether the Government had considered the desirability of regulating the employment and education of children who are employed in agriculture.

Sir G. Grey said, in reply to the first question, that it was not possible to fix a day for the introduction of the Bill. The last report of the Factory Commissioners applied to a variety of trades, and it would require some time as well as much consideration to deal with the various details connected with the subject. The process of investigating them with a view to legislation was, however, being carried on with all due despatch. The Government, he might add, had framed no plan on the subject of his hon. friend's second question.

## THE COMMITTEE ON LEPROSY.

The forthcoming report of the Leprosy Committee of the Royal College of Physicians will be a valuable addition to Medical literature, if we may judge by the "Memorandum" already issued containing the first batch of replies, received in answer to the interrogatories proposed and circulated by the Committee.

We must be prepared for a little more delay than was at first anticipated, as we understand that the mass of written evidence received since the issue of the first "Memorandum" is very large indeed, and to arrange and criticise carefully the various details must be a matter of very considerable labour. The Memorandum to which we now refer contains an abstract of the replies to questions received from New Brunswick, Bermuda, Bahamas, Jamaica, Tortola, St. Kitts, Nevis, Montserrat, Antigua, Dominica, St. Lucia, St. Vincent, Barbadoes, Grenada, Tobago, Trinidad, Cape of Good Hope, Sierra Leone, Tangiers, Tunis, Tripoli, Bengazi, Cairo, Jerusalem, Beyrout, Cyprus, Damascus, Aleppo, Rhodes, Smyrna, and parts around; Crete, Ionian Islands, Salonica, Bucharest, Dardanelles, Constantinople; the Indian Presidencies, Ceylon, Mauritius, China and Japan, Australia and Norway.

We noticed in reading through the abstract, a very great uniformity in the opinions expressed in regard to the leading features in the history of the disease, and a general agreement in the more important points in the course and pathology of elephantiasis. Leprosy is known to be dependent upon some condition associated with bad food and bad hygiene, and it is universally, without exception, admitted to be hereditary—to exhibit two forms, the anæsthetic and the tuberculous—to be more prevalent in males than females—to be developed most frequently between the ages of about 6 and 20—to be incurable when once established, and to be generally, if not always, non-contagious. It is more frequent amongst the blacks and coloured races, as a rule, but it may arise in those whites who have sojourned in leprous districts for any length of time. It is regarded by the reporters, with one exception, to be quite independent of syphilis.

But there are many special circumstances worthy of note, and first of all the transplantation of elephantiasis is well illustrated by the report received from New Brunswick and Australia. It appears to have been carried to the former place by a French emigrant from St. Malo, in Normandy, and still remains as a heirloom in the descendants alone of the original leper. Dr. McCrea states that in Australia it is only known amongst the Chinese, who imported it from their own country.

Secondly, as to the earliest stages of disease. It will be remembered that Dr. Vandyke Carter has strongly contended for the necessity of describing the early stage as an *eruptive* one. The eruption partakes of the character of erythema, out of which are developed whitish, sometimes darkish coloured anæsthetic spots. This is described as a "fine red rash" by Dr. Benson (New Brunswick): "as erythematous patches of bright red colour," so that the patient looks as though overheated by exercise, by Dr. Hinson (Bermuda). At St. Kitts and Nevis, the same is noticed, and the disease is called in the latter place "Red Leprosy." Governor Hamilton observes that in Antigua there are reddish blotches somewhat resembling urticaria, but they are permanent, and in addition anæsthetic patches like *pityriasis vesicolor*. Dr. Carrington, of Barbadoes, describes the eruption as of a pinky-rose hue; Dr. Young notices this also; Dr. Aguart (Granada), "red irregular patches;" Drs. Murray, Anderson, and Saturnin state that the eruption is noticeable in Trinidad, and Dr. Tygaldos in the Ionian Islands. Dr. Carter, of course, describes it as seen frequently in India, and Dr. Hobson, in China, as consisting chiefly of "red spots;" but the Chinese have a white spot and a red spot leprosy, which are recognised as early stages of the more fully developed elephantiasis. From all sides, then, there comes abundant testimony to the fact that leprosy is marked at its outset by an erythema. This is often mistaken for syphilis. A case of this kind is mentioned by Dr. Tilbury Fox in the *Edinburgh Medical Journal* for March, 1866. Dr. Hinson, of Bermuda, says it is "often mistaken for syphilis;" Dr. Stevenson, of Barbadoes, that it produces similarity to syphilis.

As to the connection of syphilis with leprosy. There is a general and almost unanimous agreement amongst the reporters that these two diseases have no connection with each other in nature. Mr. Bradshaw, of Sierra Leone, is an exception, and observes that it is a result of syphilis. In Arabia it was known long before syphilis was introduced there. A resemblance may be produced between the tubercular stage of either disease, but the history soon clears up all doubt. It is astonishing to note how frequently observers call attention to the use of bad fish and rancid oil as a chief article in the diet of those countries in which leprosy is common. We gather from the contents of the Memorandum that leprosy has no topographical connection with malarious districts, that it prevails in spots that have no right to the title "malarial." Dr. Bowerbank notices that "there is no connexion between malarial districts and leprosy," and Dr. Abercrombie (Cape) testifies to the same fact. But all writers agree that leprosy is most abundant along and near the sea coasts, or at any rate in spots where fish-eating habits are a characteristic feature. This fish is often putrid, pickled, or salted. If fish be not taken, sour milk or rancid oil enters largely into the diet of people in leprous districts. Drs. Bayard, Gordon, and Nicholson (New Brunswick) give as part of the cause the use of decomposing and offensive fish diet. The same is noticed in Bahamas by Drs. Chapman and Sweeting; in Jamaica, in St. Lucia, where bad salt fish is the most general animal food, Dr. Gardiner; and at St. Vincent's (Dr. Smith). In Scio, leprosy is extremely rare amongst the Turkish peasants, who practise frequent ablutions, use more animal food, and little, if any salted fish; but their Greek neighbours are largely affected. Dr. Hjorth says, in speaking of Crete, the food of the peasant consists of "a large quantity of bad salt fish, barley bread, and of an enormous quantity of olive oil, often rancid, which they will drink like water;" and he calls attention to the analogy between the oily diet of the Norwegian and that of the Cretan. Dr. Tygaldos also remarks upon the bad bread and bad olive oil consumed by the people of the Ionian Islands. On the Malabar Coast, "rice and shell-fish are the staple articles of food," (Dr. Innes). A fish diet is frequent in China and Japan, (Dr. Dickson). In Trinidad, "tainted fish" is used (Dr. Saturnin). At Barbadoes, the Cape, Cairo, Beyrout, the same fish-eating habit prevails, whilst bad olives, rank oil, salt and putrid fish, and bad bread, are relished in such places as Smyrna, Scio, and Mytellene. There would seem to be good ground, then, for believing that the consumption of putrid fish and rancid vegetable oily matter in abundance has something to do with the causation of elephantiasis. Observers differ somewhat as to the contagiousness of leprosy. The Chinese believe it to be eminently contagious, and evidence to this same effect has been furnished by Dr. Reynaud (Mauritius), who states that "a wife got leprosy from contact with the dressings of her leprous husband." Dr. Aguart (Grenada), Mr. Rogers, Dr. Stevenson, Dr. Goding (Barbadoes), and Dr. Checkley (St. Vincent), also relate cases which seem to indicate that the discharge from leprous ulcerated surfaces, may be the means of communicating the disease; but it is open to question whether even in these cases there may not be hereditary predisposition which is developed coincidently with the influence of the supposed cause. The *majority* of observers, however, agree that while intermarriage favours its propagation, the disease is not, as a rule, in any degree contagious, and therefore we find that in a large number of districts lepers are allowed to be at large without any special restriction, except that which is self-imposed or inseparable from poverty and vagrancy.

It is very curious that whilst in Cairo and Jamaica the Jews are specially affected, they should be peculiarly exempt in Syria. In Cairo the lighter coloured races appear, contrary to the general rule, to be more affected than the darker Arab race. No cases of leprosy are reported in Monastir, Bosnia, Bucharest, Varna, Dardanelles, or Brussa. A good deal of mystery has always surrounded the so-called "Bouton-d'Alep." Dr. Mongeri (formerly of Crete) states that it is the same as the "Bouton-de-Crete," a form of the ordinary tubercular leprosy.

We should have been glad if the Committee had included questions that would have lead to the distinction of the pellagrous form of leprosy. We cannot help thinking that many cf the cases used as the basis of records are those of pellagra, and it is of some importance to separate (in determining causation) pellagra from true elephantiasis.

With regard to treatment, the recommendations are expressed in general terms. Nothing appears to be of any very great benefit when the disease is once developed. "Rare cases of spontaneous cure in a very early stage of the disease are said to have occurred by the removal to a climate quite different from that where the disease originated (Scio), as Wallachia, Moldavia, Russia. A man, 28 years of age, son of a leprous mother, and having four brothers younger than himself, all leprous, left this island on the earliest appearance of the disease for Constantinople, where he lived four years. Last spring he returned apparently quite well; but, being obliged to return to work in the fields, within three months he became quite leprous." The chief thing to be aimed at is non-intermarriage with lepers, the allowance of the most nutritious food, and the adoption of good hygienic states. Medicinally, arsenic internally and iodine externally seem to be the chief remedies.

The pathology of the disease is meagre in the extreme. We cannot help thinking that very much good might result from the appointment of some Commission to investigate this aspect of leprosy in its endemic haunts. We want also some very precise knowledge as to the influence of topography, malarial poison, diet, contagion, in addition to information as to the minute microscopic changes in the tissues of lepers. At present we are only at the threshold of such an inquiry. The labours of the Leprosy Committee will no doubt define the more important doubts and differences which await solution—in fact, supply us with the average beliefs of Medical men, and we think this may fairly be supplemented by special research.

## REVIEWS.

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*Lehrbuch der Psychischen Krankheiten.* Von Dr. Max Leidesdorf, Docent der Psychiatrie an der Wiener Hochschule, etc.

*Text-book of Mental Diseases.* By Dr. Max Leidesdorf, Teacher of Psychiatry in the High School, Vienna. Enke, Erlangen. 338 pp.

This work has already appeared in a somewhat different form and under a different title, having been originally published in 1860, and then called "Pathologie und Therapie der Psychischen Krankheiten" (Pathology and Therapeutics of Mental Diseases). In this shape it met with decided success, and a new edition having been called for, the book now appears enlarged in form and under a new title. Although Dr. Leidesdorf is the responsible author of the whole work, still men eminent in particular departments have lent their aid in revising certain portions of it, and while thus giving it a somewhat encyclopædic character, have also given it additional weight as an exposition of the most recent views entertained on the Continent in connexion with psychological Medicine. Thus the part treating of the anatomy of the brain has been revised and illustrated by Dr. Meynert, a *Docent* in the High School, Vienna. Stricker, and the well-known Brücke, have superintended the production of that division which relates to cerebral physiology; while Schott, for some years principal assistant to Rokitansky, and himself no mean authority on the subject, has revised the chapter on the pathology of mental diseases.

We shall try to give some idea, however inadequate, of the contents of the work, taking each chapter in regular sequence, although the space at our disposal does not admit of any very lengthy report.

The work begins with an historical sketch of the development of psychiatry in the four great historical periods, which Dr. Leidesdorf designates the primitive, the antique or artistic, the dialectic, and the scientific. The first of these extends from the Creation to the time of Hippocrates; the second, from the days of Hippocrates downwards to about the time of the Christian era; the third, from the third to the fifteenth centuries; and the last, from the revival of learning to the present time. The author directs his attention principally to the last of these, in which, like every other department of science, Medicine has made its principal advances, while psychiatry may almost be said to have taken its rise with it. The progress of this department of Medicine has been most marked in France, Germany, and England, and to its history in these countries Dr. Leidesdorf chiefly draws attention, noticing in an especial manner the researches of Prichard, Morison, Haslam, Winslow, Conolly, and others of our countrymen.

As an introduction to the more practical part of the work, we have next a short outline of the anatomy of the brain, illustrated by figures from sketches by Dr. Meynert, and comprehending the latest researches of Leuret, Gratiolet, Lockhart Clarke, Huschke, and Schroeder van der Kolk. Following this is an outline of cerebral physiology, where notice is taken of the most recent advances in our knowledge of the subject, and the investigations of Kussmaul and Tenner, of Schroeder van der Kolk and others, as to the states of the brain causing convulsions, etc., discussed at some length. Some account is also given of Pflüger's researches as to the propagation of nervous energy, du Bois Reymond's on the electrical condition of the nerves, Schiff's on the functions of the various parts of the brain, along with many other points which we cannot here refer to. As a natural sequel to such a chapter, we have next a sketch of psychology, treated, however, chiefly in its somatic relations, which, in turn, leads to a discussion of the more elementary mental derangements, including an appreciation of the value of mental depression, hallucination, illusion, hyperæsthesia, anæsthesia, etc., as diagnostics and prognostics. Next in order comes a chapter on the etiology of mental disease, and an estimation of the relative values of its various causes, both predisposing and exciting. Among the former special importance is attached to hereditary taint, example, period of life (from 30 to 40 being the most critical time), etc. The author divides the exciting causes of insanity into somatic and psychical; of the former class some are directly referable to the brain or its coverings, as meningitis, encephalitis, new formations, parasites (for an account of which with reference to insanity we are indebted to Professor Griesinger, of Zurich), apoplexy and its consequences, embolism, choking of the cerebral arteries by pigment in intermittent fevers, concussion of the brain, injuries to the head, protracted epilepsy and chorea, exostoses, or caries of the bones of the skull, sunstroke, hyperæmia or anæmia of the brain and its membranes, influence of narcotics, etc. Embolism, one of the most common of these, may, in turn, arise from endocarditis, deficiency of the aortic valves, or aneurism of the aorta, and usually gives rise to loss of consciousness, hemiplegia, and loss of speech. This subject, which is discussed at considerable length, is further illustrated by the citation of a few cases selected from those published by Oppolzer and Gerhardt. Among other causes of mental derangement, not so directly referable to the brain, are pneumonia, spermatorrhœa, pregnancy, delivery, puerperal fever, lactation, acute rheumatism, intermittent fever, secondary syphilis, and the exanthemata. Among the psychical causes the most important places are assigned to love or jealousy in women, and ambition in men.

Having discussed the causes and symptoms of insanity, Dr. Leidesdorf next proceeds to classify the various mental disorders, and in so doing avoids the clumsy and artificial arrangements adopted by many German writers, as Neumann and others. Following the example of Reil, Pinel, and Esquirol, he selects the nature of the aberrations themselves as the basis on which to found his groups. These divisions are three in number, the first characterised by *depression*, the second by *exaltation*, and the third by *weakness*. The two first, marked by disturbance of thought and perception, of a depressed or elevated nature, are sometimes termed the *primary*, and are characterised by their comparative curability; the third, known also as the *secondary* class, is hopeless as to curability, while the delusions are usually more equable in their character than in either of the others.

The first group, or that characterised by depression, consists of two members—viz, Hypochondriasis and Melancholia—the former being the milder form of the two, in which the attention of the patient is entirely centred in himself, and his hallucinations are connected with his own person. If to these, insanity of a depressing kind be superadded, we have melancholy, which Leidesdorf divides into melancholia religiosa, dæmonomania, melancholia metamorphosis, and melancholia cum stupore.

The next division is devoted to diseases of exaltation, or mania properly so called, divided into two forms—*Tobsucht* (acute mania), characterised chiefly by muscular excitation, increased mental activity with delusions, etc.; and *Wahnsinn*, a chronic condition of the former, where the excitement is more protracted and the delusions more permanent, ending in complete loss of identity on the part of the patient.

The author next proceeds to consider the forms of insanity characterised by permanent weakness of mind, corresponding somewhat to our fatuity or dementia, as the congenital forms (idiocy and imbecility), are not here discussed. The first of these conditions does not appear to have any exact representative in our classifications. It is called *Verrücktheit,* literally derangement or craziness, and is described as being usually developed from acute mania (*Tobsucht*) or melancholia. The delusions apparent in this form of insanity are uniform in character, but the whole appearance of the patient is changed, even though a considerable degree of intelligence may remain during the earlier portion of its course. It ultimately ends in the next variety known as *Blödsinn*, or idiocy, this being only seen in advanced life (primary) or as a result of one of the disorders already mentioned (secondary), when it corresponds more exactly to our dementia. Both of these kinds of insanity are accompanied by lesions of the cerebral organs, and are reckoned incurable. To a particular form of this Blödsinn, corresponding to our general paralysis, the author devotes a valuable chapter, giving the latest results of the Continental pathologists. The part of the book devoted to the description of mental disease closes with a chapter on the relations of epilepsy and mental alienation. As a remedy for the former affection, the author recommends atropine.

A valuable section of the volume is given up to the pathology of insanity, where the morbid conditions which usually accompany it are described in order, beginning with those dependent on the bones of the head, then those on the membranes, and finally those connected with the brain itself. Some of the causes less known in this country are, thickening of the epithelial coat of the dura mater or arachnoid, various kinds of ulcers of the same, thrombosis of the cerebral sinuses, etc.

In his last division, our author gives an outline of insanity in its Medico-legal relations, with extracts from the various German codes with regard to it, but as this subject is already known to most of our readers through the New Sydenham Society's translation of Casper, we shall draw our notice to a close. The volume ends with some very characteristic plates of individuals labouring under the various forms of insanity.

Contrasting this volume with the best of our general treatises on insanity—Bucknill and Tuke's "Psychological Medicine"—we must say that the German work is a worthy rival, so thorough is it, and so comprehensive—indeed, we could not well conceive a greater boon to the Medical public than a translation of such a work as that just noticed, with the practical remarks of a man of standing, approximating and contrasting the German and British systems of psychiatry.

*Balneologische Notizen über die Kurmittel des Bades Reinerz, in Schlesien.* Von Dr. **Hermann Beigel.** Enke, Erlangen.

*Balneological Notes on the Curative Effects of the Reinerz Baths, in Silesia.* By Dr. H. **Beigel.**

By a treatise on the curative effects of the medicinal waters of Reinerz, in Silesia, Dr. Beigel has added another to the already overgrown balneological literature of the Continent. As usual, he commences with the site, its beauties, and advantages in the shape of temperature, etc.; as usual, also, he gives lithographs of the bath-house and of the neighbourhood, sketches of the various plans and means of treatment, analyses of the waters, and, finally, a number of cases supposed to have been benefited by the treatment usually adopted. This treatment may conveniently be put under two heads—water, internally and externally, and whey. One of the baths, supposed to be particularly useful in cases of scrofula, rheumatism, etc., contains a small quantity of iodine, as iodide of sodium, but whether their fame will ever be sufficient to tempt English visitors is rather doubtful. With regard to the value of such books as this we have also our doubts; at all events, we are of opinion that what is here detailed in about two hundred pages would, in all probability, have been condensed into five-and-twenty by an Englishman. In such works there is always a one-sidedness which is not at all to be desired in a book intended for guiding a Medical man in the disposal of his patients: they may, in fact, be said to be written for two motives—self-glorification and patient hunting, and these in about equal proportions, the preponderance slightly inclining to the latter. To such an extent has the plague of balneological literature spread on the Continent that a satire on it appeared in Frankfort in 1861, entitled "The Salzloch Spa: its Iodine- Bromine- Iron- and Salt-containing Sulphur Springs, and the Tannic Acid-Animal-Air-Baths; with a Defence of the Game of Hazard. By Dr. Polycarpus Stranger-Catcher (Gastfänger)." With regard to Dr. Beigel, what he has done he has certainly done well; we only wish he had written on something else.

*Compendiöses Wörterbuch der Speciellen Arznei-Verordnungslehre bearbeitet. Von* Dr. **Karl Philipp Falck,** Prof. Med. an Marburg. Enke, Erlangen.

*A Compendious Dictionary of Medicinal Formulæ.* By K. P. **Falck,** Professor of Medicine at Marburg.

A very different book from that just noticed is "The Dictionary of Medicinal Formulæ," by Professor Falck, of Marburg, which might almost be called a treatise on the Materia Medica, arranged according to their pharmaceutical preparations. The most valuable point in connexion with it is that it gives at one view the officinal preparations of all the German Pharmacopœias, as well as the best modes of exhibition, the properties and doses of substances not contained in any Pharmacopœia, though employed in medicine. As examples of these might be cited curara, guaco, such preparations of mercury as the santonate, the preparations of manganese, phenol, fusel oil, picrotoxine, etc., etc. In some cases we have specimens of prescriptions; thus, under the head of Phosphorus three are given to indicate the various ways in which it may be exhibited Again, where the components of preparations having the same names differ in the different Pharmacopœias, the ingredients of each are given in the form of a table; while in an appendix a series of tables are given, showing the differences between the 6th and 7th editions of the Prussian Pharmacopœia and of these from the other German State Codices. The volume terminates with a double index, the one in Latin the other in German.

The doses are given throughout according to the Nurnberg Medical weight, which is the same (with reference to the grain, at least) as our apothecaries' weight.

This is a book we can most cordially recommend to those who are in the way of reading German Medical works, and who are doubtless sometimes puzzled by the prescriptions contained in them; nor will it be by any means a useless addition to the library of any Medical man who wishes to make himself acquainted with the state of therapeutical science in Germany.

## REPORTS OF SOCIETIES.

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## THE PATHOLOGICAL SOCIETY.

Tuesday, March 6.

Dr. Peacock, President.

The President exhibited to the Society a specimen of

### ABSCESS IN THE RIGHT HEMISPHERE OF THE BRAIN.

The specimen was removed from a boy aged 4, who was a patient of his at St. Thomas's Hospital. The boy was admitted in April, and then was reported to have been ill three months. He had been first seized by convulsions, and on recovery was found to be paralysed on the left side. On admission he was very intelligent for a child of the age, but the left arm and leg were completely powerless. There was ptosis of the right eyelid, both pupils were dilated, and the right was entirely insensible to light, the left nearly so; he was apparently blind of the right eye. When asked what was the matter with him, he uniformly placed his hand on the right temple, and said "pain," "pain." Some time after he had been in the Hospital the ptosis disappeared, but both pupils were dilated and insensible, and the vision of the right eye was apparently abolished, and that of the left imperfect. He was again taken with convulsions, and died very shortly after in July. On dissection an abscess containing fully eight ounces of greenish yellow pus was found in the right middle cerebral lobe, extending close to the convolutions. This was surrounded by indurated tissue, and there were compound granular corpuscles also in the right corpus striatum and thalamus. There was also some sub-arachnoid effusion, and lymph on the surface of the right hemisphere. The left side of the brain and the other organs of the body were free from disease. The President remarked that the great interest of the case arose from the fact that, though the abscess was evidently of old date, the child was peculiarly intelligent up to a very short time before his death.

Mr. Holmes then gave particulars of a case which in some respects resembled that narrated by the President. A boy was under his care for disease of the hip. Excision was performed. The boy had convulsive attacks, but recovered. Subsequently, however, amputation was necessary for inflammation of the femur. From this also he recovered, but died at length, after a severe attack of convulsions, from abscesses of the brain, one in the cerebrum and the other in the cerebellum. The origin of the abscesses was not known. It might be suggested that they were pyæmic, but there had been no pyæmic symptoms.

Dr. Hughlings Jackson said the specimen exhibited by the President was one of interest in reference to the question of the seat of damage to the nervous system, when speech was lost,—a question now much discussed in France. It was worthy of remark that in the President's case, the child could talk, although there was a large abscess in the right hemisphere. Dr. Jackson asked Mr. Holmes as to the side of the brain affected in his patient's case.

Mr. Holmes was under the impression that the right hemisphere was the one diseased.

Mr. Holmes read, for Mr. Hickman, the following account of a specimen of

### CYSTIC DISEASE OF BOTH OVARIES.

This specimen was removed from a patient who came under my notice at the Western General Dispensary on account of an umbilical hernia, and who died of exhaustion from vomiting, coupled with fatty degeneration of the heart. The subject of it was a large, fat woman, aged 64, and the ovarian disease had not been suspected during life, all her abnormal symptoms having been attributed to the hernia; but it appeared that for several years past she had suffered from pain and weight—greatly increased by walking or riding—at the lower part of the abdomen, had had constant attacks of sickness, and had been unable to make water except in a standing position. She had borne several children, the last at the age of 41; the menses became very irregular after this, and ceased at the age of 52. The tumours were freely moveable, and at the post-mortem lay one behind the other, the large one occupying the front in the centre of the pelvis, and looking exactly like a distended bladder: this one had one long, firm adhesion to the back part of the pelvis. The walls of the cyst were excessively thin, so that the mere manipulation in drawing the tumours to one side caused some of them to burst, allowing a quantity of reddish serous fluid to escape. The tumour of the right ovary was about the size of a duck's egg, that of the left, before being injured, was as large as the egg of an ostrich, showing two stages of cystic disease.

Dr. Greenhow exhibited a specimen of

### COLLIER'S LUNG,

for which he was indebted to the kindness of Dr. Philipson, of Newcastle-on-Tyne. It was taken from the body of a pitman, aged 30 years, who had not died of pulmonary disease, but in consequence of injuries received in the mine. The lungs were free from consolidation and from any trace of tubercle, but they were very dark in colour, almost black, and under the microscope black pigment was found deposited in and around the cell-walls. A portion of the lung incinerated and afterwards boiled in strong nitric and hydrochloric acids left a considerable residue, which was found to consist of silica, partly in an amorphous state, partly in crystalline fragments, which polarised light. On analysing the acid liquor in which the ash had been boiled a considerable trace of alumina was discovered.

Dr. Greenhow also exhibited a specimen of

### POTTER'S LUNG,

which had been forwarded to him by Mr. W. Dunnett Spanton, of the North Staffordshire Infirmary. It was taken from the body of a man, aged 35, who had worked as a potter all his life, and had died with symptoms of phthisis. On section cavities were found in the upper lobe of the lung, and the pulmonary tissue was consolidated and contained many small, hard, perfectly black nodules, which near the apex were intermixed with granular matter resembling tubercle. There was likewise much black pigment deposited in patches throughout the crepitant portions of the lung. Under the microscope the cell-walls showed deposits of black pigment, and the field was here and there traversed by what looked like semi-transparent fibrous bands. The cells in the consolidated portions of the lung were occupied by opaque, yellow granular matter mixed with irregular nuclei. A portion of lung incinerated left an ash partly soluble in boiling nitric and hydrochloric acids, the insoluble residue consisting of amorphous silica. The acid liquor was found to contain a large amount of alumina. These specimens were further illustrations of a subject which he (Dr. Greenhow) had already on two former occasions brought under the notice of the Society. There could be no doubt that in both cases pulmonary irritation had been excited by the inhalation of dust, and that in the potter's case true phthisis was superadded to the results of that irritation.

Dr. Moxon suggested that it was not quite certain whether the presence of the foreign bodies in the lungs was cause or effect. Healthy lungs, he said, would be able to get rid of a large quantity of foreign matter, but if there were a bronchitis it might be impossible. All chronic lung disease, he remarked, was attended with deposition of pigment.

The President said that in a specimen of very dark lung which he had exhibited to the Society, obtained from a Cornish miner, the black material was found by Dr. Bernays to be carbonaceous, not an animal pigment. He inquired of Dr. Greenhow whether there had been any coal found in the lung in the first case he had exhibited to the Society, as well as siliceous and aluminious matter.

In reply to these and several other speakers, Dr. Greenhow said that he had no doubt as to the inhalation of dust being the direct cause of the pulmonary disease to which colliers, grinders, potters, and other operatives in dusty employments were liable. The disease was in the first instance bronchitis, to which, at a later period, consolidation of the lungs was often superadded. Doubtless the bronchial irritation caused by the mechanical irritants produced a change in the bronchial membrane, impairing the function of the ciliated epithelium, and thus favouring the further passage of the irritating particles into the smaller tubes. As regarded the black colouring matter, he had no doubt that in some cases it consisted partly of matter received from without by inhalation; but, as the lungs were found black in cases in which the dust inhaled was not of that colour, he could not doubt its being also frequently a deposit formed within the body. He might say that he had on many occasions boiled portions of black lung in strong hydrochloric or nitric acid without producing any effect on the colouring matter, which was evidently carbonaceous.

Mr. Spooner showed casts of specimens illustrative of the

### CATTLE PLAGUE.

The casts were numerous, and were all from decided cases of cattle plague. They were made by Mr. Tuson, and represented the mucous membrane of the mouth, the trachea, the rumen, omasum, fourth stomach, large and small intestines, etc. In the course of his remarks Mr. Spooner said that Mr. Worms' treatment of the disease had turned out to be a complete failure.

The President said that some time ago he had requested Mr. Spooner to show these specimens, and he felt sure the Society would feel thankful to Mr. Spooner for having done so.

Mr. Spencer Watson showed a specimen from a

### CASE OF STRANGULATED OBTURATOR HERNIA.

The patient was a woman, of 76 years of age, who had all the symptoms of strangulated hernia without any signs to indicate the precise seat of the hernia. She had an old inguinal hernia on the left side, which could be easily reduced, and the only part at which there was the slightest unusual fulness which could have pointed out the true nature of the case was at the upper part of Scarpa's triangle on the right side; this fulness, however, seemed to be due to enlarged glands in that locality. The hernia was a small one occupying the left obturator canal, the bowel being ulcerated on the mucous surface, but the peritoneum remaining entire.

Mr. Spencer Watson also showed specimens from a

### CASE OF ALVEOLAR DISEASE OF BOTH OVARIES.

A widow lady, 49 years of age, had symptoms of abdominal tumour for some months, and accompanied by frequent vomiting. The diagnosis was not made during life, though several different opinions were formed. The nature of the tumour was of the alveolar variety, consisting of numerous cysts varying in size from that of an orange to that of a pin's head, and very closely packed together. The microscopic appearances resembled closely those observed in a similar case exhibited by Dr. Julius Pollock to the Society. There were no adhesions in front of the tumours, which, however, were adherent to each other and to the deeper structures.

Mr. **Pick** showed a specimen of

### RUPTURE OF THE POPLITEAL ARTERY.

As this case excited much interest, we give a full report of it.

The patient, aged 25, was admitted into St. George's Hospital with the history that on the 21st of December of last year he was engaged in raising a heavy truck by means of a crow-bar, when the bar slipped and struck him a violent blow on the front of the right thigh. This was followed by a sudden and intense pain in the back of the knee joint, which lasted some minutes and caused him to feel very faint. The pain then passed off, and he resumed his work, that of a navigator. He continued at work for a week in spite of pain and some slight swelling of the limb, and on the 27th of December he walked several miles, from Edgeware to Barnet. Whilst walking the pain in the knee became very severe, and considerable swelling of the limb came on; so much so, in fact, that he was unable to get home again, and was obliged to be conveyed there. From this time he was confined to his bed, and was seen by a Medical man, Dr, Wotherstone, of Stanmore, who states that the limb was then much swollen, but without discolouration, and that there was pulsation in the tibial artery. He was ordered bran poultices. The swelling continued to increase till the middle of January, after which it remained stationary. A day or two before admission into Hospital, however, a soft fluctuating spot was felt in the ham, and was punctured and discharged some broken down blood-clots. When admitted on February 1 he was in a state of extreme collapse and delirious; so much so, indeed, that no history could be obtained from him. The pulse was 144, very weak, and he was covered with a cold, clammy sweat. The left leg was enormously swollen to a short distance above the knee. The skin was quite cold, tense, and white; there was not the slightest appearance of discolouration about it, except on the heel, where there was a large bleb, filled with bloody serum. No pulsation could be felt in the tibial; but this might have been due to the swelling. There was forcible pulsation in the femoral in the groin. In the popliteal space there was a small opening, from which fluid blood was oozing. An incision was made into the leg, and it was found to be one mass of coagulated blood. The thigh was, therefore, amputated by the double flap method. On making an incision into the leg after the operation, the whole of the back of it was found to be occupied by a mass of coagulated blood, weighing over two pounds; this was diffused throughout the tissues, and was in no way encysted or circumscribed. In the centre the clot was broken down, and commencing to suppurate. The blood was found to come from a rupture in the popliteal artery, opposite the knee-joint; the rupture was not quite complete, the two ends being still united by a small portion of the anterior wall of the vessel. The coats around the rupture were much thickened, and there was no plugging of the orifice. The popliteal vein was uninjured, but the walls of this vein, as well as those of the anterior and posterior tibial were much thickened, and they contained clots adherent to the lining membrane. The tissues on the front of the leg were infiltrated with a gelatinous serum. The knee-joint was uninjured. After the operation the patient rallied for a time; symptoms of pyæmia then set in, and he died from this disease on the nineteenth day after the operation. The interest in connexion with this case is the fact that the lesion should have existed such a length of time—six weeks—without any appearance of gangrene; this, no doubt, was due to the fact, as has been shown by Mr. Poland, in the fourth volume of "Guy's Hospital Reports," that the rupture was not quite complete. In a case which occurred under the care of Mr. Cæsar Hawkins in 1858, the rupture, though not complete, was followed by gangrene on the fifth day. Another point of interest in connexion with the case is to determine the exact time at which the rupture took place. It seems most probable that at the time of the accident the coats of the vessel were only injured, perhaps the internal and middle ruptured, and that the complete laceration and effusion of blood was the result of walking, with an injured vessel, so many miles on December 27.

Mr. **Holmes** remarked that the case was interesting in several points. In the first place, with regard to the very long period during which gangrene was delayed, and which had been referred by Mr. Pick, with much probability, to the fact of the laceration having been incomplete at first. In the second place, the case was of interest with reference to practice. Ought the limb to have been amputated at the outset? The Medical man who had had charge of the case originally was, as he understood, threatened with an action at law because he had not pointed out the nature of the injury at once, and recommended or performed amputation. But in the cases of this injury which Mr. Holmes had seen at St. George's Hospital, it appeared to him that they had done better by delaying amputation until gangrene was unmistakeably declared, while as to diagnosis he had seen cases in which the diagnosis was impossible, in consequence probably of the laceration being, as in this instance, only partial. Thus, in a case under Mr. Cæsar Hawkins's care some years ago, Mr. Hawkins was confident that he could feel the pulsation of the anterior tibial, and a good deal of doubt at first existed as to the nature of the injury.

## OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, MARCH 7, 1866.

Dr. **Barnes**, President.

The following gentlemen were elected Fellows of the Society: Drs. G. B. Brodie, John Easton, C. B. Fox; Messrs. N. Avent, R. Blagden, J. H. Bryant, Thomas Dane, W. Dewsnap, R. A. Elliott, John Loane, W. Soper, H. Winterbottom. Professor Retro Laggati, (of Milan), and Dr. Theodore Hugerberger (of St. Petersburg), were elected Honorary Fellows.

Dr. **Tyler Smith** showed a new Vaginal Speculum made for him by Messrs. Weiss. He considered it much more convenient than any other known to him. It was made in the form of a double duck-bill, the ends being in close apposition. The nuisance of having a plug for the sake of introduction was done away with.

The **President** stated that he had had a rod made after the fashion of the uterine sound for the purpose of Cauterising the Cervix Uteri in the manner described by him at the last meeting.

Mr. **Baker Brown**, jun., exhibited a little boy, ten weeks old, born with Amputated Arms and Legs, but perfect in other respects. On one of the thigh stumps there was an appearance of toes, and on each of the stumps of the upper extremities was a distinct nipple.

Dr. **Madge** showed a specimen of Fibrous Tumour of the Uterus. It measured fifteen inches in circumference, and weighed nearly two pounds. It had a pedicle, which was attached to the posterior wall of the uterus.

Dr. **Barnes** exhibited a specimen of an Encysted Fœtus, which had been removed at the patient's death, forty-three years after its escape into the abdominal cavity. He also showed a Mummified Fœtus, which had been expelled after the birth of a full-grown child.

Dr. **Braxton Hicks** exhibited a specimen of the Echinococcus, which had been discharged from the vagina.

Dr. **Walker**, of Peterborough, read the history of a case of Ruptured Vagina during Labour.

Mr. **Baker Brown** read a paper on the

### USE OF THE ACTUAL CAUTERY IN OVARIOTOMY.

The author observed that on February 1, 1865, he placed before the Society his first case of completed ovariotomy in which the pedicle was divided by the actual cautery. Since then he had published ten or eleven more in the *Lancet*; and now he wished to relate his last eleven cases. and make some remarks on the use of the actual cautery. In the eleven cases the operation was completed, and all recovered. Mr. Baker Brown found that, in a few of the cases, the cautery was not sufficient alone, he having to ligature several vessels in the adhesions; and in case 6, the artery, which was bleeding, was from a very fat mesentery, and the superabundance of fat prevented the seared edge from puckering. He considered it highly necessary to have a properly-made clamp; also, it was advisable that the iron should not be too hot, a simple red heat being best, so as not to hurry the process of separation. but to bruise the pedicle by cutting it off slowly, and afterwards care must be taken not to disturb the stump. On one occasion, the author being anxious to see if the vessels were safe (after the cautery), gently rubbed the edges with a towel, when the crust was broken, and a small vessel bled. Of twenty-three cases of completed ovariotomy, the author had lost but two. He thought it must appear evident that this success had arisen from the use of the actual cautery.

Mr. **Brown** then presented a cyst and pieces of omentum from a patient operated on the day before, which showed that the whole omentum was so fat that the cautery would not act safely on the adhesions. In such cases it was better not to attempt its use. The pedicle itself was safely removed by the cautery clamp.

Dr. Routh read a paper on

### A CASE OF FIBRO-CYSTIC DISEASE OF THE UTERUS WHICH WAS MISTAKEN FOR OVARIAN DISEASE.

It occurred in a woman aged twenty. There were two large abdominal fluctuating tumours united by a large solid mass. These were diagnosed as multilocular ovarian disease by Dr. Savage, Dr. Greenhalgh, Sir W. Fergusson, and Dr. Routh. All advised operation except Dr. Greenhalgh, who recommended delay. She was operated upon on November 16, 1865. There were no adhesions of any consequence. The tumour was freely moveable on the right side. On the left, it was bound down by the usual ligaments, and had become very dense and unyielding. Extirpation was thus impossible. Portions of the omentum were removed by actual cautery. The larger right cyst was punctured, and emptied of a quantity of pus, and the abdominal wound brought together. The patient scarcely rallied, was constantly sick, and died, after evidence of internal bleeding, in thirty-four hours.

The post-mortem examination revealed that all the cysts were full of blood, vessels having giving way in them, probably through the vomiting. The actually cauterised surfaces were quite shrivelled, and free from even an appearance of blood. The whole fundus of the uterus was fibro-cystic.

The importance of this case was brought out in the error of diagnosis. All the usual symptoms of fibroid disease were absent—namely, early fibroid hardness of tumour; absence of flooding; increased length of uterine cavity; absence of tubular souffle; and previous exploratory puncture would have only given exit to pus. Secondly, owing to numerous vascular trabeculæ in the tumour, death might at any time have resulted from simple puncture with the trocar. Thirdly, it proved the great efficacy of the actual cautery, even in a case of constant sickness following operation.

Mr. Spencer Wells said he fully admitted that in some rare cases it was very difficult, perhaps impossible, to arrive at an exact or positive diagnosis as to the nature of an abdominal tumour; but he contended that in the great majority of cases —in at least nine out of ten—it was quite possible to arrive as near the truth in this as in any other department of Surgery. He admitted most fully that men of great experience, after carefully examining a case, would sometimes find it impossible, even with the help of an exploratory incision, to make a positive and complete diagnosis. In such a case as that narrated by Dr. Routh, the exact nature of a tumour might be doubtful even after its removal. But such cases were few and far between, and by no means opposed to the rule that in a large majority of cases of ovarian and uterine disease a very accurate diagnosis might be made. With regard to the use of the cautery in ovariotomy, the cases brought forward certainly proved that we had been taught an additional and successful mode of dealing with the pedicle. But they also convinced him that it should be an exceptional and not a general method. The number of cases in which ligatures had been also required, the accounts of the melting and flaming fat, the care required as to the precise temperature of the irons, the slowness of the searing, the effects of disturbing the eschar, and the very frequent suppuration in the abdominal wall were very unsatisfactory. And the argument that because out of twenty-three cases only two had died, therefore this success was due to the use of the cautery was clearly untenable; for it was a curious fact that of the last twenty-two cases of ovariotomy in which he (Mr. Wells) had been able to secure the pedicle by a clamp, only two had died, and one of these lived twelve days and died of cancer of the peritoneum, which was not detected before the operation.

Time not admitting of further discussion or reply from the authors of the papers, the meeting adjourned.

## WESTERN MEDICAL AND SURGICAL SOCIETY.

Friday, February 2.

Mr. Charles Hunter showed to the Society a boy subject to severe periodic attacks of

### NEURALGIA OF THE SPINE, UNDER TREATMENT BY THE ATROPINE INJECTION.

William K., aged 7 years, had a severe convulsion fit after whooping-cough four years ago. The fit was followed by insensibility for many days, and hemiplegia of the right side has existed from that time. The boy now walks lame with the right foot; the right hand remains clenched. Since the fit the boy has hardly been free from neuralgia (epileptiform?) of a peculiar nature, and for four years he has been almost constantly under treatment of different kinds without beneficial results. The neuralgic attacks last from three to seven days, during which time he gets very little sleep; it is then absent usually about two, or at the most three, weeks. The attack consists of paroxysms of two degrees of severity. The milder, which are very numerous, last but a short time, and are partially relieved by patting the boy on the back, for which treatment the boy usually runs to any one near; the severe paroxysms are in number ten or twelve a day, which the boy usually treats himself, by hitting himself over the eighth dorsal vertebra with a ninepin. This "dulls the pain of the paroxysm." There is no tenderness of the spine to be felt. The pupils are always dilated before an attack comes on. On November 29 one-sixtieth of a grain of atropine was injected over the spine, an attack having begun some hours previously. 30th.—The progress of the attack and all further paroxysms were arrested. December 16.—Another attack began, six severe paroxysms having occurred before the puncture could be used. The fortieth of a grain was injected: complete arrest of spasms for twelve hours. A return began; a repetition of the injection then arrested all paroxysms until January 12, 1866, when a third attack threatened; it was arrested by a single injection of atropine in the arm. February 3.—Altogether five attacks have thus been arrested up to this date; a single injection, with one exception, sufficed every time. The boy usually slept after the injection, and never had the "intoxication atropique" to any extent. The case is still under observation.

Mr. Hunter then exhibited a specimen of

### CANCER OF THE PHARYNX.

The patient, a healthy-looking, well-nourished woman, aged 33 when she died, did not live more than seven months from the first appearance of the disease. For three or four months the symptoms were chiefly those of a cold in the throat and windpipe, slight huskiness of voice, clear white expectoration, soreness of different parts of the throat, slight dysphagia. Gradually the dysphagia became the prominent symptom, and she died with all the symptoms and results of stricture of the œsophagus. For the last few months she was fed chiefly by beef-tea and milk enemata. The disease did not involve the œsophagus, but greatly contracted the lower part of the pharynx, with a villous growth, which ulcerated on the right side of the larynx, opened into it by a minute orifice, and produced an abscess which traversed among the condensed tissues of the neck, and opened externally just before she died.

Mr. H. P. Bannister exhibited two tape-worms from the peritoneum of a rabbit. No worms were found, after careful examination in the intestines.

Mr. Vasey showed a lower jaw-bone in which the wisdom teeth were situated in the sigmoid notch of the rami.

Dr. Martyn showed two good-sized pieces of glass which had travelled under the scalp from a wound of the forehead.

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Collegial Prizes.—The Council of the Royal College of Surgeons of England has just awarded one of the Jacksonian Prizes of twenty guineas to Mr. William Paul Swain, of Devonport, a Member of the College, for his essay on "The diseased conditions of the knee-joint which require amputation of the limb, and of those conditions which are favourable for excision of the joint, with an explanation of the relative advantages of both operations as far as can be ascertained by cases properly authenticated." Mr. Swain was a pupil of King's College. For the other Jacksonian prize on the relative value of the various modes of treatment of popliteal aneurism, it does not appear there were any competitors. The following are the subjects for the Jacksonian prizes of the present year—viz., "Ovariotomy: pathology and diagnosis of cases suitable for this operation, with the best method of performing it, and the results of recorded cases;" and on "Fractures into joints: their modes of union, with the treatment and result."

At the London Quarter Sessions on Saturday a report of a committee was adopted, increasing the salary of the City coroner to £885 a year.

## OBITUARY.

### BENJAMIN GUY BABINGTON, M.D., F.R.S.

We gave last week a very short and imperfect sketch of the life and work of Dr. Hodgkin, who made his Professional reputation at Guy's Hospital and Medical School. We now have to give a notice of another celebrity of the same school, Dr. B. G. Babington, who, though several years Dr. Hodgkin's senior, died in London just at the time that we received the tidings of Dr. Hodgkin's lamented death at Jaffa.

Dr. Benjamin Guy Babington was the son of a very well known and popular Physician, whose statue stands in St. Paul's Cathedral. Descended from a good old Irish family, Dr. William Babington was one of the most successful London Physicians of his day, and filled a very prominent and active place among his brethren, though we are not aware that he found time to much enrich the literature of the Profession. He was one of the first Vice-Presidents of the Medico-Chirurgical Society on its formation in 1805, and President in 1817-18. A paper of his, read before the Society in 1807, will be found in the first volume of the *Transactions*. He was Physician to Guy's Hospital, and lectured there on Chemistry, and on the Practice of Medicine. He died of influenza in 1833, and a very eloquent eulogy on him, by Dr. Bright, is printed in vol. xii. of the *Medical Gazette*. Dr. Bright, while paying homage to his excellent judgment, extensive information, and love of science, dwells with affectionate insistence on his warm and admirable qualities of heart; and any friend of B. G. Babington's who may read that eulogy will recognise in the father's character many of those gifts and qualities which they most loved and admired in the son.

Benjamin Guy Babington was born in 1794, and was educated at the Charterhouse. We have seen it stated that he began public life in the Navy, and was present at Copenhagen and Walcheren, but if so he soon gave up that career and entered Haileybury College, where, after going through the usual two years' curriculum, he proceeded, in 1812, to the Madras Presidency, as a member of the Indian Company's Civil Service. After seven years' residence in India, ill-health compelled his return home, and abandoning the Indian service, he adopted his father's Profession, entered at Pembroke College, Cambridge, and took his M.B. degree in 1825. In 1830, he proceeded to the full degree of M.D., and in the year following was elected a Fellow of the London College of Physicians. Early in his Medical career he obtained the appointment of Physician to the Deaf and Dumb Asylum; and for many years he, like his father, lived in the City; but about 1840, we believe, he moved westward, to George-street, Hanover-square, where he died. He naturally selected Guy's as his London Medical School, and when a vacancy in the Medical staff of that Hospital was made by Dr. Cholmeley's death in 1837, he contested the appointment with Dr. Hodgkin. His Cambridge degree, and, we may fairly suppose, the influence of his father's name and memory, added to the reputation he had already made as an accomplished Physician and hard worker, enabled him to triumph over the strong claims of his opponent, and he was appointed Assistant-Physician. We say "the strong claims of his opponent," for Dr. Hodgkin had by many years of untiring labour at Guy's made himself an European reputation as the best pathologist in England. The splendid Museum at Guy's was his creation almost, and the catalogue of it, which he published, together with his work on the Serous Membranes, had made him known and admired far and wide. He was much chagrined by his failure to obtain Hospital promotion, and though we have heard that an offer was made to appoint him Assistant-Physician at the same time as, but below, Dr. Babington, he declined the proposal, and resigned his post as Lecturer and Pathologist; and ceasing from that time to take the same interest as formerly in pathology, he was known of late years rather as a warm and large-hearted philanthropist than as a Physician.

To return to Dr. B. G. Babington. In 1840 he became full Physician to Guy's, having Drs. Bright and Addison for colleagues. As a clinical teacher he was very painstaking, and was popular with the students, but he was not successful as a lecturer, and after assisting Dr. Addison for a short time he gave up lecturing, and in 1854 altogether retired from the Hospital.

His earliest writings were on animal chemistry, in which subject he made original observations and experiments. He was not, like his colleagues, Drs. Bright and Addison, so fortunate as to be the first to point out a special pathological condition which should afterwards bear his name, but he created the felicitous phrase "the liquor sanguinis," as signifying the blood after the separation of the red corpuscles, and that ought to keep green his memory so long as physiology, pathology, or organic chemistry are taught. The expression occurs first in a paper by him on "Some considerations with respect to the Blood, founded on one or two very simple Experiments on that Fluid;" it is published in vol. 16 of the Medico-Chirurgical Transactions, 1830. He also wrote the essay on "Morbid Conditions of the Blood," in vol. 1 of Todd's "Cyclopædia." His more purely Professional writings are to be found in the first series of the Guy's Hospital Reports, and two of these—the articles on epilepsy and on chorea—specially deserve mention as excellent practical papers, well worthy of study. Dr. Babington then—twenty-five years ago—wrote as strongly of the power and value of arsenic over chorea as Dr. Begbie very recently has; but his appreciation of the power of the medicine for good—and he says "I believe this the most powerful remedy of all"—was more tempered by his recognition of its power for mischief.

Possessing a good knowledge of several languages, Dr. Babington excelled as a German scholar, and we owe to him the elegant translation of Hecker's "Epidemics of the Middle Ages," which was published by the Sydenham Society; he edited also their issue of Feuchtersleben's "Medical Psychology." He was a great admirer and a successful cultivator of the "fine arts," and was the friend of many eminent musicians, painters, and sculptors. Tall, well formed, and muscular, he was framed to excel in physical exercises, and many stories are told of his skill and prowess with the gloves.

We have already said that he inherited some of the best qualities of mind, heart, and temper of his father, and we cannot in any way better show this than by quoting the following notes on him for which we are indebted to a Physician who knew him long and well, and is himself one of the most eminent of the present "Guy's men:"—"Personally," he says, "Dr. Babington was universally beloved, for a more amiable and genial temper than he possessed could not be imagined. He was overflowing with fun and good humour, and his benevolence was carried to a fault. He was an excellent 'clubbable' man, and had the most enduring friendships, and his cheerfulness, gaiety, and even sprightliness were so great that even up to the time of his death he was never regarded as an old man. He was highly accomplished, and had indeed a remarkable facility of manipulation—there was scarcely any operation with the hands which he could not accomplish. It was, therefore, rather the art than the science of his Profession which he cultivated; and not only could he write an elegant prescription, but he was always ready with the most remarkable and clever devices for the good of his patients. He was one of the first who put into practice the 'boot' for drawing the blood from the body; he had a new mode of making issues by the actual cautery; he invented a curved stethoscope, and was a great adept in using mirrors for examining the throat; one made especially for the larynx was the first laryngoscope. He invented a chamber utensil by which the urine could be separately collected, and many other ingenious contrivances too numerous to mention. The writer remembers that the first patient he ever saw bled was operated on by Dr. Babington; none of the pupils around him had ever bled, whereupon the Doctor said he would do it himself; and as he wished to open a vein in the left arm, the operation was done with the left hand, the Doctor being ambidexter. But every accomplishment of this kind must sink into insignificance compared with his goodness of heart. In common with his father, he had the most generous spirit. Every poor person received his commiseration. Like his father, he gave an immense amount of gratuitous advice, not at his own house ostentatiously, but by kind visits to the needy. Like his father, he would remit fees did he discover he had been impoverishing his patient. Although so large and unknown an amount of unrewarded advice is given by our Profession, yet Dr. Babington's virtues in this respect were so remarkable that they formed a striking trait in his character; and his friends could no doubt show that he has failed to enrich himself by his benevolence, and too often, perhaps, through the niggardness of those whom he benefited. In this selfish world he deserves a memorial, though it were for nothing else than his kindness of heart."

We will only add that Dr. Babington was mainly instrumental in founding the Epidemiological Society in 1850, and was President of it till very recently. During the last year he employed all his spare time upon the subjects under notice by the Venereal Commission, of which he was a most active and efficient member. He mastered all the modern literature on the subject, and was engaged at the time of his death in framing an analysis of the mass of evidence given before the Commission. For a long time he had been troubled by a urinary complaint, and for some months had been losing flesh. About a fortnight before his death he was taken worse, with rigors and other symptoms denoting suppuration in the kidneys; and this was the immediate cause of his death.

## DR. JOSEPH POULTER MACKESY, OF WATERFORD.

We deeply regret to announce the sudden death of the above-named gentleman, son of Dr. Thomas Lewis Mackesy, so well known as taking a leading part in every movement having for its object the dignity and advancement of the Profession in Ireland. Dr. J. P. Mackesy passed the Irish College of Surgeons in 1838, and was admitted a Fellow of that body in 1844. He graduated as Bachelor of Medicine in 1839, and was also a Master of Arts in the University of Dublin. He very soon acquired extensive practice in his native city (Waterford), and at the time of his lamented decease occupied a high position in his Profession. The *Waterford Conservative* gives the following account of the melancholy event:—"It is impossible to describe the painful sensation that was felt on Tuesday in Waterford by every one who heard of the almost sudden death of Dr. J. P. Mackesy. There could not have been any death more unexpected, as he was in the prime of life and apparently in the enjoyment of the most robust health. Late on Monday evening he felt an uneasiness in the region of the heart, and, notwithstanding the skill of his Medical attendants, he became worse until he expired on Tuesday, shortly before three o'clock in the afternoon, having been for some time insensible. He had been for several years in a leading position in his Profession, and was highly esteemed by all who knew him. He has left a widow and two sons."

# NEW INVENTIONS.

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## MEDICATED PESSARIES AND SUPPOSITORIES.

A paper was read at the last meeting of the Pharmaceutical Society, by Mr. Brady, of Newcastle-on-Tyne, on the subject of "Medicated Pessaries and Suppositories," of some considerable economic interest to the Profession. The author strongly urged the necessity of some *recognised standard of weight* for suppositories and pessaries. In regard to pessaries, there is, perhaps, little difficulty to be overcome, since in all the papers which have been published about them, with formulæ for their preparation, *two drachms* had been very properly adopted as a suitable size. With suppositories the case is far different. The two Pharmacopœial formulæ are not alike, and suppositories containing the same medicinal ingredient might be found of any size from 10 to 30 grains. This is a matter of very great annoyance to the chemist. That suppositories should be neatly dispensed, it is necessary that they be cast in moulds, and if an *uniform* size were recognised, there would be no more liability to misunderstanding or annoyance than in dispensing pills or mixtures. At present, while suppositories are very difficult to make nicely, there is no standard for them. The author suggested *fifteen grains* as the standard weight for suppositories. It is not too large for such things as morphia, and just large enough for the exhibition of tannin and other bulky substances. *As the Profession are beginning to use these suppositories largely, it is essential that some uniform plan be adopted.* The chemist is anxious that attention should be called to the matter, and, as we have said, it is suggested by Mr. Brady that *fifteen grains* be the standard. Messrs. Maw and Sons have taken great pains in the manufacture of a fifteen-grain mould. The author condemned the Pharmacopœial formulæ, especially their base, and recommended theobroma oil, either by itself or with an admixture of 5 to 10 per cent. of lard, which might be previously used to take up the morphia or other medicinal agent.

# THE LONDON SICK POOR.

On Saturday afternoon a large body of noblemen and gentlemen attended at the Poor-law Board, Whitehall, as a deputation from the meeting which was held a few weeks since at Willis's Rooms with respect to the condition of the sick poor in Workhouse Infirmaries. Among those in the deputation were the Archbishop of York, the Earl of Shaftesbury, the Earl of Airlie, Earl Carnarvon, Earl Grosvenor, M.P., Mr. Ernest Hart, Dr. Anstie, Dr. Carr, Dr. Rogers, Dr. Dobell, Dr. R. Fowler, Dr. Ogle, and Dr. Stallard.

The deputation was received by the Right Hon. C. P. Villiers, M.P., President of the Poor-law Board.

The deputation having been introduced as from the Association for the Improvement of the Condition of the Sick in the Metropolitan Workhouse Infirmaries, Lord Carnarvon proceeded to call the President's attention to the large and influential meeting held at Willis's Rooms a few weeks since, and to the resolutions then carried. The first was:—

"That the present management of the sick poor in the metropolitan Workhouse Infirmaries is highly unsatisfactory; that the buildings are inadequate and unhealthy, the Medical attendance insufficient, the nursing merely nominal, and the general administration radically defective."

The noble lord observed that there was not a single sentence in all the resolutions passed at this meeting which was not distinctly borne out by facts, and nothing whatever was stated at that meeting by those who represented the Association for the Improvement of the Condition of the Sick Poor in Workhouses which could be said in the least to approach exaggeration. The facts were perfectly clear, and it must be obvious to all who had looked into the matter that the terms of the first resolution were fully borne out by the facts, for the Medical attendance was insufficient, the buildings were proved to be unhealthy, and the staff of nurses was nothing like proportionate to the wants of those who were in these places. There was no hope of improvement being effected in the workhouse Infirmaries by those who had the administration in their hands, and the gentlemen who had their interest awakened in this matter now came before the right hon. gentleman to appeal to him, as President of the Poor-law Board, and as representing her Majesty's Government, to deal with a state of things disgraceful at once to society and to the administration of the law. It was not for the deputation to suggest the measure of reform which should be applied to these existing evils; but he felt bound to say that no system would be satisfactory which did not include the separation of the sick poor from the able-bodied paupers, and the placing of the sick under a distinct management. Those who knew the buildings at present used as workhouse Infirmaries, most of which had been erected for a totally different purpose, were quite hopeless of any effective improvement being carried out in these buildings. The gentlemen around challenged inquiry into the condition of those Infirmaries, and they trusted that the inquiry being conducted by the Poor-law Board would be a full and free one, for then it would prove the necessity for a change being made, and the Poor-law Board would feel bound to consider principles and and rules signed by some most eminent Medical gentlemen connected with Hospitals as to the primary rules with regard to space in and the government of any Infirmaries instituted under the Poor-law Board;—Dr. Thomas Watson, President of the College of Physicians; Dr. George Burrows, President of the General Medical Council; Dr. James Clarke, Dr. Wm. Jenner, Dr. Edward Sieveking, Sir William Fergusson, and Mr. James Paget. The principles and rules laid down by these authorities he would lay before the Poor-law Board. They were:—"The sick poor should be separated from the able-bodied paupers, and their treatment should be placed under a distinct management. In lieu of sick wards annexed to each workhouse, consolidated Infirmaries should be provided, where the following rules of Hospital management should be adopted under skilled supervision. They are those generally accepted in this and other European countries. 1. The buildings should be specially devised for the purpose, of suitable construction and on healthy sites. The rules laid down by the Barrack and Hospital Commission may be consulted with advantage on this subject. 2. Not less than 1000 (and for particular classes of cases 1200 to 1500) cubic feet of air should be allowed to each patient. 3. The nursing should be conducted entirely by a paid staff, and there should not be less than one day nurse, one night nurse, and one assistant nurse for each fifty patients. 4. There should be resident Medical officers in the proportion of not less than one for each 250 patients. 5. The Medical officers should not have any pecuniary interest whatever in the medicines supplied, nor should they be charged with the duty of dispensing them. 6. A judicious classification of patients should be strictly observed, the epileptic and imbecile, the acutely sick, and the aged and infirm, being treated in separate wards. 7. The aged and infirm, the chronically sick, and the convalescent should be provided with day rooms separate from the dormitories." The noble Lord concluded by urging that these should be the bases upon which any reform in workhouse administration should be conducted.

The meeting having been addressed by the Archbishop of York, Dr. Rogers, Mr. Paget, the Earl of Shaftesbury, Mr. Ernest Hart, and Mr. J. S. Storr,

The President, in reply, said the deputation would see that he was unable to give any definite reply to the propositions which they had laid before him. Lord Carnarvon had appealed to him as a member of the Government and as President of the Poor Law Board, but, looking at the nature of the case, and the extent of the evils which the Association had brought under review, and the very comprehensive character of the changes proposed, he could not state what the Government might think it right to do, or what would be practicable. But, certainly, as President of that Board, he could say that he felt, and he was sure the public must feel, deeply indebted to this Association for the inquiries which had been instituted, and for the effective manner in which the results of those inquiries had been made known in the effort to reform the system of which they complained. By bringing such matters forcibly before the public, and enlisting its sympathies in the cause, the best chance was afforded of ultimately giving effect to their views. Many of the things which the Association had observed had not taken him by surprise, for cases had often, too often, arisen in these houses and come before the Board showing that the Hospital arrangements of the houses were still very defective, and, indeed, he was not indisposed in consequence to agree substantially with the terms of the resolution passed at the meeting. As far as he understood the subject—for to understand fully almost required a Professional knowledge—he believed the resolution to be true, and saying this it was hardly necessary to add that it was a state of things which ought not in his opinion to continue, and in which great change was required. Referring to the statements which had been made with respect to the inquiry instituted by the Board, he assured the deputation that it had been instituted for the purpose of placing the Board in the official possession of facts with regard to London Workhouse Infirmaries, so as to be prepared to lay them fully before the Government and the Legislature if opportunity should offer. The fact that the inquiry was being carried out by Dr. Smith, who was eminent in his Profession, and by Mr. H. B. Farnall, the well-known Poor-law Inspector for the metropolis, was a guarantee that the inquiry would be full and impartial. An inquiry had certainly been made, but it was, in one sense, private in its character—he alluded to that instituted by the proprietors of the *Lancet*. He begged to say that he had never questioned the capacity or the good faith of the gentlemen who had made that inquiry, and he had yet to learn that there had been any overstatement in the cases they had apparently established. He feared, however, that the difficulty in this case was not so much in getting at the truth as in giving effect to the remedy suggested. He was certainly not prepared to dispute the conclusions to which the deputation had arrived, and the remedy proposed was, he understood, that there should be six separate Hospitals for the sick at present lodged in the metropolitan Workhouse Infirmaries. The meeting must not lose sight of the fact that such a scheme involved a great change in the principle upon which the poor were now maintained in this country. That charge was now local, and the administration of the law was in the hands of those who contributed locally to the fund out of which the poor were relieved, whereas this scheme would treat the sick poor as belonging to the whole metropolis, and the expenses of raising the buildings and maintaining the Hospitals would be charged on the whole property of the metropolis. He did not say it would be wrong on that account, or that the system of local management for the purposes of the poor had been faultless; but the system was one of which the community was extremely tenacious, and there would be considerable difficulty in suspending it even in this city, where the adoption of a more general system would appear to be so reasonable, and if it were clearly proved that a change was essential for the proper treatment of the sick poor he did not say that it might not become even popular, especially if it were proved that the defects under the present system were irremediable. There had always been a difficulty as to the hands in which the administration of the Poor-law should be placed, and the great dread of the Legislature had been that there would be a lax and wasteful expenditure, injurious to property, and tending to the promotion of pauperism, if the administration was not in the hands of those directly interested in the economy of the funds, and the guardians were chosen for this purpose. Some guardians, he acknowledged, performed their duties with judgment and humanity; but as the chief duty which they had to perform was what was termed "to keep down the expenditure," it was somewhat of a chance when guardians were found possessing all the qualities required for a wise administration of the law. The right hon. gentleman proceeded to deal with the other facts of the case, and said he thought that if the House of Commons could be prevailed upon to alter the present system of rating in the metropolis, it would do so for the sick poor, and have a general rate, as in the case of the casual poor. He concluded, amid loud cheers, that, though he could not pledge the Government in the matter, he could assure the deputation that nothing should be wanting on his part in recommending the propositions for favourable consideration.

The deputation thanked the President, and withdrew.

## MEDICAL NEWS.

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**Royal College of Physicians of London.**—At a general meeting of the Fellows held on Monday, April 16, 1866, the following gentlemen having undergone the necessary Examination, and satisfied the College of their proficiency in the Science and Practice of Medicine, Surgery, and Midwifery, were duly admitted to practise Physic as Licentiates of the College:—

Thomas Thornely Brooke, Stockport; George Carr Dunn, 17, Stanley-gardens, W.; Henry James Ellery, St. Stephen's by Saltash, Cornwall; John Cooper Garman, Wednesbury, Staffordshire; Richard Samuel Purnell Griffiths, 11, Dudley-place, Harrow-road, W.; George Augustus Hicks, Torquay; William Hoffmeister, M.D., Heidelberg, Cowes, Isle of Wight; Jordan Roche Lynch, 12, Horbury-terrace, Notting-hill, W.; George Monlas Slaughter, Fort Pitt, Chatham; Thomas Wise, Castletown, Isle of Man.

At the same meeting the following were reported by the Examiners to have passed their Primary Examination:—

Robert Vacy Ash, St. Mary's Hospital; George William Barroll, St. George's Hospital; George Earp Burton, Liverpool; Edward Noble Edwards and William Betts Giles, Guy's Hospital; Thomas George Palmer Hallett, University College; Richard Clement Lucas, Guy's Hospital; Wm. Gordon Maddox, University College; John Aaron James Timmins, St. Bartholomew's Hospital; John Greaves Wiseman, Guy's Hospital.

**Royal College of Physicians, Edinburgh.**—The under-mentioned gentleman passed his Examination in the Science and Practice of Medicine, and received certificate to practise on Thursday, April 12, 1866:—

Harry Burrill Glaister, Southwell, Notts.

**Royal College of Surgeons of England.**—The following gentlemen passed their Primary Examinations in Anatomy and Physiology at a meeting of the Court of Examiners on the 17th inst, and when eligible will be admitted to the Pass Examination:—

Messrs. Laucelot Newton, W. T. Thurston, Charles Wade, E. R. Evans, W. W. Saul, J. M. Kirkman, and H. T. Butlin, Students of St. Bartholomew's Hospital; Edward Colson, J. A. Sharp, Benjamin Walker. T. J. Burroughs, J. R. Morgan, and Henry Gould, of Guy's Hospital; J. F. P. McConnell and Leonard Smith, of St. George's Hospital; Joseph Gabe and G. F. Norton, of the Middlesex Hospidal; William Little and H. E. Juler, of St. Mary's Hospital; Joshua Duke and A. C. Air, of St. Thomas's Hospital; R. L. Sheffield, of the London Hospital; Rowland Heathcote, of Manchester; Henry Bland, of King's College; J. R. Fielding, of Leeds; J. B. Ryley, of Dublin; and Samuel Pidwell, of University College.

The following passed on the 18th inst., namely:—

Messrs. B. W. Chapman, Clifford Crewe, J. F. Goodhart, J. F. Codrington, and P. T. Scott, Students of Guy's Hospital; G. A. Woods, Peter Ryder, J. E. Burton, and Alfred Trubshaw, of Liverpool; J. R. Lasenby, Charles Aldridge, and Charles Richardson, of Leeds; T. H. Pinder, J. T. Fox, and A. O. McKellar, of Manchester; Edward Young, George Amsden, and Walter Hart, of King's College; Alfred Pern. C. W. Milne, and Frederick Pollard, of St. Thomas's Hospital; Reginald Bayley and F. B. Besly, of the Charing-cross Hospital; J. W. Blandford and Robert Laing, of Newcastle; Samuel Alford and E. W. Minter, of University College; W. H. Wood, of St. Mary's Hospital; Joseph Massingham, of the London Hospital; Arthur Atkinson, of Hull; Henry Case, of the Middlesex Hospital, and T. H. Hickman, of St. Bartholomew's Hospital.

The following passed on the 19th inst:—

Fred Wallace, Albert Williams, John Webb, George Mason, T. C. H. Spencer, Alfred Ashby, J. R. Hughes, and W. R. Cortis, students of Guy's Hospital: Joseph Wharton, Thomas Fawsitt, J. G. Blackley, F. M. Pierce, Thomas Greenhalgh, and W. H. Middleton, of Manchester; W. A. Hunt, Fletcher Beach, W. J. G. Bedford, and R. H. Prior, of King's College; John Orton, J. H. Humphrys, T. P. Davies, and James Brown, of Birmingham; William Swan, B.A. Oxon, W. W. G. Stables, and W. D. Butcher, of St. Bartholomew's Hospital: M. W. W. Chorley and J. T. Gobat, of Leeds; Richard Hughes, of Liverpool; R. L. Roberts, of University College; and Alexander Fox, of the London Hospital.

It is stated that out of the 108 candidates who offered themselves for examination, nineteen failed to acquit themselves to the satisfaction of the Court, and were consequently referred back to their studies for three months.

**Apothecaries' Hall.**—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, April 12, 1866:—

John Lorimer, Carlton hill, St. John's-wood; Thomas Bailey, 4, Gough-street North; Thomas Bell Hay, 43, Caledonian-road, N.

The following gentleman also on the same day passed his First Examination:—

J. A. J. Timmins, St. Bartholomew's Hospital.

## APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

**Godfrey, Frank**, L.R.C.P, L.R.C.S., L.M. Edin., has been appointed Assistant-Surgeon to Her Majesty's Convict Prison Hospital, Gibraltar.

**Heckman, W.**, M.D., has been appointed Surgeon for Out Patients to the Samaritan Free Hospital for Women and Children, Edward-street, Portman-square.

**Junker, F. E.**, M.D., has been appointed a Physician for Out Patients to the Samaritan Free Hospital for Women and Children, Edward-street, Portman-square.

**Karkeeth, P. Q.**, M.R.C.S.E., has been appointed House-Surgeon to the General Infirmary, Chester.

**Taylor, J.**, M.R.C.S.E., has been appointed Assistant House-Surgeon to the General Infirmary, Chester.

## BIRTHS.

**Davidson.**—On April 7, at 8, Devonshire-place, Wandsworth-road, the wife of C. M. Davidson, M.R.C.S.E., L.S.A., of a son.

**Harvey.**—On April 15, at 5, Avenue-villas, Belsize-park, N.W., the wife of F. Harvey, Staff Surgeon R.N., of a son.

**Hickman.**—On April 11, at 1, Dorset-square, the wife of W. Hickman, M.B., F.R.C.S., of a son.

**Langford.**—On April 14, at Knackersknowle, Devon, the wife of E. C. Langford, M.R.C.S.E., of a son.

**Mason.**—On April 14, at Woolwich, the wife of R. Mason, F.R.C.S., of a daughter.

**Noyes.**—On April 14, at Lee, Kent, the wife of H. G. Noyes, M.D., M.R.C.P. Lond., of a son.

**Rose.**—On February 22, at King William's Town, Cape of Good Hope, the wife of H. J. Rose, Staff Assistant-Surgeon, prematurely, of a daughter.

**Sheppard.**—On April 7, at Ashford, Kent, the wife of William Sheppard, M.R.C.S.E., of a daughter.

**Watts.**—On April 18, at 23, Westbourne-park-terrace, the wife of A. J. Watts, L.R.C.P. Edin., of a daughter.

**Wilmot.**—On April 2, at Merrion-square North, Dublin, the wife of S. G. Wilmot, M.D., of a daughter.

## MARRIAGES.

**Crosby—Platt.**—On April 12, at St. Mary's, Oldham, William Crosby, M.R.C.S., to Elizabeth, daughter of the late H. Platt, Esq.

**Wilson—Wotherspoon.**—On April 11, at 124, Blythswood-terrace, Glasgow W. A. Wilson, M.D., C.M., to Jeannie Erskine, daughter of John Wotherspoon, Esq.

**Wintle—Mackinlay.**—On April 12, at St. Barnabas, West Kensington, R. P. Wintle, M.R.C.S.E., to Catherine, youngest daughter of the late John Mackinlay, M.R.C.S.

## DEATHS.

**Bogg, John**, M.R.C.S., at Louth, Lincolnshire, on April 15, aged 66.

**Braithwaite, W.**, M.R.C.S., at Stoke Damerel, on April 9, aged 43.

**Clarke, E. S.**, M.D., M.R.I.A., at Richmond-hill, Dublin, on April 3.

**Harrison, G.**, F.R.C.S., of 65, Grosvenor-street, on April 12, aged 60.

**Hodges, F. S.**, M.R.C.S., at 84, Brompton-road, April 12, aged 43.

**May, W. H.**, M.R.C.S., at St. Martin's, Leicester, on April 9.

**Parsons, W. A.**, M.R.C.S., at Leamington, on April 4, aged 65.

**Scott, W.**, M.D., at Greenwich, on April 12, aged 41.

**Seymour, E. J.**, M.D., F.R.C.P. Lond., at 13, Charles-street, Berkeley-square, on April 16, aged 70.

## POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

### RESIGNATIONS.

*Wolverhampton Union.*—The Second District is vacant; area 807; population 12,800; salary £54 8s. per annum.

### APPOINTMENTS.

*Alnwick Union.*—George W. Turnbull, M.D. Edin., L.R.C.S. Edin., to the Warkworth District.

*Liverpool Parish.*—Edward Adam, M.R.C.S.E., L.K. and Q. Coll. Ire., to the Fifth District; Samuel John B. Caldwell, M.R.C.S.E., L.R.C.P. Edin., to the Sixth District.

*Plymouth Incorporation.*—Josiah Oake Adams, M.R.C.S.E., L.S.A., to the Third District.

*Redruth Union.*—Thomas S. Reed, M.R.C.S.E., L.S.A., to the Workhouse.

*St. Saviour's Union.*—Henry John Thorp, L.R.C.P. Edin., M.R.C.S.E., L.S.A., to the St. Saviour's District.

*Sleaford Union.*—George John Blasson, M.R.C.S.E., L.S.A., to the Heckington District.

*Sunderland Union.*—Charles N. Foote, M.R.C.S.E., L.S.A., M.D. St. And., as Assistant Medical Officer for the Workhouse.

*West Derby Union.*—James V. Worthington, L.R.C.P. Edin., L.R.C.S. Edin., L.S.A., to the Garston District.

**Christ's Hospital.**—The salaries paid to Medical officers in London, and to the Surgeon and Apothecary at Hereford, amounted to £745.

**Naval Medical Supplemental Fund.**—At the quarterly meeting of the directors of the Naval Medical Compassionate Fund, held on the 10th inst., Sir E. Hilditch, Inspector-General, in the chair, the sum of £70 was distributed among the various claimants.

**The Public Medical Services.**—The Profession, and especially the Military and Naval officers, will be glad to learn that the Lords Commissioners of the Admiralty have just received a copy of the following resolution passed unanimously at a meeting of the Council of the Royal College of Surgeons of England on the 13th inst.—viz., Resolved, "That the Council, in acknowledging the receipt from the Secretary to the Admiralty of the Report of the Committee appointed to inquire into the whole question of the rank, pay, and position of the Medical officers of the Army and Navy, beg to express to the Lords Commissioners of the Admiralty, the Secretary of State for War, and His Royal Highness Commanding-in-Chief their cordial concurrence in the recommendations contained in that Report, and their belief that those recommendations, if fully carried out, will obviate the objections at present felt to entering the Medical Service of the Army and Navy. That the Council further desire to express their opinion that the adoption of these recommendations will induce a better educated class of Medical candidates to seek admission into these services than hitherto, and will thereby tend to promote the health and efficiency of Her Majesty's Military and Naval forces." It remains to be seen whether these recommendations will be carried out by the heads of the respective departments of the public Medical services.

**University College Hospital.**—The annual dinner of the North London or University College Hospital was held on Wednesday evening at Willis's Rooms, when the Duke of Cambridge presided over a large assembly. After the usual loyal and patriotic toasts had been duly honoured, his Royal Highness remarked, in proposing the toast of the evening, that the annual expenditure incurred in maintaining the Hospital was £6500; but the subscriptions did not amount to more than £1000 a year, and, although the Physicians and Surgeons made a donation to the charity of the fees they received from the students who walked the Hospital, yet a deficit was left of nearly £4000, to meet which the public was appealed to. He regretted that the response to this appeal did not permit of the maintenance of a sufficiently large permanent staff, nor could the Committee receive into the Hospital as many patients as their wards would permit. Nevertheless, the Hospital had done great good. 1396 in-patients and 10,415 out-patients were attended to during the past year; relief was given in 1446 ophthalmic cases, and nearly 12,000 casualties were attended to. His Royal Highness also observed that he had recently inspected the Hospital, and could bear personal testimony to the excellent way in which it was conducted. He especially referred to the nursing arrangements, which were conducted by the sisters of All Saints' Home. In doing so he extolled those ladies for their self-denial, and expressed his conviction that the good they did, not only in connection with the physical, but also the mental ailments of the patients, was incalculable. In proposing the toast of the Army and Navy the noble duke assured his hearers that the most cordial feeling existed on the part of the army to the Medical Profession, and he trusted that a reciprocal feeling would be exhibited in the shape of a large number of efficient candidates for the post of Army Surgeons. It was announced in the course of the evening that a legacy of £2000 had been left to the institution by the late Mr. Goldsmid. The subscriptions amounted to £1500.

**Beneficence.**—The funds of some of our metropolitan Hospitals will be seasonably augmented under the wills of the following gentlemen, viz.:—Captain John Moore, R.N., C.B., who has bequeathed to St. George's, the London, and Royal Free Hospitals, £500 each; John Palmer, stockbroker, of Maida-hill, has left £100 to St. Mary's Hospital, Paddington; Mr. John Goodwin Marner, the well-known coach-builder, of Oxford-street, has bequeathed £3000 to the Convalescent Hospital at Weybridge-heath, towards building a new wing to that institution, and £50 each to such fifty charitable institutions as his executors may select. The executors of the late Duke of Northumberland, finding that his grace had not drawn his pension for some years as an Admiral in the Royal Navy, made application for the amount, and handed over the sum to the present Duke, who has generously bestowed the whole amount in charity, giving to the *Dreadnought* Seaman's Hospital Ship, off Deptford, the sum of £2000, and the remaining £5000 to other charities connected with the mercantile marine.

**Successful Action for Damages against one of the "Anatomical Museum" Fraternity.** — Young *v.* Hamilton—(Bail Court, before Mr. Justice Mellor and a common jury).—Mr. Ribton and Mr. Besley were for the plaintiff. The defendant did not appear, either in person or by counsel. The action was brought to recover compensation for impaired health, in consequence of the defendant falsely representing that he was a regular Doctor, and thereby inducing the plaintiff to employ him as a Medical man. In the other counts it was alleged that the defendant had carelessly and negligently treated the plaintiff, and had guaranteed to cure him of a disorder under which he suffered. The plaintiff, an agricultural labourer, who had saved a little money, visited an anatomical museum in Oxford-street, and was persuaded by the defendant, who described himself in a "Guide to Health" as "John Hamilton, M.D., Doctor of Medicine and Surgery, Lecturer on Physiology, Accoucheur, and author of the 'Botanic Essay and Family Physician,'" to submit to his treatment. He paid at first £5 5s. and then £6 6s., and the defendant, stating that he had underestimated the case, and should have charged any one but a poor man between £40 and £100, wanted to obtain a further sum of £9. The plaintiff then went to Mr. O'Donohue, a regular Practitioner, in the Westminster-bridge-road, and some two months elapsed before the ill-effects of the defendant's treatment could be eradicated. The poor fellow had been salivated, and rendered incapable of earning his livelihood by his daily labour for the space of several months, besides having to pay £10 for the necessary Medical aid which his state of health required. The jury found a verdict for the plaintiff—damages £60.

**Sussex and Brighton Medico-Chirurgical Society, and the Proposed Vaccination Bill of 1866.**—At a special meeting of this Society, held on April 11, 1866, it was resolved that:—1. This Society decidedly approves of compulsory vaccination. 2. This Society would urge that, in consideration of the knowledge and care required of the Medical man in practising vaccination in the safest and most efficient manner, and of the amount of his time which must be consumed in filling up and signing so many certificates and returns, the fees of eighteenpence and two shillings and sixpence respectively proposed in Clause 5, should be increased to two shillings and sixpence and three shillings and sixpence. 3. This Society would urge that the Bill should provide for every Medical Practitioner (when not acting as a public vaccinator) being entitled to charge a fee to any parent or other person for every certificate that he may be required to give. (See Clauses 17 to 19, 22, and 28.) 4. This Society would recommend that Clause 31 should be made more stringent by rendering it imperative that every parish, or Union, should provide a special and proper vehicle for the removal of the infected, which vehicle should also be obtainable on hire by any private individual for the like purpose. 5. That a copy of these resolutions, signed by the President, be forwarded by the Honorary Secretaries of the Society to Mr. Bruce and Mr. Baring (the promoters of the Bill), and to the members of the borough and of the county, accompanied with a request that they will all give them their gracious and best consideration and support.—Signed, on behalf of the Society (containing eighty-five members), by G. F. Hodgson, President. Brighton, April 11, 1866.

**King and Queen's College of Physicians in Ireland.**—On Friday, the 5th inst., at the quarterly meeting of the President and Fellows, Dr. Wynne Foot was duly elected a Fellow. Dr. Foot is well known to the Profession as a frequent contributor to its Medical literature. He was one of the Commission recently sent to England by the Irish Government to investigate and report on the Cattle Plague. He is Assistant Reader in Anatomy in the University of Dublin, where he graduated B.A. and M.B. in 1862 and M.D. in 1865. He was admitted a Licentiate of the College of Physicians in 1862. Licences to practice Medicine were granted to the following gentlemen during the months of January, February, and March, 1866:—Wm. Walsh, F.R.C.S.I. 1865, L.R.C.S.I. 1860, Kilmuckridge; David Moore, M.R.C.S. Eng. 1859, House-Surgeon, Belfast Hospital; Patrick Walter Tuite, L.R.C.S.I. 1865, Dublin; Patrick Brady, L.R.C.S.I. 1865, county Cavan; Joseph Irwin Welsh, L.R.C.S.I. 1865, county Donegal; Samuel Henry Banks, L R.C.S.I. 1865, Wicklow; Charles Fryer, Lancashire; Stephen McDermott, L.R.C.S.I. 1865, Roscommon; John Fagan, L.R.C.S.I. 1865; Edward Aloysius Stephenson, L.R.C.S.I. 1865, Kilkenny; James Stirling, L.R.C.S.I. 1866, county Kilkenny; William Longworth Watkins, L.R.C.S.I. 1866, Dublin; Edward William Adrian, M.R.C.S. Eng., county Dublin. To the following gentlemen Midwifery Diplomas were granted during the same term:—Rowan Purdon, L.K.Q.C.P. 1864, Tralee; David Moore, L.K.Q.C.P.I., Belfast; P. F. McGlorin, M.D., Queen's Univ. 1863, county Mayo; J. Urwin Welsh, L.K.Q.C.P. 1866, Ballyshannon; John Fagan, L.K.Q.C.P., L.R.C.S.I., 1865; Edward Aloysius Stephenson, L.K.Q.C.P., L.R.C.S.I, 1865, county Kilkenny; James Stirling, L.K.Q.C.P., L.R.C.S.I. 1866, county Kilkenny; William L. Watkins, L.K.Q.C.P., L.R.C.S.I. 1866, Dublin.

**Verdict of Manslaughter against an Amateur Prescriber.**—Mr. Taylor, coroner, resumed an inquiry on Tuesday, at the Coopers' Arms Inn, Wakefield, relative to the death of Mr. Joseph Newsom, innkeeper, who had been poisoned under unusually distressing circumstances. Mr. Newsom for some weeks past had been suffering from a bad cold, which caused him very restless and sleepless nights. On Saturday night he was talking to the company at his bar about the trouble his illness gave him, and a young man named Rigg went away, saying that he would get him something that would do him good. He shortly afterwards returned with a bottle containing about six ounces of a light-coloured watery fluid, and told Newsome to take half that night, and half the next morning. Newsome followed the instructions given, became very drowsy, wandered very much during the night, and was so dangerously ill next morning that Mr. Kemp, Surgeon, was sent for. The Doctor, however, arrived too late to be of any service, the deceased shortly afterwards undergoing every symptom of death from the effects of a narcotic poison. A chemist and druggist named Dennison stated that Rigg came into his shop on Saturday, and asked for five or eight grains of quinine and six or eight drachms of opium. Witness told Rigg that half a drachm was a full dose under ordinary circumstances, but in such cases as delirium tremens a Medical man might administer more. Rigg said the person for whom he wanted the medicine was labouring under some such complaint, and the witness added two and a-half drachms of laudanum to the quinine, and filled the bottle up with water. At Rigg's request he put a label on the bottle, giving directions for three tablespoonfuls, or about a quarter of the contents, to be taken every three hours. When Rigg returned to the publichouse the bottle had no label upon it, and instead of following the directions of the druggist, and giving Newsome a fourth of the bottle's contents, he told him to drink off half. As regarded the statement of Rigg that the person for whom he intended the potion was suffering from delirium tremens, it was proved that Mr. Newsom had had nothing but tea and coffee on Saturday, and had not tasted three glasses of malt liquor or spirits for a month. The jury returned a verdict of "Manslaughter" against Rigg, but the Coroner admitted him to bail.

**Workhouse Infirmaries.**—At a meeting of the guardians of St. George's, Hanover-square, held on Wednesday, the appointment of Mr. H. B. Farnall, C.B., together with Dr. Smith, to visit and report upon the state of the metropolitan workhouse Infirmaries, was discussed at great length. On the motion of Major Lyon, seconded by Mr. Westerton, it was unanimously resolved that the clerk should write to the President of the Poor-law Board, stating that, while the guardians of St. George's, Hanover-square, cordially concurred in the advisability of the proposed inspection, and had every confidence in Dr. Smith, they at the same time begged to protest most earnestly against the appointment of Mr. Farnall on the Commission. Mr. Farnall had, in the most emphatic manner, already condemned the mode in which the London guardians and their officers administered Poor-law relief; he had denounced the treatment of sick paupers, both indoor and outdoor, and he had further stigmatised the guardians as being of a low *status*. Having, therefore, come to a foregone conclusion on the matter, Mr. Farnall was not, in their opinion, the man that should be selected for the duty, nor did the guardians consider he would approach the subject in the impartial spirit that was absolutely necessary for the elucidation of the truth. The guardians of St. George's, therefore, trusted the Poor-law Board would substitute an unbiassed gentleman to accompany Dr. Smith in his visits. One of the guardians here said, that in order to ascertain how far Mr. Farnall was supported by the Poor-law Board in his sweeping condemnation of the metropolitan guardians, he would rise in his place in the House of Commons and put a pointed question to the President of the Poor-law Board on the subject. He would also ask his colleagues, who were vestrymen and guardians of the parish, and who also had seats in Parliament, numbering about a dozen, to support him in endeavouring to ascertain further whether Mr. Farnall's private statements made by him to the Association for the Improvement of Workhouse Infirmaries, and which were printed and circulated, met with the sanction of the Poor-law Board. This announcement gave every satisfaction, and the guardians separated with the expressed determination that their character as guardians of St. George's, Hanover-square, should not be trifled with by any person, be he archbishop or Poor-law Commissioners.

THE following are the last week's Cattle Plague Returns.

| Census Divisions. | 1. Attacked. | | | 2. Result of reported Cases from the Commencement of the disease. | | | | |
|---|---|---|---|---|---|---|---|---|
| | Week ending April 7. | Week ending March 31. | Week ending March 24. | Attacked. | Killed. | Died. | Recovered. | Unaccounted for. |
| 1. Metropolitan Police District . . | 67 | 92 | 60 | 7908 | 3442 | 3516 | 343 | 607 |
| 2. South Eastern Co. . | 6 | 8 | 6 | 5056 | 1615 | 2785 | 445 | 211 |
| 3. South Midland Co. | 396 | 526 | 542 | 17262 | 5443 | 9880 | 1546 | 398 |
| 4. Eastern Counties . | 122 | 217 | 190 | 10446 | 4509 | 4779 | 766 | 401 |
| 5. South Western Co. | 18 | 42 | 10 | 1634 | 587 | 776 | 199 | 72 |
| 6. West Midland Co. . | 444 | 513 | 444 | 11991 | 3660 | 6205 | 1316 | 810 |
| 7. North Midland Co. | 511 | 537 | 671 | 13941 | 6166 | 6040 | 1066 | 669 |
| 8. North Western Co. | 899 | 880 | 1492 | 55331 | 10479 | 33975 | 5862 | 5015 |
| 9. Yorkshire . . | 338 | 534 | 683 | 32651 | 5832 | 18259 | 5804 | 2756 |
| 10. Northern Counties. | 280 | 281 | 264 | 7456 | 3904 | 2491 | 941 | 120 |
| 11. Monmouthshire & Wales . . | 126 | 122 | 85 | 7864 | 523 | 5950 | 1079 | 312 |
| 12. Scotland . . | 154 | 204 | 257 | 46143 | 5869 | 27078 | 10671 | 2525 |
| | 3361 | 3956 | 4704 | 217683 | 52029 | 121725 | 30038 | 13891 |

*Note.*—62 Inspectors who reported cases last week have not reported in time for this return—viz., for the county of Buckingham, 1; Cambridge, 8; Chester, 1; Hertford, 1; Huntingdon, 2; Lancaster, 5; Lincoln, 6; Norfolk, 3; Northampton, 3; Northumberland 1; Salop, 1; Stafford, 1; Suffolk, 1; Surrey, 1; Yorkshire, 15; Metropolitan District, 7; Flint, 2; and Scotland, 8. These Inspectors returned 594 cases last week.

TREATMENT OF FEVER BY ALCOHOL.—I have, however, ascertained that 534 cases were treated with wine or spirits during some part of their illness, and out of this number 138 died. On the other hand, 491 were treated without any alcoholic stimulants, with only 9 deaths. From the much higher rate of mortality amongst the former than amongst the latter, I would caution any one against drawing the conclusion that the greater relative number of deaths was at all influenced by the administration of the stimulants. All the inference that I think may be deduced from those numbers is, that a large proportion, say fully one-half, of the cases of typhus in the present epidemic, may be advantageously treated without any alcoholic stimulants. Doubtless a considerable number of those who got wine or spirits would have recovered without a drop of either, but I am satisfied that, in many of them, the risk of a fatal issue would have been much increased, and the patients would have had a much more tedious convalescence. Of 245 patients below 15 years of age, only twenty-nine had any alcoholic stimulants, and several even of that small number had only very small quantities, and for only a few days. The state of the cardiac and radial pulses, as pointed out by Dr. Stokes, is the best guide for the administration of alcohol; and, as I before mentioned, the time for giving and the quantity required must be regulated by it in each individual case.—"*Observations on the Present Epidemic of Typhus,*" *by Robert Perry, M.D., Physician to the Royal Infirmary, Glasgow.*

# NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

*J.L., M.D.*—It is an impudent assumption of the title.

*Mr. H. Gardiner.*—One drop of Condy's solution of permanganate of potass to a gallon of water, then stir with a stick.

*L.R.C.P. London.*—1st. Yes, but not if you practise pharmacy. 2nd. Doubtful. 3rd. Not M.D.

*A Student.*—Registration at the College twice annually; at the Hall three times.

*A Metropolitan Student.*—The examination takes place this day. The questions can be obtained on application to the Secretary.

*Mr. Latham.*—You will find nearly perfect skeletons of those extinct birds the dodo and the great auk in the British and Hunterian Museums.

*A Member* will see in another page that the award has been made. The subjects for the Jacksonian prize for 1867 will be announced shortly. Write to the Secretary.

*Dr. Montgomery, York.*—You cannot consult a better work on the subject of your inquiries than Atkinson's "Medical Bibliography." It is an admirable work, which the author only lived to carry to letter B, calling it his A.B. performance. The dedication is as quaint as the notice of Albinus,—viz., "To all idle Medical students in Great Britain, Sit," and here follows a drawing of the "*sacrum.*"

*Prehistoric Remains.*—A great deal of interest was excited last year by the discovery of certain "prehistoric remains," human bones, flint implements, and so forth, by Mr. Laing, in mounds at Caithness. The learned interpretations of Professor Huxley and Professor Owen were sought and obtained. The peculiar construction of the mounds was elaborately described by Mr. Laing, the adult skeleton was pronounced to have ape-like peculiarities, and the jawbone of an infant which was submitted to Professor Owen was said to have certain marks which were painfully indicative of the cannibalistic habits of our prehistoric progenitors. The Ethnological and Anthropological Societies had rival discussions, and a great deal of erudite dissertation and debate took place which is preserved in print. At the last meeting of the former society it was broadly stated by several persons who had since examined these mounds that not any of them contain any traces of prehistoric age. The harbour mound is composed almost entirely of limpets, and the churchyard mound of periwinkle shells. The harbour mound contained a pair of weaver's shears, and was itself the ruins of a common corn kiln of the country. The stone implements were said to be chips such as may be collected by the barrowful. The Birkle Hills, instead of being places of worship and sacrifice, were thought to be natural hillocks of blown sand, which had served as the rendezvous of country folks on occasion of wrecks. The ape-like skeleton is declared to be the remains of a Danish seaman, and the jawbone of the child which afforded indications of cannibalism to have been borrowed from a neighbouring churchyard. Coins are said to have been found among these "prehistoric" remains belonging, not to the age of the great auk, but to the reign of William III. The controversy of the authenticity of the Abbeville jawbone will probably fade before the battle over these mounds at Keiss. Science will grieve and orthodoxy will rejoice at these widely differing interpretations.—*Pall-mall Gazette.*

### POOR LAW MEDICAL REFORM AND VACCINATION.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Permit me, through the medium of your columns, to say a few words on the subject of the Vaccination Bill, which most of your readers are now aware has been referred to a Select Committee of the House of Commons. A Member of Parliament in writing to me on the subject said, "By this morning's papers you will see the fate of the Vaccination Bill, which had not a single friend in the House." Yet this very Bill had passed a second reading without a single word being said against it, proving most incontestably that the check given to a Minister of the Crown is due to our Profession, and in no small degree to our Association, which, so far as I know, was the only body that sent a pamphlet on the subject to each Member of Parliament. I have written to the Select Committee requesting to be allowed to give evidence, and I trust other gentlemen will do likewise.

I am, &c., RICHARD GRIFFIN.

List of Subscriptions recently received:—Ellerton, F. C. G., Tadcaster, 5s.; Andrews, O., Monmouth, 10s.; Woollett, J. M., Monmouth, 10s.; Paget, James, Harewood-place, Hanover-square, (not Union), 42s.

By Mr. Prowse:—Cresswell, R., Merthyr Tydvil, 10s.; Wyman, W. S., Dunmow, 10s. 6d.; Thompson, A. B., Epping, 10s. 6d.

### Condy's Fluid.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The deep regret which is universally felt at the death of Dr. Hodgkin can hardly but be increased by the circumstance that, as stated in your last number, the cause of that lamentable event was apparently a preventible one. There is little doubt in my mind that if Dr. Hodgkin had been fully aware of the importance of the permanganate water test, as first practically introduced by me, and of my plan of freeing water from organic contaminations, he might have avoided the danger to which he seems to have fallen a victim. But even those who have not yet made acquaintance with Condy's Fluid as a disinfectant and general domestic purifier, would be greatly advantaged by being informed that Condy's Fluid is the most readily available source of the permanganates, because it is infinitely easier to be met with than the pure chemical salt, which, though now in the Pharmacopœia, is still kept by comparatively few chemists in this country, and perhaps by hardly any in India and the Colonies.

Independently, however, of these reasons, I have no hesitation in saying that those who consider they are doing good by commending the sanitary properties of the alkaline permanganates, are bound in all fairness to bear in mind what is due to the individual who not only discovered them, but, at the time when those salts were most expensive and inaccessible, ran the risk of undertaking their manufacture on the large scale, and thereby putting them within the reach of the public.

I will take this opportunity of calling attention to the important fact that the permanganates, in extremely small quantity, not only completely free water from organic impurities, but also from the metal lead, by converting that substance into peroxide, which is its most insoluble form. An account of the experiment by which this is proved and others relating to the purification of water, will be found in my published treatise on "Air and Water."

In conclusion, I would beg to observe that the extremely favourable results obtained from the internal administration of Condy's Fluid in Asiatic cholera, as shown in one of the tables of the rates of mortality of various treatments given by Dr. Howard B. Montgomery, in the letter of his which you published on the 10th of March last, are no doubt due to the chemically antidotal properties of the permanganates to effete and foul organic substances of every kind, and seem to me for this reason particularly deserving of the attention of the Profession.

I am, &c.,
H. B. Condy.

Battersea, April 1€.

COMMUNICATIONS have been received from—

W. H. Sankey; Apothecaries' Hall; R. Griffin; Royal College of Physicians; H. B. Condy; Royal Institution; H. Gardner, L.R.C.S. Lond.; Ethnological Society; Dr. Laycock; Medico-Chirurgical Society; Dr. Suckling; Dr. Tilbury Fox; Mr. J. Hutchinson; Mr. F. H. Marsh; Dr. Silver; Mr. E. Bellamy; Mr. J. Chatto; Dr. Lionel Beale; Dr. Hughlings Jackson; Dr. Cholmeley.

BOOKS RECEIVED—

Die Lehren vom Syphilitischen Contagium, von Dr. Auspitz.—Edwards' Photographs of Medical Men. No. 8.—Dixon, On Diseases of the Eye. Second Edition.—Reynolds' System of Medicine. Vol. I.—Langley's Few Words of Advice on the Buying and Selling of Medical Practices.—Simpson, On the Necessity of Removing Gas-works from the Metropolis.—Haughton's Notes on Animal Mechanics.—The Seventh Annual Report of Sussex County Asylum.—Journal de Médécine Mentale. Mars.—Annual Report of the Committee of the Manchester and Salford Sanitary Association.—Dr. Hovell, On Medicine and Psychology.—Dr. Daldy, On Disease of the Right Side of the Heart.—Professor G. Harley, On Influence of Physical and Chemical Agents upon Blood.—Phil. Trans., 1865. Vol. II.

NEWSPAPERS RECEIVED—

The Sunday Gazette.—The City Press.

## VITAL STATISTICS OF LONDON.

*Week ending Saturday, April* 14, 1866.

### BIRTHS.

Births of Boys, 1090; Girls, 1098; Total, 2188.
Average of 10 corresponding weeks, 1856-65, 1910·7.

### DEATHS.

| | Males. | Females. | Total. |
|---|---|---|---|
| Deaths during the week .. .. .. | 819 | 733 | 1552 |
| Average of the ten years 1856-65 .. .. | 667·3 | 635·1 | 1302·4 |
| Average corrected to increased population.. | .. | .. | 1432 |
| Deaths of people above 90 .. .. .. | .. | .. | .. |

### DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

| | Population, 1861. | Small pox. | Measles. | Scarlatina. | Diphtheria. | Whooping-cough. | Typhus. | Diarrhœa. |
|---|---|---|---|---|---|---|---|---|
| West .. | 463,388 | 1 | 16 | 6 | 2 | 20 | 7 | 2 |
| North .. | 618,210 | 13 | 8 | 4 | 1 | 17 | 26 | 5 |
| Central .. | 378,058 | 3 | 10 | 3 | — | 8 | 7 | 1 |
| East .. | 571,158 | 9 | 11 | 10 | — | 27 | 8 | 6 |
| South .. | 773,175 | 5 | 10 | 7 | — | 26 | 18 | 2 |
| Total .. | 2,803,989 | 31 | 55 | 27 | 3 | 98 | 66 | 16 |

### METEOROLOGY.

*From Observations at the Greenwich Observatory.*

| | |
|---|---|
| Mean height of barometer .. .. .. .. .. .. | 29·710 in. |
| Mean temperature .. .. .. .. .. .. .. | 47·8 |
| Highest point of thermometer .. .. .. .. .. | 65 8 |
| Lowest point of thermometer .. .. .. .. .. | 41·3 |
| Mean dew-point temperature .. .. .. .. .. | 43·3 |
| General direction of wind .. .. .. .. .. .. | S.W. |
| Whole amount of rain in the week .. .. .. .. | 0·54 |

### BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, April 14, 1866, in the following large Towns:—

| Boroughs, etc. | Estimated Population in middle of the Year 1866. | Persons to an Acre. (1866.) | Births Registered during the week ending April 14. | Deaths. | | Temperature of Air (Fahr.) | | | Rain Fall. | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Corrected Average Weekly Number.* | Registered during the week ending April 14. | Highest during the Week. | Lowest during the Week. | Weekly Mean of the Mean Daily Values. | In Inches. | In Tons per Acre. |
| London (Metropolis) | 3067536 | 39·3 | 2188 | 1400 | 1552 | 65·8 | 41·3 | 47·8 | 0·54 | 55 |
| Bristol (City) . . | 163680 | 34·9 | 117 | 73 | ‡97 | 59·7 | 40·1 | 47·3 | 0·31 | 31 |
| Birmingham (Boro') | 335798 | 42·9 | 280 | 163 | 176 | 60·6 | 38·3 | 46·7 | 0·45 | 45 |
| Liverpool (Borough) | 484337 | 94·8 | 368 | 281 | 371 | 58·4 | 39 3 | 49·0 | 0·18 | 18 |
| Manchester (City) . | 358855 | 80·0 | 288 | 203 | ‡259 | 64·4 | 40·0 | 48·2 | 0·01 | 1 |
| Salford (Borough) . | 112904 | 21·8 | 102 | 57 | 75 | 61·5 | 38·0 | 46·9 | 0·05 | 5 |
| Sheffield (Borough) . | 218257 | 9·6 | 173 | 115 | 127 | 60·6 | 37·9 | 45·2 | 0·40 | 40 |
| Leeds (Borough) . | 228187 | 10·6 | 119 | 116 | 137 | 64·3 | 38·6 | 47·7 | 0·34 | 34 |
| Hull (Borough) . | 105233 | 29·5 | 106 | 49 | 59 | .. | .. | .. | .. | .. |
| Nwcastl-on-Tyne, do. | 122277 | 22·9 | 81 | 65 | 85 | .. | .. | .. | .. | .. |
| Edinburgh (City) . | 175128 | 39·6 | 114 | 84 | 103 | 55·7 | 37·0 | 44·0 | 0·40 | 40 |
| Glasgow (City). . | 432265 | 85·4 | 372 | 252 | 319 | 56·3 | 37·9 | 45·8 | 0·39 | 39 |
| Dublin (City and some suburbs) . | 318437 | 32·7 | 202 | †156 | 214 | 57·4 | 36·0 | 46·7 | 0·33 | 33 |
| Total of 13 large Towns . . . | 6122894 | 34·4 | 4510 | 3014 | 3574 | 65·8 | 36·0 | 46 3 | 0·31 | 31 |
| | | | | | Week ending April 7. | Week ending April 7. | | § | | |
| Vienna (City) . . | (1863)<br>560000 | .. | .. | .. | .. | .. | .. | .. | .. | .. |

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·710 in. The barometrical reading increased from 29·17 in. on Wednesday to 29·96 in. at the end of the week.

The general direction of the wind was S.W.

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* The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.

† Registration did not commence in Ireland till January 1, 1864; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in that city were the same as the averages of the rates in the other towns.

‡ The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

§ The mean temperature at Greenwich during the same week was 42·4°.

## APPOINTMENTS FOR THE WEEK.

### *April* 21. *Saturday (this day).*

*Operations* at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free Hospital, 1½ p.m.

Royal Institution, 3 p.m. G. Scharf, Esq., "On National Portraits."

### 23. *Monday.*

*Operations* at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.

### 24. *Tuesday.*

*Operations* at Guy's, 1 p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; St. Peter's Hospital for Stone, 3 p.m.

Ethnological Society of London, 8 p.m. John Thrupp, Esq., "On the British Superstitions relating to the Hare, the Goose, and the Fowl." Thomas Wright, Esq., "On the Intercourse of the Romans with Ireland."

Royal Medical and Chirurgical Society, 8½ p.m. Dr. John Harley, "On Hydatid Disease of the Liver." Also, if time, Papers by Mr. Toynbee or Mr. Durham.

Royal Institution, 3 p.m. Rev. Chas. Kingsley, "On Science and Superstition."

### 25. *Wednesday.*

*Operations* at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.

### 26. *Thursday.*

*Operations* at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.

Royal Institution, 3 p.m. Rev. Chas. Kingsley, "On Science and Superstition."

### 27. *Friday.*

*Operations*, Westminster Ophthalmic, 1½ p.m.

Royal Institution, 8 p.m. The Very Rev. the Dean of Westminster, "On Westminster Abbey."

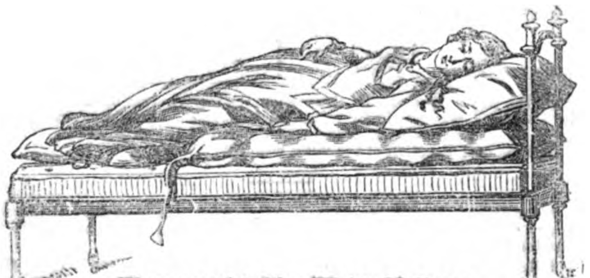
# HOOPER'S
# WATER BEDS AND CUSHIONS,

**(obtained the only Prize Medal, 1862).**

USED BY
THE ROYAL FAMILY
AND ALL
CLASSES OF INVALIDS.

ALSO IN
H.M. ARMY AND NAVY,
AND THE
INDIAN PRESIDENCIES.

**Full Length Water Mattress.**
*In sending an order the Width of the Bedstead should be stated.*



Three-quarter Size Water Mattress.

Half Size Water Mattress.

**HOOPER, Operative and Manufacturing Chemist, 7, Pall-mall East, and 55, Grosvenor-street, London.**

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# THE PANCREATIC EMULSION,

## A NEW REMEDIAL AGENT.

Originated by **Dr. DOBELL**, Physician to the Royal Infirmary for Diseases of the Chest.

*Vide* The Lancet, *Nov.* 11*th* and 18*th*.—"A third report of cases of consumption treated with Pancreatic Emulsion at the Royal Infirmary for Diseases of the Chest."

**This Preparation is now made on an extensive scale, and the Price is therefore considerably Reduced.**

N.B.—The TRUE PANCREATIC EMULSION has an acid reaction, and is readily miscible with water or milk. Preparations in IMITATION of it have an alkaline reaction, and are not miscible with water or milk.

PREPARED ONLY BY

## SAVORY & MOORE, New Bond-street,

**CHEMISTS TO HER MAJESTY THE QUEEN, HIS ROYAL HIGHNESS THE PRINCE OF WALES, HIS IMPERIAL MAJESTY NAPOLEON THE THIRD, AND HIS MAJESTY THE KING OF THE BELGIANS.**

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**EARL RUSSELL sent to the College of Physicians a communication received by him from Manilla (where Cholera has been raging fearfully), to the effect that, of all remedies tried, Chlorodyne was the most effective.—See "Lancet" and "Brit. Med. Jour.," Dec. 31, 1864.**

# TOWLE'S CHLORODYNE.

**OF KNOWN COMPOSITION.**
*For Formula, &c., see back Numbers.*

## NOTICE TO THE PROFESSION.

In consequence of the decision of the Board of Inland Revenue, that Chlorodyne is liable to Stamp duty, whether for Retail, Dispensing, or Export, I beg to inform the Profession of the following alterations in my Dispensing sizes, the price of which will now be,—2 oz., 2s. 9d.; 4 oz., 4s. 6d.; and 10 oz., 11s. (stamped.) The Liq. Chloroformi Co., in 2 oz., 4 oz., and 8 oz. bottles, will remain as before. All future orders are requested to be written for the above sizes.

The ½ oz., 1 oz., and 8 oz. sizes are discontinued in order to give the largest possible amount of Chlorodyne for the smallest Stamp Duty. Chlorodyne being frequently sold by weight, I beg to say that such is not the case with my preparation, which, being sent out by the fluid ounce, gives a considerable advantage over purchasing by weight, there being only 12¼ fluid ounces to the pound.

**Sole Manufacturer—A. P. TOWLE, STOCKPORT-ROAD, MANCHESTER.**

# ORIGINAL LECTURES.

ON

## MECHANICAL DISEASES AND THE SECONDARY CHEMICAL DISEASES THEY PRODUCE.

By H. BENCE JONES, M.D., F.R.S.

### PART V.—LECTURE XII.

In my previous lectures I have shown you that chemical diseases are the parents of mechanical diseases, and I have frequently had occasion to point out how a secondary mechanical complaint sets up a more serious tertiary chemical disease than the primary chemical wrong, of which renal or biliary calculus are two most striking examples. I shall now endeavour once more to bring before you the compound or mechanico-chemical or chemico-mechanical nature of the actions in disease by taking an illustration or two from a vast number of instances which, in the subdivision of labour, fall under the care of the Surgeon instead of the Physician.

If I were a Surgeon, I could give you a long course of lectures on mechanical diseases and the secondary chemical diseases which they produce, and on mechanical treatment and on the consequent beneficial alterations thereby produced in the chemical actions going on in the body.

The purest portion of pure Surgery consists in the treatment of mechanical accidents and the increased or diminished chemical actions produced by the mechanical wrong. How important the relationship of the chemical to the mechanical effects is, may be seen in the fact that Surgical accidents would, speaking generally, be free from danger, if it were not for the secondary chemical actions which necessarily come out of them and often rise to fatal diseases.

I might take my illustrations from fractures of the bones or from rupture of the tendons, vessels, or membranes; or from dislocations, as of the joints or viscera, as in hernia; or from wounds, as of the skin, vessels, muscles, or nerves.

By any of these different mechanical accidents, I might show you the danger of secondary chemical disease, and if it were desirable to extend this long list of mechanical disturbances, I might take parturition, with all its accidents and consequences, to prove the origin of chemical from mechanical complaints.

You must not suppose that in this lecture I take my illustrations from Surgery and Midwifery, because Medicine will furnish me with no examples sufficiently striking to be brought before you; on the contrary, in Medicine also mechanical complaints abound—Medical accidents, if I may so call them, among which I may mention obstructions, hæmorrhages, ruptures of valves connected with the heart, causing dilatation and hypertrophy; dilatation of the veins; emphysema of the lungs, and many other diseases. In addition to the Surgical accidents, I shall bring before you one or two of these sudden or slow Medical accidents to prove to you the connexion of mechanical with chemical disease, or, if you please, of Surgery with Medicine.

From the immense variety and amount of mechanical diseases to which he ministers, and from the greater use he makes of mechanical remedies, the Surgeon may be regarded as the mechanical Physician; but in consequence of the secondary chemical diseases that are set up, he requires the same knowledge of chemical remedies as the Physician who, in the treatment of disease, can use comparatively no mechanical remedies whatever, except rest. This comparative limitation to one class of remedies enables the Physician to become more skilled in their use against the innumerable multitude of chemical diseases that he is called upon to treat.

My first illustration of the production of chemical disease by previous mechanical action will be taken from a compound fracture of the leg,—in other words, fracture of the bone, with laceration of the muscles, blood-vessels, and skin at the same time. When the same amount of injury is done to the bone, muscles, and blood-vessels, the skin remaining unhurt, the accident is, comparatively speaking, slight. Hence the amount of mechanical injury cannot be the cause of the seriousness of the compound fracture, for a broken skin could not in itself make the difference of danger between a simple and a compound fracture. The difference really consists in the secondary chemical diseases which are set up in the two accidents. In the simple fracture, when perfect rest is possible, moderate peroxidation and pertrophic action only occur, and generally no formation of pus takes place. In the compound fracture the admission of the air to the injured parts is sure to determine excessive local peroxidation, and pus is much more likely to be formed, and this suppuration from the position of the wound, and from the access by the air of infusorial germs, or from the peculiar condition of the albumen, rapidly sets up decomposition. A state of general peroxidation is readily produced in the system, and not unfrequently the pus enters the blood, and becomes itself a species of ferment, modifies the peroxidation in the system, and, when it lodges mechanically (embolically) in different organs, it there becomes the nucleus and cause of a local modified peroxidation, which gives rise to secondary abscesses wherever the lodgment is effected. Hence increased oxidation and altered nutrition is the chemical complaints produced by this mechanical accident.

The first and most necessary part of the Surgeon's treatment is to put the fracture in that position in which no fresh mechanical disturbance can take place; then, by chemical means, lotions, and diet, he lessens or increases the chemical action, and day by day he carefully removes the foul matter, which is apt to become a chemical poison, and then not only interferes with the healing process, but, if absorbed, poisons the whole system.

If the general peroxidation is excessive, and if the drain of matter endangers life, the Surgeon is obliged to use mechanical instead of chemical treatment, he removes the limb with the knife. Thus a clean surface is gained instead of a foul one, and chemical and mechanical irritation is removed, and moderate oxidation and nutrition soon close the wound.

My second illustration of the production of chemical disease by a mechanical action will be taken from dislocations. A dislocation is a mechanical misplacement, as, for example, of the bones; but it may also occur in the viscera, as with the uterus or the bowels. In this last instance it constitutes hernia.

In all severe dislocations of the joints the mechanical injury that is done to the parts around the joint causes more anxiety to the Surgeon than the misplacement of the bones. The capsule, the ligaments, the vessels in the neighbourhood, may be so injured that violent inflammation may be set up; in other words, great alteration of the chemical actions of oxidation and nutrition around the joint may occur. The motion may be completely lost either by the formation of pus within the joint, or it may be only more or less hindered by the effusion of lymph in the surrounding textures.

When the dislocation accidentally remains unreduced the mechanical pressure may cause so much inflammation that the displaced bone may become so fixed that no motion may be possible.

When the Surgeon is called to remedy the accident, he applies mechanical force in the opposite direction to that force that caused the dislocation. He counteracts the displacing force, the tension of the muscles and the contraction of the tendons, and then, by rest and by remedies, cold lotions, salines, and aperients and diet, he tries to prevent the occurrence of increased chemical action.

He saves the joint, and ultimately the use of the limb is restored. Whilst if the dislocation has been neglected, he counteracts a very small part of the original mechanical injury and of the results of the chemical actions set up around the displaced bone by means of constant and long-continued mechanical motion of the limb, whereby a greater or a less amount of motion by means of a false joint is obtained.

But you will see better in a case of hernia how chemical actions arise from mechanical injuries and how they add to the distress and danger which the accident occasions.

Usually constant mechanical pressure with a truss prevents any accident to the bowel, but when from a mechanical cough or from a jar displacement occurs, then mechanical pressure must be used by the patient or by the Surgeon to return the bowel and to prevent the occurrence of any secondary chemical wrong action. When the hernia cannot be reduced, the mechanical strangulation immediately begins to affect the progress of the chemical actions in the part.

The entrance and escape of the supply of blood to the bowel may be so stopped that no oxygen may go in and no carbonic acid may come out. The action of the oxygen on the fuel may be so diminished that the chemical conditions necessary for producing mortification may occur, and to prevent the death of the intestine the Surgeon, as soon as he finds that the pressure cannot be otherwise removed, mechanically divides the stricture. Then if the operation has not been too long delayed the circulation is restored and healthy chemical actions again take place, unless the chemical changes that have occurred in the bowel during the extreme pressure preclude all healthy action.

When the mechanical work of the Surgeon is done, he then by perfect rest to the body and rest to the bowel, by the least amount of pressure of the general and local circulation, by diet, by lotions, and by medicines, endeavours to stop the increased chemical action, which under the name either of peritonitis or of diffuse cellular inflammation is so apt to deprive him of the credit of his handicraft, and his patient of his life.

In every one of the mechanical injuries which may be brought to the Surgeon, this relationship of the chemical disease to the mechanical accident is always in his mind. In some slight accidents, or in some parts of the body, the mechanical injury may hardly visibly alter the healthy chemical actions of oxidation and nutrition; but a disturbance always takes place; and in some parts of the body, from the nature of the textures or from the mode in which the nutriment and oxygen are supplied, and the products of change and disintegration are removed, a very slight mechanical cause may give rise to a very great chemical effect.

Of all wounds, why are scalp wounds the most serious? Not surely because of the nature of the mechanical injuries themselves, but on account of the secondary chemical results which from the anatomical structure of the parts are more apt to occur in these than in most other kinds of wounds.

The two chemical consequences of scalp wounds generally are diffuse inflammation (peroxidation and altered nutrition) consequent on the looseness of the structure of the cellular tissue of the scalp; and necrosis or chemical death of the bone, which occurs when the periosteum which supplies the bone with food and oxygen is torn away by the mechanical injury.

As soon as the peroxidation begins in one spot of the cellular tissue it rapidly sets up similar action in the adjoining healthy texture, and causes the healthy oxidation going on in it to rise in degree until it becomes capable of increasing the oxidation in the neighbouring cells and structures, and so the inflammation spreads, and altered actions of nutrition occur. These altered chemical actions might extend through the whole cellular tissue of the scalp if the Surgeon did not mechanically divide the tense skin, which relieves the pressure and the circulation, and allows the products of the inflammation to escape freely from the inflamed part.

So, also, when more or less of the surface of the bone is mechanically deprived of its nutriment, the part so injured immediately begins to go through changes of anoxidation and atrophy; whilst around the obstruction increased circulation is set up, and increased chemical action, which would slowly end in the removal of the dead and sometimes decomposed bone. The Surgeon, by the removal of the dead bone, mechanically does what nature would do chemically, and by so doing he rapidly puts an end to a state of chemistry which, when left to its course, ends not unfrequently by the absorption of pus, in a general poisoning of the system, and a stoppage of all the actions which constitute life.

In another very large class of diseases—those, namely, which follow child-birth, the same relationship between mechanical injury and altered chemical action may be shown to obtain.

The removal of the child from the uterus may be regarded as a mechanical accident, an operation performed by nature; and violent mechanical injuries are often inflicted on the mother and child in the process of parturition. Thus by pressure, for example, rupture of blood vessels and other textures between the uterus and placenta invariably occur, and accidentally other ruptures take place. Thus rupture of the perineum not unfrequently happens, and rupture of the bladder or even of the uterus itself more rarely occurs. The rupture of the vessels connecting the uterus and the placenta, and a tranverse rupture of the uterus, cause oftentimes such hæmorrhage that an acute state of anæmia is rapidly produced; and the actions of oxidation and nutrition so suddenly decrease in consequence of the deficiency of the supply of oxygenated blood to the nerves and muscles that they cease to act, and death rapidly ensues. When the rupture of the uterus is longitudinal, there is less hæmorrhage, and in some rare cases a less fatal result ensues.

Rupture of the perineum is slight or serious according to the degree of the mechanical accident. In slight cases healthy increased chemical action soon closes the wound, and little or no inconvenience is produced. In more extensive ruptures more serious wrong chemical actions arise, mortification, inflammation, and passage of the fæces into the inflamed false opening keeping up constant irritation. These evil effects may last through life unless by skilful mechanical treatment the Surgeon can enable nature to close the opening which the mechanical force originally produced.

Among the diseases which have been classed together under the term puerperal fever you will find not only the best illustrations of the relationship of chemical to mechanical diseases, but also the best possible example of the close connexion that exists between the actions that constitute fever and those that constitute inflammation.

At the time of child birth the whole of the chemical and mechanical actions going on in the body are suddenly disturbed. The whole oxidation and nutrition that was going on in and through the uterus is suddenly checked. An entirely new set of chemical and nutritive actions are beginning to be set up in the mammary glands. Each structure of which the uterus is made up is undergoing more or less altered action. The peritoneum has been stretched to the uttermost, and then is suddenly squeezed up. The muscular structure of the uterus has suddenly been called into the most intense action, and then suddenly has its violent action stopped, and its substance gradually dwindles, by oxidation and altered nutrition, away. The mucous membrane is not only bruised, but is torn, and has to be repaired and absorbed. Even the blood vessels of the uterus are torn, and have to be closed and gradually to undergo that change of texture which reduces them to a small fraction of the size to which a short time previously they had attained. Without any inoculable products of inflammation being brought to the uterus by the accoucheur or nurse inflammation may be set up by spontaneous development from cold, from unhealthiness, from physical or mental distress. The inflammation may be most intense in one or in all of the uterine structures, and according to the different textures involved different names have been given to the resulting chemical disease.

If the inflammation is most intense in the peritoneum, the disease is called puerperal peritonitis. If in the veins, it is called puerperal phlebitis, and cases of inflammation of the absorbents have probably been included in this designation. When the symptoms are less manifest in the peritoneum and veins, the inflammation then is in the mucous and muscular structure, and when less distinctly localised, it is designated as puerperal fever, which in all cases is a spontaneous or inoculated inflammation of one or many of the textures of the womb just after delivery, when all the forces in the body are in a state of very great disturbance.

The effects of pressure upon the child in parturition are in the highest degree mechanical and dangerous. It may be mechanically strangled, or suffocated, or crushed; it may be so wedged in that it must either be removed in pieces, or the mother must be opened to get it out. No stronger proof of the energy and extent of the chemical actions of oxidation and nutrition that go on within us can be given than that they should be able to continue in action during the violent mechanical accident to which we are exposed at the end of the ninth month of our existence.

The pure Surgeon considers that all these accidents of parturition do not belong to his handicraft, and the division of labour has almost taken them from the pure Physician, and has given them to a separate class. But the amount of skill that is required to obviate and to remedy these mechanical accidents, and the amount of judgment and knowledge that the skilful treatment of the secondary chemical diseases requires, shows that no distinction can be drawn in the relative requirements of those who practise any one of the three branches of our Profession. All should possess the same chemical and mechanical knowledge, while the handicraft can be neglected by the Physician alone, who, to compensate for this loss of power, should possess the greatest insight into the chemical and mechanical forces that are in action in health and in disease. Even in the treatment of Medical accidents no handicraft is of use to the Physician. Whether these accidents are sudden or slow, generally speaking, no mechanical treatment can touch the cause of the evil. The Physician may palliate or cure by mechanical and chemical remedies the secondary chemical diseases that may be set up; but no direct mechanical treatment of the original injury is possible, except that which can be obtained by rest.

(To be continued.)

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THE CHOLERA IN FRANCE.—The *Armorique* of St. Brieuc states that the cholera is raging at St. Trephine.

## ORIGINAL COMMUNICATIONS.

# REPORTS AND LECTURES ON ORIGINAL RESEARCHES IN SCIENTIFIC PRACTICAL MEDICINE.

By BENJ. W. RICHARDSON, M.A., M.D., F.R.C.P.,
Senior Physician to the Royal Infirmary for Diseases of the Chest.

## II.—ON SOME NEW COMPOUNDS OF ETHER.

## III.—STYPTIC OR HÆMOSTATIC ETHER.

MY researches on the production of local anæsthesia by means of ether spray have led me to invent a few new compounds of ether which cannot, I think, but prove useful in practice, and to which I would direct the attention of the readers of the *Medical Times and Gazette.*

### HÆMOSTATIC ETHERS.

In observing the influence of the cold produced by the dispersion of absolute ether during operations, nothing has struck me more than the effect of the cold in immediately stopping the flow of blood. For a time, cold alone, when carried to its fullest degree, prevents all venous and capillary hæmorrhage, and even the hæmorrhage from small arterial trunks. After a time, however, as reaction returns, and the vessels relax under the influence of heat derived from the renewed circulation, there is bleeding, which, if a wound be closed too quickly, is a cause of after trouble. The observation of the immediate effects of cold led me to think that if they could be supplemented by a styptic which would spray evenly with ether, and which would take up the constringing action when the vessels commenced to relax, an important desideratum in both Medical and Surgical practice would be supplied.

### XYLO-STYPTIC ETHER SPRAY.

With this object before me, I requested Mr. Robbins to make for me a solution consisting of absolute ether, having a boiling point of 92° Fah., charged to saturation at a low temperature with tannin, and afterwards treated with xyloidine, a little short of saturation. The compound, made with much care, came out well. It ran easily through the spray tube without blocking; it produced good local anæsthesia, and it possessed an agreeable odour.

In order to test to the extreme the effects of this preparation as a styptic, I took sheep's blood, removed all the fibrine previous to coagulation by whipping, and then let the blood remain exposed to the air for two days to ensure partial decomposition. In this way the blood was rendered nearly as fluid as port wine, and in the most unfavourable condition for being transformed into clot. A few drachms of this blood were now placed in a saucer, the saucer having been warmed to the temperature of the body. The spray of the styptic ether was then directed upon the blood from a full-sized spray tube, and in five seconds the whole mass of blood was so thoroughly solidified that the saucer could be turned upside down without any escape of fluid. The blood, which had previously presented the odour of putrefaction, was also deodorised, and remains quite inodorous at this date—ten days after the experiment. The blood sets in a firm leathery consistence, covered on its upper surface with a fine whitish layer, with a bright vermilion colour beneath.

These are the effects of the styptic ether on blood, the spontaneous coaguability of which has been lost, and I had the pleasure of showing these effects at the College of Physicians on Friday last during a lecture on heat and cold in the treatment of disease; but these effects are trifling when compared with what takes place on blood newly drawn, and which contains fibrine. In this case the process of coagulation under the influence of the spray is the work, I had almost said, of a second.

When this spray is directed on an open bleeding living surface, the primary effects are those produced by the cold—namely, the condensation and whitening of the tissues. If blood be flowing, it solidifies, and when the parts relax, new blood that may ooze up enters the solid blood as though it were a sponge, quickly solidifying by coagulation and stopping further flow.

The applicability of this process for the arrest of hæmorrhage will occur to the mind of every Practitioner. The substances used in the compound are innocuous, and the combined influence of the cold and the styptic are immediate, and so decisive that I can scarcely imagine any hæmorrhage they would not control. I have not had an opportunity of testing the point, but I have no doubt from the influence of the styptic on the decomposing albumen of defibrinated blood that even in those cases of hæmorrhage where the blood is preternaturally fluid, the styptic spray would arrest the hæmorrhage entirely. Where the blood contains fibrine in a natural condition, I cannot imagine a case in which the fluid would not prevent exudation.

The essential elements of this process are three in number:

1. The immediate constringent effects of cold on the blood-vessels.
2. The chemical action of the solution on the fibrine and albumen of the blood.
3. The extreme mechanical fineness of distribution of the fluid on the bleeding surface.

The styptic ether can not only be applied to open wounds on the skin, but to hæmorrhage after the extraction of teeth, and, by means of a uterine tube, to hæmorrhage arising from cancerous disease of the uterus or other cause. It might also be applied to the rectum in cases of hæmorrhage from piles.

The apparatus required for this styptic ether is mechanically the same as for ordinary ether—that is to say, my spray tube with Dr. Clarke's hand bellows. The tube, however, requires to be made of different metal from that ordinarily in use for local anæsthesia; and I have therefore instructed Messrs. Krohne and Sesemann to construct a special tube for the purpose.

### FERRO-STYPTIC ETHER.

I have tried other experiments with the persalts of iron, which are more or less soluble in ether, especially the perchloride, and these one and all produced, as a styptic ether, rapid coagulation of blood. Solutions of iron salts in ether are not, however, more effective than the ether I have already described; and as they destroy the tube rapidly, act upon clothing injuriously, and do not so thoroughly deodorise, I do not think they are in the main so practical.

The styptic ether, containing xyloidine and tannin, will keep ready for use any length of time, as there is nothing in it to undergo decomposition; and as very small quantities of it are required, it will become, I trust, of standard service to the Medical Practitioner. It would be of great use also to Surgeons on board ship, and particularly to Army Surgeons. In case of warfare it would be exceedingly useful on the battle field, as under the instruction of the Surgeon it could be used by an orderly, so as to prevent hæmorrhage instantaneously in the case of flesh wounds. It would also form a useful addition to the Medical cabinet of travellers, who by necessity are removed from the direct succour afforded by Medical art.

I have invented some other ether compounds—namely, a caustic ether, an iodised ethereal oil, and an ozonised ether, to which I will refer in a future number.

# ON THE OCCURRENCE OF AMPHORIC RESPIRATION IN PLEURISY AND PLEURO-PNEUMONIA.

By H. FEARNSIDE, M.B. LOND.,
Member of the Royal College of Physicians of London.

THE not unfrequent occurrence of amphoric respiration in the course of pleurisy and pleuro-pneumonia has scarcely, I think, received from English Physicians and writers on auscultation the amount of attention which it deserves; for, as cases which have come under my own observation have proved to me, its want of recognition may lead to errors both in diagnosis and practice.

The doctrine formerly held respecting amphoric respiration was that it is heard (most generally) in broncho-pleural fistula, and in some examples of large pulmonary cavern.

Chomel, in his "Traité de Pathologie Générale" (1842), mentioned that gurgling was sometimes heard in chronic pleurisy, and supposed that it was owing to the presence of a pulmonary cavern, separated by a thin layer of tissue from the pleuritic effusion.

MM. Rilliet and Barthez ("Traité des Maladies des Enfans," vol. i., p. 152) stated that when a pleuritic effusion is superadded to pneumonia, most frequently the bronchial souffle augments in intensity, and sometimes assumes a true cavernous timbre; whilst, if mucus be present in the bronchial tubes, and be disturbed by the passage of air, a sound resembling gurgling is produced, and at the same time the voice is pectoriloquous, and thus the idea of the existence of a cavern naturally arises. These observers subsequently reported instances of pleurisy (*Archiv. Gén. de Médecine*, 1853) from which they concluded that where there was no union of pneumonia with pleurisy, nor any communication of the bronchial tubes with the pleural sac, nor any large pulmonary cavern, these signs may exist, and that for days, weeks, or even months, a bronchial souffle may be heard, which by its intensity and timbre simulates cavernous and even amphoric respiration.

MM. Béhier, Trousseau, and Gallard have also narrated cases of simple pleurisy in which these phenomena have been present.

To M. Landouzy, of Rheims, however, belongs the merit of specially studying this subject, and of deducing useful rules for practice.

The cases, of which an abstract follows, afforded good examples of the signs in question, and as such I beg to place them before the readers of the *Medical Times and Gazette.*

*Case* 1.—Some months ago I was requested to visit a young woman who had been ill for several weeks with symptoms of fever of an intermittent type. The patient (a domestic servant) was descended from healthy parents, and although not robust, had generally possessed good health. Her illness was not, in the first instance, attended by any notable signs of pulmonary disease, but, after the lapse of about three weeks, she began to complain of pain in her left side, and shortness of breath. She also became troubled with a cough, which in the course of ten days was accompanied by a considerable amount of muco-purulent expectoration. She had much evening fever and night perspiration; her strength rapidly declined, and her weakness was still further increased by occasional attacks of diarrhœa and by her inability to take food. Signs were noticed which were thought to indicate the formation of a large cavity in the lung. In this condition, she was supposed to be the subject of acute phthisis, and at this stage of the complaint she fell under my notice. On examining her chest, the following signs were observed:—The movements of the left side were much less free, and the lower intercostal spaces were less marked than those of the right side. On measurement immediately below the mammæ, the circumference of the left side was the same as that of the right. On percussion over the left side, the sound was universally more or less dull, except under the clavicle and near the sternum, where it was tympanitic. From this point to the fourth rib it was less dull than below, where the dulness was absolute both before and behind. Vocal fremitus over the lower half of the left side was absent. On auscultation under the left clavicle the respiration was tubular; over the third and fourth ribs moist crackling sounds were heard; below this there were no respiratory sounds; behind, over the left upper scapular region, the sound was bronchial, which increased in intensity and acuteness of tone as the ear descended over the lower part of the scapula, until near its inferior angle, where it passed into pure amphoric respiration, which was heard both in inspiration and expiration. Occasionally, over the same part a liquid sound, not distinguishable from that of gurgling, was audible, and the voice was not œgophonic, but pectoriloquous; below, as in front, no respiratory sounds were heard. On the right side the stroke sound was clear, and the respiration puerile. The heart was displaced, and its impulse felt behind the sternum; the pulse was weak and quick; the respiration short and frequent. The tongue was unnaturally red, the stomach irritable, and the bowels relaxed.

*Treatment and Subsequent Progress of the Case.*—To correct the morbid state of the gastro-intestinal mucous membrane, bismuth and hydrocyanic acid were prescribed, and were speedily found useful. Alteratives and alkalies (iodide of potassium, with bicarbonate of potash) were then given, and the lower half of the affected side of the chest was freely painted from time to time with a strong solution of iodine. A diet, simple, but as nutritious as the stomach would bear, was allowed, and under these means she gradually improved. The respiration over the lower scapular region remained amphoric for about three weeks; it then became tubular, and did not altogether lose this character so long as the patient remained under observation. The vocal resonance subsided, and became bronchophonic; the expectoration diminished, and at the end of three months ceased. At this date the patient considered that her health was re-established; there was evidence, however, that there remained a considerable amount of condensation in the lower half of the left lung, and the circumference of the left side had contracted by about an inch.

*Case* 2.—During the last summer my opinion was asked respecting a young lady, 14 years of age, who had been more or less out of health for some months. She did not inherit any predisposition to tuberculous disease, but had lost several relatives from cancer. Her health, however, had been much impaired some years before by a severe attack of scarlatina. The catamenia had appeared a year previously, but had been suspended for a considerable time. In the summer of the preceding year, Miss A. had been sent to a school in one of the midland counties, where the subjects of study were more numerous and required closer application, and where also the diet was less abundant and supporting than she had been accustomed to when at home. Her health remained as good as usual until about Christmas, when she took cold, and was confined to bed for a short period. A slight cough remained; and about the middle of March she expectorated about two tablepoonsfuls of blood. At this date she was again confined to bed for a few days, and discontinued her studies for about a fortnight. Her cough recurred from time to time, but did not attract much notice until May, when she began to complain of pain in her left side and shoulder, and her increasing debility and emaciation led to her being sent home. She was then considered to be the subject of consumption, and was advised to take cod liver oil. I visited her in the early part of July, and made the following observations:—She was much emaciated, had a small, quick pulse, a good deal of evening fever, and some night perspiration. The motions of the left side of the chest were much impaired, and there was great dulness on percussion over its whole extent—more complete, however, below than above. Vocal fremitus was feeble, but still perceptible. The respiration was bronchial under the left clavicle; and in the lower and outer portion of this region there was a sound which no auscultator would have hesitated to pronounce cavernous; here also gurgling was heard from time to time. Behind, the breath sound was strongly tubular over the upper scapular region, and amphoric over the lower, where the vocal resonance was that of pectoriloquy. Below, the respiratory sounds were all but inaudible. The heart's sounds, impulse, and position were normal. On the right side there was no dulness on percussion, but the breath sounds were masked by sonorous rhonchus. She had a troublesome cough, and expectorated in twenty-four hours from two to three ounces of uniform brownish yellow muco-purulent matter. It is unnessary to give the details of the treatment, which varied from time to time as circumstances indicated. Suffice it to say that counter-irritation over the affected side was freely practised by means of iodine. Sedatives were given to allay the cough, and, as soon as possible, alteratives and tonics were prescribed; from the first, also, as liberal and supporting a diet was recommended as her digestive organs would tolerate. Under this plan she soon began to improve in health; her cough and expectoration rapidly subsided, and at the end of seven weeks both had ceased. The respiration over the lower scapular region lost its amphoric character in about a month; but it remained tubular, with a gradually diminishing intensity, for nearly three months. The cavernous sound, anteriorly and superiorly, became weaker and more distant; but at the end of five months it was still recognisable on deep or quickened breathing. At the same date the stroke sound over the lower half of the left side was still duller, and the respiratory murmur feebler than natural. She presented, however, all the external indications of good health, having become ruddy and plump.

*Comments.*—In each of these patients there was a combination of pleuritic effusion with pulmonary condensation. In the first, the affection of the lung was probably simple inflammation; in the second, it is more reasonable to suppose that some tuberculous deposit had taken place, which had even resulted in the formation of a small cavity in the upper and outer portion of the lung. The chief interest of the cases and that for which they have been narrated, relates to the occurrence in both of amphoric respiration over the lower scapular region. In considering the causes and mode of production of this sound, the possibility of the existence of broncho-pleural fistula may be dismissed at once, as there were absolutely no other signs of it. The previous history of the cases, the seat of the lesion, the rapid subsidence of the cough, the cessation of the expectoration, and the subsequent progress of the patients are incompatible with the supposition that it could be referred to the existence of a large pulmonary cavern. Hence it can only be ascribed to a peculiar condition of the lung produced by the pressure of the effused fluid—probably aided also by interstitial deposit. Béhier, Rilliet, and Barthez think that in such cases amphoric respiration is only the reverberation of the tracheal murmur transmitted by an indurated lung, and it is so far in harmony with this view that it is especially in those points towards which the lung is pressed back that the sound is heard.

Preston.

### CASE OF

## FRACTURE AND DISPLACEMENT FORWARDS OF THE BODY OF THE FIRST LUMBAR VERTEBRA,

### WITH PHOTOGRAPH.

By Assistant-Surgeon J. MUNDAY, H.M. 21st Hussars.

No. 326, P. R. R., aged 26, 21st Hussars, a healthy young man, of stout build, middle height, and very active habits, was mounted in the Barrack-square, at Umballa, on the morning of September 25, 1865, prior to going out to field drill with the regiment, when his horse became restive, reared up in the ranks, and fell back on him, the weight of the horse coming with full force on him and crushing him to the ground, the hilt of his sword intervening between his back and loins. He was not rendered insensible by the fall, but screamed out in great agony for some time, and when raised from the ground to be put into the dhooly, for conveyance to Hospital, it was found that both legs were completely paralysed.

He was seen almost immediately after his admission to Hospital by reporter, who found him in great suffering and quite unable to move in bed without assistance, the most severe pain being referred to the lower part of his back and loins, commencing from about the ninth dorsal, and extending down as far as the sacrum. In about the middle of this space he said it was that he received the injury, from the hilt of his sword coming under him when the horse fell back. There was much tumefaction, tenderness, and heat all along the lower part of the spine, but no fracture could be detected at the time; there was total loss of motion and sensibility in both lower extremities, but from about the upper third of the thigh towards the abdomen sensation partly remained. He was at once placed in a warm bath for half an hour, with some relief to the pain, and afterwards laid on a water-bed face downwards, and his back and loins fomented with hot water containing some tincture of opium. At bedtime a draught containing muriate of morphia was given, and the hot stupes ordered to be continued throughout the night should sleep not supervene.

26th.—Has scarcely slept at all last night, but is in no actual pain so long as he is lying face downwards on the water-bed and is not moved, any change of position being attended with sharp pain between the tenth dorsal and second lumbar vertebræ, in which situation a fracture of the spine is more than suspected. Pulse 80, and firm; has not made water since admission. A catheter was introduced, and some twenty-three ounces of ammoniacal urine drawn off. Thirty-six leeches applied to the back, followed by hot fomentations, and a morphia draught ordered at bedtime.

27th.—Slept for about two hours during the night; bowels torpid; pulse good; is anxious for food. Catheter introduced; twenty-six ounces and a half of urine similar to that of yesterday drawn off. A large warm water enema thrown up. *Vespere.*—There is still extreme pain and tenderness on pressure over the entire back and loins. Twenty-four leeches applied to the back; hot fomentations continued; haustus morphiæ at bedtime.

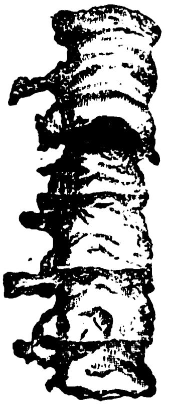
28th.—Slept a little during the night; feels more comfortable; pulse 86; tongue clean; bowels as yet have not been moved. A castor-oil enema administered. Twenty-one ounces of urine drawn off.

29th.—Feels comfortable unless when moved; bowels as yet unaffected. Eighteen ounces of urine drawn off. Repeat enema.

30th.—In the same state. Fifteen ounces of highly ammoniacal urine drawn off.

October 1.—This morning, at 1 a.m., was seized with sharp rigors, which lasted more than an hour, followed by severe pain in the pubic region and distension over the bladder. A catheter was passed, and about an ounce of dark-coloured and offensive smelling urine drawn off. An enema of warm water and oil was thrown up, which brought away some fæculent matter, the first passed since admission to Hospital. Thirty-six leeches were applied over the lower part of the abdomen, and the whole belly well fomented. On being again seen at the usual hour of the morning visit he was found still in severe pain over the pubic and right and left iliac regions, and the whole surface of the belly was hot and tender to the touch; tongue furred; pulse small and quick. Ordered an anodyne draught at once, and to take calomel gr. iij., opium gr. j., in a pill every three hours. Abdomen to be frequently fomented. 12 noon.—Abdomen tympanitic; pulse small, feeble, and quick; complains of shortness of breath; features greatly changed and sunken since the morning; has vomited some bilious matter. Haustus effervescens, c. spt. æth. sulph., omni horâ. 3 p.m.—Pulse almost imperceptible at the wrist; arms and chest cold and clammy. To have an ounce of brandy, with some soda-water, every hour, and strong beef-tea at intervals. His stomach continued very irritable, and his pulse weak and thready. Towards evening the pain in his abdomen entirely ceased, the upper extremities being cold and clammy; belly tumid and hot. An ounce and a-half of turbid urine was drawn off, and hot turpentine stupes were continued to the abdomen, brandy and beef-tea being given at intervals. He slowly sank, and became unconscious towards midnight, and died at 1·30 a.m., October 2, eight days after receipt of the injury.

*Autopsy Six Hours After.*—Rigor mortis not fully established; body well nourished. Head not opened. Thorax: Old adhesions of the pleura throughout the lower half of the chest; some congestion of the lungs at their bases, although otherwise healthy; heart of normal size, valves healthy; the pericardium contained about eight drachms of straw-coloured serum. Abdomen: This cavity was distended with air. About two pints of bloody serum was found, in which the intestines (which were matted together) floated; the peritoneum was thickened from the effects of recent inflammation; externally the sigmoid flexure of the colon presented a patch of livid discolouration, extending downwards for some five or six inches, and a corresponding appearance for the same extent internally, but no ulceration was apparent; bladder quite empty, its mucous membrane pale; liver large and somewhat congested; kidneys enlarged. Dorsal Region: On dividing the integuments over the seat of the injury, an immense mass of congested tissue appeared extending from about the three last dorsal vertebræ down to the sacrum, and about three inches broad on each side of the spinal column, from which a quantity of dark venous fluid oozed. On raising the muscles in this situation and exposing the back of the spinal column, fracture and dislocation forwards of the first lumbar vertebra were discovered. The transverse process and pedicle of this vertebra were also broken off, and the jagged edges were found compressing firmly the first lumbar nerve as it emerged through the "intervertebral foramen." The transverse process of the second lumbar vertebra was also splintered off. On taking out that portion of the spine comprising the eleventh and twelfth dorsal and first four lumbar vertebræ, and making a careful dissection, the extent of the fracture was more fully seen, and the specimen subsequently photographed. This fracture extended diagonally from right to left from below upwards, through the pedicle and superior articulating process of the first lumbar vertebra, and across the body of this bone in its upper third—in fact, it seemed as if the head of this vertebra had been knocked off, with the interarticular cartilage adhering to the upper fragment. The theca vertebralis was congested and thickened for about an inch and a-half above and below the seat of injury, and here the nerve fibres were crushed, and a few of them torn across from violence inflicted by the sharp edges of the bone. A photograph of the fractured spine is enclosed, which gives an excellent view of the extensive injury.



Umballa.

THE library of the late T. J. Pettigrew, Esq., which comprises several early printed works, some on vellum, ancient MSS., and missals, and valuable works on archæology, is about to be sold by Messrs. Sotheby.

# REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

## THE LONDON HOSPITAL.

### REMARKS ON A RARE FORM OF INDURATED CHANCRE IN THE MALE.

(Case under the care of Mr. MAUNDER.)

A VERY large majority of indurated chancres which are presented to the notice of the Surgeon have the physical characters of the kind termed "Hunterian," the induration giving to the sense of touch the idea of a foreign body—such as a split pea or hemispherical piece of cartilage let or sunk into the tissues. I here allude to this induration only in order to compare it with a corresponding physical sign, which was well marked in a case of indurated chancre (*chancre parcheminée, en surface*) of Ricord, recently under my care, among the out-patients of the London Hospital. The subject of it was a young man about 20 years of age, and the ulcer, which was seated on the integument of the penis, behind the level of the corona, and on the left side of the organ, had existed about a month. It was of the shape and size of an ipecacuanha lozenge, and had the appearance of being seated upon the surface of the organ, just as a lozenge or coin would appear if similarly situated. In the left groin some four or five lymphatic glands were enlarged, indurated, but painless (constituting an adenopathy), quite separate, and the adjacent tissues were normal; the surface of the sore was granulated, and secreting pus freely, On taking it between the finger and thumb in the direction of its long axis it yielded (bent up), and the induration was not recognised, but when gently compressed in its short diameter the induration was at once appreciated by all who examined the case.

So rarely has this form of induration come under my observation that I deem it to be worthy of record. I pointed out to my dressers and others that had not the specific induration been observed the sore would probably have passed for one of the soft variety, and urged the necessity for physical examination by the finger and thumb in all case of chancre; and specially directed their attention, when a doubt existed concerning the nature of a chancre, to the condition of the lymphatic glands associated with the region in which the chancre is seated. In the case before us, had a doubt existed concerning the variety of sore, whether indurated and infecting or soft and non-infecting, the condition of the glands in the corresponding groin would at once have determined the question in favour of the former variety.

In order to prove the correctness of the diagnosis, and to press upon my class the peculiar characters of this form of indurated chancre, I withheld specific treatment so as to avoid the possibility of checking the natural evolution of symptoms, and in the course of a few weeks a delicate rose rash and sore throat (mucous tubercles on the tonsils) were manifested.

The few examples of *chancre parcheminée* that I have seen have been seated on the integument of the penis.

## NATIONAL HOSPITAL FOR THE EPILEPTIC AND PARALYSED.

### CLINICAL REMARKS ON CASES OF TEMPORARY LOSS OF SPEECH AND OF POWER OF EXPRESSION (EPILEPTIC APHEMIA? APHRASIA? APHASIA?), AND ON EPILEPSIES.

(Under the care of Dr. HUGHLINGS JACKSON.)

JUST as a patient may lose sight for a time, so a patient may lose speech for a time. To this sudden and temporary loss of speech Dr. Jackson had given the name of Epileptic Aphemia. Aphemia is the term introduced by M. Broca as a name for the loss or defect of *articulate* language. Dr. Jackson thinks this term is rarely applicable to the defect or loss of speech which occurs with hemiplegia (nearly always of the right side) from disease of the [left] hemisphere, as there are generally other troubles besides inability to talk. But in one of the cases of sudden and temporary loss of speech that he had seen the patient had been able to express himself in writing quite well. The term aphemia might, therefore, be correctly applied to cases like this in which only *articulate* language appears to have been lost. Dr. Jackson, however, thought it undesirable to use such terms as aphemia or aphasia. Besides, M. Broca has recently introduced a new term—aphrasia. Dr. Jackson wished, however, to be understood as saying this respectfully, for under such names a vast amount of most excellent work had been done, as any one might easily learn by reading Trousseau's most charming and exhaustive lecture on aphasia, recently translated by Dr. Bazire. With students, however, there might be a fear that in any particular case they would think it chiefly desirable to know whether the mental defect should be called aphemia, aphrasia, aphasia, alalia, aphthenxis, etc., and thus pay too little attention to it as an individual departure from healthy language or healthy mind. It is probable that the so-called faculty of language "resides" whereever mind resides, and that language is but an outward form of thought. An intelligent student will not infrequently say of a case that he does not know what it is, when in reality he knows much about it, but does not know the name it would generally go by. He is in a better frame of mind than the one who quickly applies terms to cover up generalities. Dr. Jackson said it was good for students—in the wide sense of the word—to study even such common diseases as scarlet fever as if they had never seen or heard of the disease before. It was, he urged, especially desirable that we should not blunt our appetite for knowledge in investigating cases of defects of expression by the too free use of technicalities. The books to read to make us feel the importance of single cases of loss of speech as flaws of mind were those of Max Müller, Herbert Spencer, J. S. Mill, etc.

Moreover, in cases of sudden and temporary loss of speech it is by no means clear even what the relations of the superficial phenomena really are, and probably the defects differ in different cases. For a like reason Dr. Jackson had suggested, in the cases of permanent defect of speech, the use of the loose general term Expression, as this would force on us a description of what really happens, and especially prevent us from dwelling with exaggeration on defects of expression by articulate sounds. However, Dr. Jackson had, he confessed, made little progress in his investigations as to the general power of expression in cases of sudden and temporary failure of power of speech. In some of these cases he had asked the patients' friends to procure specimens of writing when the loss of speech came on, but nothing had come of his requests. He is, therefore, particularly anxious to learn from those who may have intelligent patients (who are subject to occasional loss of power to talk) under their constant observation, if these patients lose power to express themselves by writing and by signs when they lose speech.

Now, as regards the adjective "epileptic." This is used to call attention to the circumstances under which the defect often occurs, and is not meant to be a definition of what its real nature is. Indeed, Dr. Jackson thinks the term "epilepsy," whilst it may pass as a rude mark for certain groups of outward symptoms, should be used also as a definition of our ignorance. For instance, calling these sudden and temporary failures of speech "epileptic" is simply affirming that they occur with epileptiform seizures, or under similar circumstances as epileptic seizures do; and it is also affirming that the real nature of the changes in the nervous tissue in these cases is not known. It puts them in a larger group—not lazily to dispose of them, but to widen the basis for their study. Indeed, Dr. Jackson suggests that the word "epilepsy" should be degraded, and be used to imply the condition of nerve tissue in sudden and temporary loss of its function, whether that be loss of sight, loss of consciousness, or "running down of tension" in those parts which govern muscles. For it is not unlikely that the condition of nerve tissue is the same or similar (although this is not taken for granted) when a patient loses sight for, as he says, half a minute, or has temporary loss of consciousness, or becomes unable to talk for a short time, or has spasm of the hand, or of the side of the face, or of the leg, or of all three on one side. Probably, too, in cases in which a man all at once passes into a violent rage from no apparent cause, or into a state somewhat like somnambulism, in which he may walk a mile or two, or walk into a canal, or in which he takes off his boots in church, or undresses himself in the streets, there is epilepsy—using the word in the new sense—

of some parts of the hemisphere. Yet it is clear that the part of the nervous system affected must be different in each instance. In some we may, Dr. Jackson thinks, plausibly infer its position. A patient may have several of the above-mentioned symptoms at once, one after another; and here probably the temporary condition of nerve tissue is similar, but the tract affected is wider. Dr. Jackson has spoken of sudden and temporary failures of sight as "epilepsy of the retinæ" (possibly of other parts of the optic nervous system), thus suggesting that the retinal nerve tissue is, in attacks of temporary blindness, in the same condition as the hemisphere in *its* blindness—loss of consciousness. The use of the term "epilepsy of the retinæ," however, has not passed without criticism: and Dr. Jackson says he has several times been jocosely asked if the retinæ are subject to convulsions. Strictly speaking, it is as incorrect to use the terms "epilepsy of the retinæ" as it is to speak of apoplexy of the retinæ or pulmonary apoplexy.

No one knows what the condition of nerve tissue is in any of the temporary seizures alluded to, nor even in what are called "genuine" attacks of epilepsy, and the word epilepsy, therefore, as Dr. Jackson here uses it, must, in our thoughts of cases, hold some such place as $x$ or $y$ in an algebraical problem. There are speculations more or less valuable on the condition of the nervous tissue in epilepsy and in epileptiform seizures, and the one which seems to be most explanatory is that which refers the temporary phenomena to disorders of circulation.

As we cannot have a large basis for a rational treatment, unless we have a knowledge of the state of tissues in disease, our ignorance in this particular instance is unfortunate. Dr. Jackson believes, adopting the views of his colleague, Dr. Radcliffe, that nervous tissue is below and not above par in the paroxysm. How it happens that the arteries begin suddenly to contract, if they do, or why the state of tension suddenly begins to run down, it is not possible to say. It is possible that there are waves of periodicity in the system, in which certain enfeebled regions do not, as it were, come to time. Indeed, in such instances of definite periodicity as ague fits, the periodicity must be in the system.

Using the word epilepsy as herein defined, Dr. Jackson thinks it will be possible to show, at least in some instances, that the epilepsy is of nerve tissue in particular arterial regions. The whereabouts of the changes might be studied distinctly from their nature, although not separately. It may first be asked, do the symptoms of the epileptiform attack point to disorder of that part of the motor tract which is supplied by the middle cerebral artery?

The above remarks were suggested by the case of a boy who had had an attack of convulsions of the right arm and leg and right side of the face, with inability to talk, although consciousness was not obviously affected. Now, as paralysis of the right side of the face, of the right arm and leg, with permanent loss of speech, are sometimes due to plugging of the middle cerebral artery, it may be well, Dr. Jackson thinks, to inquire whether the temporary symptoms in the above case were not due to some temporary cause (possibly spasm of the blood vessels) in the range, or beginning in part of the range of the left middle cerebral artery. In the boy's case there was no information as to whether the chest or abdominal walls had been fixed or not; probably they had been. In another case of unilateral convulsions affecting the left side in which Dr. Jackson had witnessed the seizure, the chest and abdominal walls had been fixed, thus tending to demonstrate, as Dr. Jackson believes, the truth of the hypothesis recently brought forward by Dr. Broadbent to explain the escape of the muscles of the trunk (or, more in the terms of Dr. Broadbent's hypothesis, the muscles acting bilaterally) in hemiplegia from disease of the corpus striatum. Dr. Jackson ventures to use the expression "tend to demonstrate," as in the case mentioned (recorded Royal London Ophthalmic Hospital Reports, January, 1866, "Defects of Sight in Disease of the Nervous System," case xvi.) disease was found after death in the region of the middle cerebral artery. If the above explanation of unilateral epileptiform seizures holds good, *mutatis mutandis*, it will, Dr. Jackson believes, account for the symptoms of chorea.

In some cases of loss of speech with hemiplegia for a few days, the cause may be cerebral hæmorrhage. In one such case Dr. Jackson found after death, several months after recovery from these temporary symptoms, a small clot affecting the hinder part of the corpus striatum and the hemisphere outside it.

## GUY'S HOSPITAL.

### A CASE OF OBSTRUCTION OF THE BOWELS SUCCESSFULLY TREATED BY OPIUM—CLINICAL REMARKS.

(Under the care of Dr. BARLOW.)

THIS week we take the opportunity of bringing forward a very instructive case of obstruction of the bowel. Dr. Barlow delivered an excellent clinical lecture on the case. We below record some of his remarks. It is hardly necessary for us to mention that some years ago, in the Guy's Hospital Reports," Dr. Barlow called attention to certain symptoms of this disease, and in so doing clearly showed that it was possible to make a diagnosis much more correct as to the seat of the obstruction than had previously been believed to be practicable. Dr. Barlow's remarks will show that his more recent experience has still further confirmed his previous conclusions.

We are indebted to Mr. Fred. E. Manby for the particulars of this case:—

William S., aged 15, a "street boy," admitted October 24, 1865. States that four days ago he was suddenly seized with griping pains in the abdomen. A Medical gentleman was sent for, who prescribed a dose of castor oil, which was taken, but no action of the bowels followed. He suffered greatly from nausea and sickness. The day before admission he had another dose of castor oil, but his bowels were not relieved by it. He appears to have passed the usual quantity of urine. His sickness increased, and he could not "keep anything down long."

*On Admission.*—His face was blue and livid, skin feels cold, and he complained of slight cramps in his legs; his pulse very feeble, about 90. He was frequently seized with spasmodic pains in his abdomen. On being put into bed, and on examining the abdomen, it was found to be very tense, and percussion gave a somewhat dull sound over the situation of the cæcum. He passed, soon after admission, about half a pint of light-coloured urine, the specific gravity of which was 1020, acid reaction, and contained no albumen. He had had an enema, but it produced no effect. Dr. Barlow saw him the same afternoon, and was struck with the resemblance of his physiognomy to that of a patient suffering with cholera. His cheeks were flushed, an anxious look, with shrunken, drawn features, sunken eyes, and pinched nose. He ordered a warm bath, and a soap enema while in the bath. The enema retained, but no fæces passed. He was put to bed, wrapped in blankets, and a grain of opium given. Soon after this he expressed himself as feeling rather easier. Just before taking his bath he vomited a quantity of yellowish, sour-smelling matter. 7 p.m.—Much the same; no better; he has passed a little urine; has had another enema, but with no more success than the first. Has not vomited since he had the bath; pulse 108: face flushed; slight headache; pain in the abdomen increased by pressure, but the abdomen seems less tense than it was a few hours ago. 9 p.m.—Had another grain of opium by the mouth. Four ounces of urine were drawn off. Passed a gum elastic catheter into the intestines to the extent of fifteen or sixteen inches, and it was particularly noticed that it did not double on itself; no flatus escaped. Ordered hot fomentations, with opium, to be applied during the night.

25th.—This morning the nurse tells me he slept at intervals during the night. Passed about two pints of urine during the night; was rather sick; had great pain in the abdomen, also in his back. His bowels had not been relieved. To continue the fomentation; pulse 108, small; tongue very dry. 11 a.m.—Has been very sick: vomited yellowish, sour-looking matter with a feculent odour; no relief to the pain. Ordered pil. saponis co., gr. v., 4 tis hòris. Passed the long tube of the stomach-pump about eight inches up the lower bowel, then injected nearly a pint of warm water. On withdrawing the tube he passed the injection with some small flakes of feculent looking matter and mucus; also voided two or three ounces of urine. 6.30.—Has not been sick since the enema. He is lying now on his left side, and expresses himself as feeling more comfortable; pulse 112, very small and feeble; tongue very dry. 7.30 p.m.—Again introduced the enema tube and injected about a pint and a-half of warm water, and withdrew half the quantity by reversing the action of the syringe. This had a feculent odour, but not discoloured; still very sick.

26th.—Dozed during the night; was very sick; passed his urine freely. His abdomen is very tense and painful. The restlessness so marked during the whole of his illness is very great this morning. Pulse 130; tongue dry. 11.30.—Passed a small quantity of slate-coloured liquid fæces with mucus into the bed; had great pain during defæcation. Still very sick; the vomited matter is quite stercoraceous now. Dr. Barlow ordered at 1.30, calomelanos, gr.ss.; opii, gr.j., 3 tis hôris; and brandy, ℥iss. In the course of the afternoon he was very sick and passed his urine. Twice to-day he has passed a small quantity of matter from the bowel similar to what has just been mentioned. Was also very sick. 12 p.m. —Had passed a large motion. Vomiting much less. Is in less pain. Tongue very dry. Pulse 120.

27th.—Early this morning he again passed a large quantity of fæces like the last. Vomiting has quite abated. Taken a little beef-tea and milk. He expresses himself as feeling much relieved. His abdomen is not so tense. Dr. Barlow called attention to the ease with which the intestines might be seen contracting. The patient is evidently much better. No vomiting; pulse 120; tongue dry and brown. To continue the pill every four hours. In the afternoon he passed another large motion.

28th.—Has passed a restless night. Bowels have not been relieved since last night. Abdomen very tense. He is very restless. Tongue dry and parched; pulse 110; urine normal. Takes a little milk and rice in it.

29th.—Much about the same. Pulv. opii, gr.j., 3 tis hôris.

30th.—No further relief to the bowels. Abdomen very tense. Complains of griping pains. Pulse 120; tongue dry. To have a soap enema this evening. ℞. Pil saponis, gr.iv.; calomelanos, gr.ss. in pil, 4 tis hôris. The enema was followed by a copious evacuation of scybalous slate-coloured fæces. Urine not quite so plentiful and rather darker.

31st.—Passed a moderately good night and feels better this morning. Abdomen not quite so tense. ℞. Pil saponis co., gr. iv.; ext. aloes aquos, gr. ¼; ext. nux vomicæ, gr. ¼, 4 tis hôris.

November 1.—Much the same. Pulse 100, small, soft, and compressible. Repeat pill. Enema saponis, which was followed by a copious evacuation, liquid and clay coloured.

2nd.—Expresses himself as feeling much better. Pulse 98; tongue still dry. Craves for something to eat. Had some fish to-day. Passed two large motions during the day.

3rd.—Says that he passed a pretty good night. Bowels again relieved this morning. Is now sitting up in bed.

6th.—Greatly improved. Abdomen quite soft. In no pain. Bowels have acted freely.

10th.—Left the Hospital quite recovered.

The boy ascribed his illness to having eaten large quantities of grapes with husks and stones just previous to his attack.

In this case we have the usual clinical history of a case of obstruction of the bowel. This boy was suddenly seized with griping pain in the abdomen, and in consequence it was thought advisable to give him a dose of castor oil. The medicine did not operate; nausea and vomiting came on, and the pain increased. Another dose of castor oil was taken without any relief to the bowels. The pain continued. His bowels had then not been open for four days. On the fourth day he was admitted into the Hospital. Dr. Barlow then proceeded to call attention to the different symptoms; and after speaking of the obstinate constipation, he remarked—"The symptoms to which I more especially wish to call your attention are, the pain in the abdomen, the nausea and vomiting, the quantity of urine passed, the degree of abdominal distension, the degree of prostration and of collapse, and, lastly, to call attention to the boy's physiognomy. The first thing the patient felt of his illness was a griping pain in his abdomen. The degree of pain in cases of obstruction of the bowels varies very much. It varies according to the nature of the obstruction, and according to the severity of the peritonitis, and, above all, according to what part of the intestine is obstructed. If the upper portion of the small intestine be the seat of obstruction, then the pain is usually very great, comes on very early —in fact, is one of the earliest symptoms. It is just the opposite when the lower portion of the large intestine is obstructed. And the reason why the pain comes on earlier, and is more severe when the small intestine is obstructed, and less so when the large intestine is obstructed, is probably to be found in the greater sensibility of the upper portion of the small intestine. Nausea and vomiting were early symptoms in the case." Dr. Barlow further remarked—"When the obstruction is in the duodenum, jejunum, or ileum, the vomiting is usually found to be one of the first symptoms, and it is usually found to be urgent from the beginning of the attack. The pain and the vomiting are often the first indications. In contrast with this, we may have the signs of obstruction; constipation that cannot be overcome; more or less pain in the abdomen; great distension of the abdomen; and these going on for three or four days, or even two or three weeks, and yet there may be little or no vomiting. The vomiting may not come on until some days, even a week, after the constipation. When, however, such is the case, it will be found that it is the large intestine that is affected, and especially the descending colon or rectum. It does, however, happen at times that the vomiting comes on early, even when the ascending colon is obstructed; or when the transverse or descending colon is obstructed." This, Dr. Barlow thinks, is owing to some concomitant circumstance, as the pressure of the tumour of the distended bowel or the administration of purgative medicines. Dr. Barlow then remarked, "I would, therefore, observe, if you find that the vomiting has come on early, it is strong evidence, but not positive evidence, that the obstruction is in the small intestine or cæcum; if, however, the vomiting has not appeared until some days after, there is positive evidence that there is obstruction, then it will usually be found to be the colon or rectum that is affected.

I now come to speak of the quantity of urine secreted. In this case you may notice that the urine was not very scanty. In some cases, however, it is so. When the obstruction is in the duodenum or in the jejunum, the quantity of urine secreted is very small, and may even be suppressed for two, three, or more days. When, however, the obstruction is low down the intestine (and I believe it to be so in this case), the quantity of urine is not much diminished. In the case of a boy who was under my care some years ago with all the signs of obstruction, no urine was secreted (the catheter showed it was not retained) for six days. The autopsy showed the obstruction to be in the jejunum. Also in a case under the care of Dr. Hughes the urine was almost suppressed. The post-mortem examination showed the obstruction to be high up in the small intestine. Dr. Munk once mentioned to me a case of obstruction of the bowel, in which the urine was suppressed, and in consequence the patient was considered by the Medical gentleman in attendance to be suffering from 'ischuria renalis.' There is a case recorded by Dr. Lever (see *Guy's Hospital Reports*, vol. ii., year 1844, p. 414) of narrowing of the upper part of the small intestine, in which the secretion of urine was very much diminished. Still more recently, in 1861, in a case of a patient of my colleague, Dr. Rees, suffering from obstruction of the bowel, the pain and vomiting were the first symptoms. The urine was almost suppressed, and after death the autopsy showed the obstruction was situated five feet from the duodenum. (See *Post-Mortem Record of Guy's Hospital* for the year 1861, No. 179.) Now, these cases clearly show that we are liable to get suppression of the urine when the upper portion of the small intestine is obstructed. But, you will ask, do we always have suppression of, or very scanty, urine in such cases? My experience is that we nearly, if not always, do. If, however, my explanation of this phenomena be correct, I can readily imagine that the urine may in some cases be much more scanty than in others." Dr. Barlow then proceeded to explain why the urine is suppressed or greatly diminished in obstruction of the upper portion of the small intestine, and said: "Without entering into the physiology of the secretion of the urine, I would remark, in order that there may be a proper quantity of urine secreted, it is essential that a sufficient quantity of water be taken into the alimentary canal, and thence find its way through the vena porta, right side of the heart and the lungs, into arterial and systemic circulation, to hold in solution urea and other urinary constituents. It is absolutely necessary that such constituents should be held in solution in order that they may be eliminated by the kidneys. Moreover, these bodies while held in solution seem to act as diuretics, and they stimulate the kidneys to a due performance of their functions. If, therefore, a sufficient quantity of water, for the purpose above mentioned, cannot find its way into the systemic circulation, then the urine is diminished in quantity or even suppressed. Now, this may occur in consequence of the fluids being rejected from the stomach before they can be absorbed by the excessive vomiting, or from the bowel by excessive purging. Now, I have already stated the vomiting is usually very urgent from the beginning, when the upper portion of the small intestine is affected. In such cases, as we might expect, the fluids are rejected before they can be absorbed, and the urine in consequence is scanty or suppressed.

Further, if the duodenum is obstructed, the fluids are exposed over a comparatively small portion of the absorbing intestinal mucous surface, and exposed over a much greater surface when the cæcum is the seat of obstruction: therefore, in the latter case much more likely to reach the arterial system than in the former. Experience has shown, when the duodenum was affected the urine was suppressed, and when the intestine in the neighbourhood of the cæcum was affected, the urine was often diminished in quantity, but not suppressed. You will thus see that I consider the quantity of urine secreted in such cases depends very much on the urgency of the vomiting and on the seat of the obstruction, but especially on the vomiting. In other diseases, also, the fluids may be rejected, not by the stomach, but by the intestine itself, before the water can be absorbed, for instance, by the excessive purging in cholera, and in which disease, as in cases of obstructed duodenum or jejunum, the urine is exceedingly scanty, or even suppressed. In order to illustrate what I have just stated, I will mention the following brief particulars of cases, in which there was severe vomiting, and, in conseuence, scanty urine:—

Wm. H., aged 36, admitted into Job Ward February 22, 1854. Said nothing had passed his bowels since February 14—that is, for six days. Sickness and vomiting had appeared on February 15—that is, five days before admission. On admission, he vomited everything he took; excessive thirst; the urine scanty. On the 23rd, the vomiting had ceased; the pain had diminished. On the 24th, the urine was more copious, the pain had almost disappeared, and the bowels moved. He was treated by opium and enema of soap and water.

Another case was that of John D., aged thirty-three, admitted June 8, 1860, under the care of my colleague, Dr. Wilks. On admission, said he had had intense pain in his belly, and nothing through his bowels since June 5. Vomiting very troublesome. Passes very little water. On admission, was in intense pain, coming on in paroxysms. Has vomited fecal matter. 9th.—He has not passed any water to-day. 10th.—Vomiting not so troublesome. Vomited very little, and has been able to take some beef-tea. He has passed about a pint of urine to-day. This patient was treated with opium, and did remarkably well.

Other cases might be brought forward to show, as the two last-named cases do show, that when the vomiting was excessive, the urine was scanty; and as the vomiting abated and fluids were retained in the stomach, by degrees the urine became more plentiful. We may here mention, in confirmation of Dr. Barlow's views, the case of a patient of Dr. Gull's, who died a few weeks ago, in the Clinical Ward, of chronic ulcer of the stomach and constriction at the pyloric extremity of the stomach. This patient of Dr. Gull's suffered with excessive vomiting, and did so up to the day of her death. Forty-eight hours before she died, she passed no urine, and at the post-mortem examination the bladder was examined, and found to be quite empty. Dr. Barlow further observed, "I would therefore on this point mention, should the small intestine, or any portion of the intestinal tract be obstructed, and there be excessive vomiting, that the urine may be diminished in quantity. Therefore if irritating medicines are administered and vomiting excited, no matter which of the intestines is obstructed, the urine may be diminished in quantity; but when there is suppression of urine, I should always look for, and experience would lead me to expect, that the obstruction would be found high up in the small intestine."

**Sanatorium near Dublin.**—The managers of St. Vincent's Hospital, Stephen's-green, have purchased the splendid residence known as Lyndon Castle, Blackrock, for the purpose of converting it into a sanatorium to which they will send the convalescent patients to enjoy the benefit of country air, sea-bathing, etc., previous to returning to their homes. This is the first sanatorium ever established in Ireland.

**The Cattle Plague in Cheshire.**—The number of animals attacked by the Cattle Plague in Cheshire had attained on April 7 the total of 50,954, or nearly one-fourth the whole number of attacks in England, Wales, and Scotland. Even now the disease lingers in the county, the number of attacks in the week ending April 7 having been 971. There appears little reason to doubt that the spread of the disease was facilitated in Cheshire by the indisposition of the inhabitants to slaughter their sick animals. Thus, to April 7 no fewer than 31,813 had been permitted to die from Rinderpest in the county, while the whole number killed to the same date was only 9,063.

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Medical Times and Gazette.

SATURDAY, APRIL 28.

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## ASSERTED INCREASE OF INFANTICIDE.

In the report which Dr. Lankester has just issued on the inquests held by him as Coroner for the Central District of Middlesex during the year ending July 31, 1865, the subject of infanticide occupies a prominent position. Dr. Lankester appears still to hold the opinion that crime is on the increase to a very considerable extent, as is evidenced by the verdicts of "wilful murder" returned, in 1862-3 of 53, in 1863-4 of 56, and in 1864-5 of 61 newly born children; moreover, he maintains that the verdicts of Coroners' Courts cannot be regarded as the true indication of the amount of destruction of newly-born infant life, and he avows his belief that child murder is in excess of the highest rate of inquests in any part of the country.

Now, with all respect for Dr. Lankester's opinion, we venture to suggest the possibility of mischief arising from the manner in which he has at various times expressed himself upon this subject. We know him to be one of the most able and zealous of public officers, and we are concerned, therefore, lest he should set afloat ideas of an exaggerated character about an evil which is, and necessarily must be, very limited in its operation. One does not like to take up a foreign newspaper and see it written therein, professedly on Dr. Lankester's authority, that England is "a nation of infanticides;" and great as may be the benefits of a cheap press, it is somewhat irritating to find that materials for sensation "leaders" in the most ultra-accusatory strain should all be pointed with reference to the Coroner for Middlesex, tending to prove that infanticide is terribly and alarmingly on the increase. Unmindful of the worldly wisdom which lies at the root of the French proverb referring to the washing of dirty linen, scarcely a week passes without some portion of the daily press—chiefly price one penny—"improving the occasion" in this respect. Every inquest which is now held on the body of a child, as to the cause of whose death there can be the faintest shadow of doubt, goes into the newspapers as "child murder" in capital letters—in some instances when the finding of the jury directly removes the case from any such category.

No doubt the judicial investigations relative to the hag Winsor startled many by disclosing that such crimes can be and actually are committed at the present day with certain probabilities in favour of their non-detection. But there has been nothing whatever that can justly be called proof of any such increase in the number of actual infanticides as to give warrant for the lamentations which have been so loudly expressed. The plain truth about the matter was summed up in a few words by Lord Stanley when speaking at Birmingham last autumn on this very subject, that "it is just one of those periodical panics to which all who have watched the course of public opinion in this country know we are liable."

Not long ago we had an astounding piece of intelligence from the Abbé Cesare Contini, who was sent over here by the Papal Government to collect statistics of infanticide, and who afterwards published a statement to the effect that "13,000 children perish in England annually, *des mains de leur parents.*" This estimate rests, we are informed, upon a statement of Dr. Lankester that, as Coroner for Middlesex, he holds annually from upwards of 70 to 80 inquests on bodies of children found exposed in the streets and elsewhere, and that judging from the advanced state of decomposition in which many of them are found it is probable that an equal number escape observation. M. Contini turned then to our judicial statistics for 1863, and found that 6506 inquests were held by the Coroners of England on bodies of children under seven years of age, and he then complacently inferred that, on Dr. Lankester's own reasoning, 6506 cases were lost sight of, consequently that 13,000 children are murdered annually by one or other of their parents. It was a great deal too bad of Dr. Lankester to lay such a trap for unwary travellers through the domain of figures; and it must be no small source of satisfaction to those whose undoing has been wrought by his specious theory that he is in a measure "hoist on his own petard," for he has publicly committed himself on more than one occasion to an "estimate" that over 4000 children become the victims of infanticide in a year in England—a number which is about as trustworthy as M. Contini's 13,000. Does Dr. Lankester mean seriously to say that because in his district of about one million of population 80 inquests are held and 80 cases are unrecognised, therefore in the remaining two millions of population in London the same proportion of inquests and undetected cases to the population obtains?—in short, that nearly 500 children are murdered in London in a year? And even if this were not an entirely erroneous assumption as regards London, it would be the veriest *reductio ad absurdum* to apply such a mode of reasoning to the country towns and rural districts. Yet Dr. Lankester has gravely asserted that the facilities for infanticide are actually greater in the country than in London; that "the opportunities for throwing murdered newly-born children into ponds, and of burying them before the crime is discovered, are much greater in the country than in London." If there were no premonitory evidence of pregnancy all this might be possible, but everybody who has had experience of country life knows how unlikely it is for such an event as the birth of a child to take place without its being patent to, and canvassed by, all the gossips of the neighbourhood. It is in London, above all places, where people live for years without knowing their next-door neighbour, that infanticide can be most readily and safely committed; and Dr. Lankester's district, comprising as it does the termini of three great lines of railway, is peculiarly situated in that particular, insomuch that inquests are not uncommonly held by him on bodies of children which have been conveyed by rail from other parts into his district. Indeed, we believe that about 90 per cent. of the inquests on young children in London are held by Dr. Lankester alone.

But we have yet another bone to pick with Dr. Lankester, for following up the hypothetical 150 infanticides yielded by his district he makes a calculation that "one out of every 30 women met in the streets of London has at one time or another during her life 'put away' her child," and as he has complained of being misunderstood, we will give him the full benefit of his own explanation :—

"It is not probable that the 150 women in his district will commit the crime of infanticide a second time; and, therefore, it is fair to suppose that the 150 a-year are new mothers. The average age of these women is about 20 years, and the expectancy at that age is 40 years; if you multiply 150 by 40 you will have the number of women living in my district who have made away with their children. There are 360,000 adult women in London; so that, according to my calculation, there are 12,000 women, or one in 30, who have murdered their children."

We quote the above from a report of some observations addressed by Dr. Lankester to the Statistical Society in December last.

Now, it appears to us that it would be an extremely difficult matter to prove either one of these hypotheses; first, that women who have committed the crime with impunity once will be unlikely to do it again; secondly, that the expectation of life of women in London of the class amongst whom the crime is at all common is as high as the average expectation of women of all classes, wealthy as well as poor, and living in all sorts of localities, healthy as well as unhealthy; thirdly, that conclusions drawn from Dr. Lankester's district are equally applicable to the whole metropolis.

We believe that the negative of these three positions is much more in accordance with absolute fact, and we therefore think it unwise that statements so open to question should be publicly advanced by one who presumedly speaks with authority.

We take leave here of Dr. Lankester, with the assurance that our criticism is intended only to remind him of the necessity of the greatest exactitude in whatever he may utter in public whilst discharging the duties of his office. For his active and zealous efforts to put a stop to crime of whatever nature we have nothing but commendation.

It is satisfactory to know that our official statistics give no support to the notion that we are going backwards in the scale of morality. At any rate, our chief statist, Dr. Farr, has very recently proclaimed himself "on the side of the angels"—to borrow Mr. Disraeli's phrase—and has asserted his belief that infanticide is not at the present day the cause, in any country, of any considerable number of deaths. Moreover, he calculates from positive facts that, with the exception of the Scandinavian race, the mortality of young children is less in England than in any Continental state. We all know that the loss of infant life in our densely-populated cities and towns is excessive, but the miserably defective sanitary conditions under which the poorer classes in those places struggle through their brief term of existence makes it superfluous to seek in violent death for a solution of the question why their little ones die so fast. One thing seems clearly established, that we need not go beyond the first year of age to get at the measure of child murder. Every day, every hour of life, makes the crime more difficult of accomplishment, both as regards secrecy and the amount of vital energy to be destroyed. An infant just born has but the feeblest hold on life, a breath would almost suffice to extinguish the flickering lamp; but three months hence its presence will have asserted itself, and every day increases the number of witnesses to the fact of its existence. If, then, we take the number of children of less than one year of age returned to the Registrar-General under the head of "Murder and Manslaughter" during the six years 1858-63, in England, it will be found that the deaths from that cause are less in proportion to the population in the last three years than in the first trienniad of the period. In London the increase in the number of infant murders does not, we believe, keep pace with the increase of the infant population. And with regard to a favourite mode of argument adopted by those who contend that infanticide is rapidly increasing, namely, that the coroners' inquests do not give anything like the full measure of infant murder, that "thousands of infants are murdered by suffocation or overlaying in bed—or, perhaps, as Mrs. Gamp has it, "shut up unbeknownst"—while "thousands are killed by the slower process of opiates, neglect, and other easily devised means of getting rid of children who are in the way," the sufficient answer is that all this is the wildest conjecture, unsupported by proof, the onus of supplying which rests with the propounders of the theory.

A careful and discriminating inquiry into the causes of death of young children will do more to reveal the secret of their high mortality than any amount of "estimates" and conjectures. That 200 children should be murdered in their first year is a sad and terrible thing enough; but 200 is an infinitesimal part of the 100,000 deaths of young children from all causes; and if all the 1500 deaths by accident or negligence be added to the 200 murders, it is evident we are yet only dealing with "a drop in a bucket." Where violence slays its hundreds, ignorance, "poverty, hunger, and dirt" slay their tens of thousands. It is in the fever-stricken "Providence-places," in the foul back slums and courts, shut out from the pure air of heaven, that the demon of infanticide holds sway. But he works neither with the knife nor the thumb on the throat; secresy is not necessary to his operations, which are patent to all who have eyes to see and noses to detect the noxious elements in the midst of which he works; and his most potent auxiliaries, those who should be arraigned for this most alarming, because infinitely the most wide-spread system of child murder, are the landlords who grow rich on the money which they wring from the miserable occupants of hovels unfit for human habitation, and the parish authorities who have no higher conception of their duties than the snubbing of an energetic health officer or the endless squabbles arising out of their own self-conceit and ignorance.

An outcry against one particular wrong is apt to direct the public mind too much to its exclusive consideration, and the terrorists who proclaim aloud that infanticide is making such rapid strides are possibly doing more mischief than they themselves are aware of; for it has been well said of another form of crime that "nothing is more clearly established than that such crimes are too often committed from imitation. A single paragraph or some particular but apt expression, may be, as to the mode in which the deed was done, seizes the imagination, and the disposition to repeat the act in a moment of morbid excitement proves irresistible." The persistent efforts which Dr. Lankester and others are making to put a stop to infanticide deserve every support, but sensation "leaders" and "penny-a-liner" paragraphs cast a shadow of suspicion and distrust over everything to which they relate.

## PURIFICATION OF WATER.

According to the recently published report of the commissioners concerning the pollution of the Thames, there are on the banks of the main stream and its tributaries 1001 cities, boroughs, towns, hamlets, and parishes above the pumping-station at Hampton. Besides the refuse matters from tanneries, paper-mills, etc., the river water before it is supplied to us receives the sewage from hundreds of thousands of people, together with dead dogs and other abominations thrown into it. Now if we could feel assured that these matters were thoroughly destroyed by natural causes before the water reaches us, the fact of its having received such impurities would not be so objectionable. But we cannot feel thus assured, so that the organic matters found in the Thames water must, to say the least, excite our suspicion.

For the benefit, therefore, of those who, like ourselves, dislike to drink water with a certain percentage of yellowish, heavy-smelling "oxidisable organic matters," made up of sewage, infusion of dead dogs, and other such things, we call their attention to the means of ready and simple purification of water which are within their reach.

Water may be purified by the *black oxide of iron*, which, as Mr. Thomas Spencer, of Euston-square, has discovered, frees water from very nearly all its organic impurities. He was led to this discovery by studying the natural purification of water during its percolation of the soil. He found that sands which contained the black or magnetic oxide of iron purified the water which was filtered through them, and that sands which did not contain this substance had no appreciable effect.

Magnetic or black oxide of iron as obtained for medicinal purposes is unsuited for use, not only on pecuniary grounds, but because of its finely-divided state. By heating native carbonate of iron, or spathose iron ore, magnetic oxide is obtained in a suitable condition, but not cheaply enough for application on the large scale. Mr. Spencer obtains it by heating together hæmatite, or red oxide of iron ore, with sawdust. The oxide as made by his process contains a small percentage of carbon. The use of this carbon is, he states, to render the substance harder and less brittle.

In the state in which it is used it is in the form of coarse black grains, which are strongly attracted by a magnet. Its commercial name is "magnetic carbide."

Now, if ordinary river water, even the more impure kinds of it, are made to percolate a layer of magnetic carbide some inches thick, it is not only filtered, as it would be by passing through a similar layer of gravel or sand, but *it is deprived of much of its soluble organic impurities.* According to Mr. Spencer, water containing several grains of organic matter by filtering through a sufficient layer of magnetic carbide loses nearly the whole of it, containing, after its filtration, only about half-a-grain or less of organic matter. The effects of passing the water supplied by the London companies through a domestic filter containing a layer of this substance is certainly very striking. In a few minutes the water passes through the filter, and when compared with some of the water which has not been purified in this way a great difference is observed. Not only is it remarkably bright, but it is found to have lost its previous yellowish colour, and to be free from taste or smell of any kind. But more than this, if a few drops of solution of permanganate of potash are added to the water, the pink colour thus given to the water will be found to be unchanged when the water, which has not been purified by this process, will have wholly destroyed the colour of permanganate of potash similarly employed. We have found (our experiments were made upon the Grand Junction Company's supply) that water purified in a few minutes by Mr. Spencer's magnetic carbide will preserve the faintest tint given to it of permanganate solution, if preserved from the atmosphere in scrupulously clean vessels.

Lastly, the crowning property of the black oxide of iron, or magnetic carbide of Mr. Spencer, is that it suffers no perceptible diminution in its power by time and use. In the waterworks at Southport, in Lancashire, it has been in use for seven years without showing any diminution in power, and in domestic filters in use for the same period the same is stated to be the case, although the purifiers have not once been cleansed or refitted. With a filter which Mr. Spencer stated had been thus in use the effects upon water were as striking as in one newly fitted.

Mr. Spencer has put forth a theory of this remarkable and valuable property of the magnetic oxide of iron. He regards this property to be due to the conversion of ordinary oxygen into *ozone* by the magnetic carbide. Granting the production of ozone, the rapid disappearance of oxidisable organic matter is only what we should expect from its known properties. Mr. Spencer says its purifying property is "due to its power of attracting oxygen to its surface," which then "becomes changed into ozone—or, at least, a body having its properties." He regards ozone as "oxygen polarised," and considers that oxygen when attracted by the magnetic substance becomes polarised, just as a needle is polarised when attracted by a powerful magnet. The question, however, may be raised as to whether there is such a thing as self-existent *polarised oxygen*, with little chance of a definite answer being received. That the magnetic carbide does ozonise oxygen, Mr. Spencer considers to be established by the facts that air passed through a layer of it turns tincture of guaiacum paper blue, as would ozone, that the carbide itself turns the tincture blue, and that water filtered through the oxide into a solution of starch and iodide of potassium rendered it faintly blue. May not, we suggest, the oxide, which must not be crystalline, but in the amorphous state, have a common principle of action with spongy platinum and charcoal, and other non-magnetic porous bodies? But whatever be the theory of its action, its effects in removing oxidisable and other organic matter from water are undoubted.

Another way in which water may be purified, probably well known to most of our readers, is that of Mr. Condy. The solutions of permanganate of potash and other bases when added to water soon oxidise organic matters, sulphuretted hydrogen, and other oxidisable bodies which may undesirably be present in water. The quantity necessary for the purpose is so exceedingly small that the alkali introduced into the water is of no importance, while the manganese is converted into hydrated peroxide of manganese, which gradually settles down or may be removed by filtration. The permanganate should be added to the water in as large a quantity as the water can deprive of its pink colour on standing for two or three hours after it has been added.

By one of these ways, by using Mr. Spencer's purifying filter or by adding a little of Mr. Condy's solution of a permanganate and subsequently passing the water through a common filter, those who appreciate the hygienic importance and the luxury of pure drinking water can easily supply themselves with it, albeit the water may have to come from the Thames or other stream similarly polluted.

## THE WEEK.

### MERCY TO RATEPAYERS.

We see with satisfaction a notice in the *Times* that it is proposed by the Metropolitan Board of Works—(we believe that the real originator of the scheme was Major Lyon)—that the *owners* of property shall in future bear their share in the cost of permanent improvements of the metropolis. Hitherto that burden has rested on the shoulders of the *occupiers*—*i.e.*, the *ratepayers*, who are assessed upon their rental for improvements in which they have a very passing interest, whilst the value of the property they occupy is increased for all time. Medical men are *par excellence* householders and ratepayers, and ought to have an eye to any changes which affect the burdens they bear in that capacity.

### THE NEW CATTLE PLAGUE DEPARTMENT.

We learn that Colonel Harness has obtained the assistance of Mr. William Clode, of the Registrar-General's Office, in organising the new department under the Privy Council for business connected with the cattle plague. This appointment is highly satisfactory, as Major Graham's office is one of the best training schools for public servants to be met with under the Crown. In addition to the conduct of the business of his own department proper, the elaborate and extensive arrangements connected with the taking of the Census have for many years been entirely in the hands of Major Graham and his assistants; and as Mr. Clode has held responsible positions during both of the last of these operations, and also subsequently, we augur well for the efficiency of any staff whose formation and drilling into working shape are placed under his supervision.

### THE SUPPOSED CASES OF POISONING AT THE CARDIFF WORKHOUSE.

We regret to state that the Medical Officer at the Cardiff Workhouse, Mr. Henry Edwards, has been subjected to a charge of having caused the deaths of two men, Francis Buckley and Evan Frank, who died on the night after taking some medicine which had been prescribed for them by Mr. Edwards. Our readers, however, will be glad to learn that the scientific evidence given by Dr. W. B. Herapath in the case has completely exculpated Mr. Edwards. The inquiry was held in the Cardiff police-court before the local magistrates. The post-mortem examinations showed that the deceased men had died from congestion of the lungs and brain. No poison, metallic or vegetable, was detected in their bodies, and analysis showed that the medicine administered by Mr. Edwards was a harmless mixture containing iodide of potassium and carbonate of potash in small doses. In the case of one of the men, Francis Buckley, who was old and weak, a large mass of unmasticated undigested food was found in the stomach, and probably might have contributed to depress the vital powers and induce the fatal result. No such cause, however, could be alleged in the other case, and the Medical witnesses were unable to account for the cerebral congestion which proved fatal. The case, indeed, seems to have been one of simple congestive apoplexy. The charge against Mr. Edwards was at once dismissed by the Bench, and we heartily congratulate that gentleman on the result.

### CHOLERA.

Cholera has appeared in Rotterdam and its vicinity, as well on the French coast. Its occurrence in the former locality has been notified to the authorities at the various outports of the United Kingdom in the following official letter:—

> "Privy Council Office, April 23, 1866.
>
> "Sir,—I am directed by the Lord President of the Council to request you will call the attention of the authorities at            to the communications which, by his Lordship's instructions, were addressed to you from this Office in August, 1859, and subsequently in July, 1865, soon after the cholera had broken out in Egypt and in Turkey.
>
> "The progress which the disease has made in Europe since the date of the last-named letter, and the fact that, from information received to-day, cases of Asiatic cholera have occurred at Rotterdam and its vicinity, have again called attention to the importance of not neglecting any means of arresting the progress of the disease, if it should be introduced into the United Kingdom; and I am, therefore, directed to reiterate the precautionary suggestions contained in the above-mentioned letters, and to repeat the expression of a hope that means will be provided for the reception and Medical treatment of any poor seamen or other persons who may, on their arrival in this country, be found to be suffering from cholera.
>
> "I am, Sir, your obedient servant,
>
> "The Worshipful the Mayor. "Arthur Helps."

### OVARIOTOMY UNDER DR. RICHARDSON'S METHOD OF LOCAL ANÆSTHESIA.

Some weeks ago we reported a case of ovariotomy in which Mr. Spencer Wells operated after local insensibility had been produced by Dr. Richardson's method. We have now to report another successful case of a similar kind. In this instance Dr. Thorburn, of Manchester, produced the local anæsthesia while Mr. Braddon operated. Dr. Thorburn used a triple jet, and although some little longer time than is usual occurred before the skin was insensible, the anæsthesia was made perfect, and the long incision was carried out without any pain. It turned out, on removing the cyst, that the adhesions to the intestines were very firm and extensive, so that the operation was tedious and difficult. But wherever the knife had to go the ether spray was directed, and from the first to the last the pain experienced and expressed was almost *nil*. The patient being unusually feeble, chloroform was considered undesirable, so that the substitution of the local anæsthetic, which presented all the advantages of chloroform without any of its dangers, was most fortunate. We may add that the new anæsthetic method has also been successfully used by Dr. Thorburn for the operation of femoral hernia. The patient made a good recovery.

### DR. GREENHALGH'S CASE OF CÆSARIAN SECTION.

Dr. Greenhalgh's patient, on whom Cæsarian section was recently performed under the new method of local anæsthesia, returned to her home in Essex on Saturday last. In the whole course of her recovery she suffered from not one untoward symptom; indeed, it seemed as though the natural tenour of her life was at no moment disturbed. The wound healed by the first intention; there was at no time any inflammatory indication; the appetite and sleep remained good; and the circulation quiet. Once in the course of her convalescence she was startled, but the effect was not lasting. On the twenty-first day after the operation she went to church, walking there herself, and she bore her long journey home well, but was considerably affected on rejoining her children. The wound in the abdomen has healed so neatly that the position of the sutures could hardly be defined. As yet Dr. Greenhalgh has deemed it prudent not to subject the patient to examination to determine the condition of the tumour in the uterine passages that prevented the possibility of natural birth; but there are no general symptoms indicative of its progress. On the contrary, the general health has improved since the delivery by operation. As we have already said, this case ranks amongst the most important in history, and marks a distinctly progressive step in our science and art.

### ST. GEORGE'S HOSPITAL.

The sad occurrence which took place at St. George's Hospital last week—the sudden death of Sir Frederick Roe—recals to mind an event which happened under similar circumstances many years ago in the same institution, and with which the Profession at large are familiar—the death of Hunter. In both instances there had been for some little time more or less difference of opinion in regard to the internal economy of the Hospital. On October 16, 1793, Hunter, speaking in reference to the point at issue, was interrupted in his remarks, and, says his biographer, "he immediately ceased speaking, retired from the table, and, struggling to suppress the tumult of his passion, hurried into the adjoining room, which he had scarcely reached when, with a deep groan, he fell lifeless into the arms of Dr. Robertson, one of the Physicians of the Hospital, who chanced to be present." Recently, a committee appointed to inquire into the matter recommended an alteration in the system of nursing at St. George's Hospital, and party spirit seems to have run high amongst the governors at large, if we may judge by the large attendance in the Boardroom on Friday week. It was suggested that nurses should be provided from St. Peter's Home, Brompton. Amongst those who were opposed to such a change was Sir Frederick Roe. At the special meeting called to consider the matter, Mr. Abel Smith moved a resolution deprecating the introduction of any religious discussion, and pointed out that the sole object was to get good nursing for the Hospital. A first amendment, upon which a very long discussion took place, was one which affirmed that it was not advisable to introduce the system of nursing which the committee had proposed. It was upon this question that a good deal of difference of opinion existed, and about which no small amount of excitement was rife amongst the governors. Now the governors of an Hospital, in all matters that relate to the Medical care of the Hospital, are necessarily wont to be guided by the opinions of the Medical staff, but in the present instance the staff does not seem to have been specially consulted. Sir Frederick Roe, as we have said, was in favour of the continuance—or, at furthest, the improvement—of the old system of nursing, and it appears that Dr. Wilson had just made a temperate speech when Sir Frederick was specially called upon, and amid the confusion was perhaps more excited than usual. He had been, we understand, suffering for some time from symptoms that threatened apoplexy, and after he had spoken shortly he expressed himself as not feeling very well and retired. It seems that he went to the outpatients' room, and Mr. Holmes happening to be passing heard some one say, "Is there nobody there?" and found Sir Frederick sitting up, but very faint. Dr. Wilson was summoned, Mr. Henry Lee also, who had previously attended him, arrived almost immediately afterwards. All the means of restoration adopted, however, failed, but we are informed that the pulse could be felt beating after the respiration had entirely ceased. The question before the meeting was virtually shelved for the present by the adoption of a resolution to the effect, that it was expedient that the system of nursing should be improved, and that a committee of ladies be formed to assist in carrying out this object.

We are of opinion that whatever system of nursing be adopted, the control or authority in all that relates to the care of the patients of any Hospital, should be placed in the hands of the Medical officers. It would be against the interests of the patients were there two conflicting authorities in the wards. Clearly a nurse whose heart is in her work, and who is possessed of high intelligence, is far preferable to the ignorant woman who does as little as she can for her wage, and looks upon her duties as so much disagreeable daily task. It has been brought against the novel systems of nursing, that the religious convictions of patients are acted upon, and that the "Sisters" are ever aiming at preparing them for death instead of restoring them to health. We very much doubt whether this statement has any basis in fact; but, even were it true, it is not worth much as an objection. If the patients are better cared for under one than another system, by all means adopt it, only have no divided authority.

It is right to add that the system of nursing Hospitals by sisterhoods, or by societies of trained nurses, has been now extensively tried. University College Hospital is nursed by the All Saints' Sisterhood, King's College by the Sisters of St. John's House, St. Thomas's by the Nightingale Nurses, and the Great Northern by the North London Deaconesses' Institution. We believe that in every instance in which the plan has been adopted it has answered the most sanguine expectations. We can state from our personal observation that both Medical staff and patients have derived the greatest advantages from the substitution of a a force of educated and trained gentlewomen and subordinates for the Gamp and Prig race of former days. After all, the thing wanted in every Hospital is an efficient and humane set of nurses, under Medical control, not above it. Whether they shall be religious, or dressed in a quasi-conventual uniform is a question of minor importance.

### THE GUARDS MEDICAL SERVICE.

Readers of the debates in Parliament must have noticed that within the last few weeks the Secretary for War has had a number of questions put to him in reference to a change which is said to be about to be introduced in the system of promotion of Medical officers in the Guards. That system has been hitherto strictly regimental; it is now proposed to substitute promotion by seniority in the brigade. The effect which will be produced by this innovation on the prospects of many of the Medical officers will be understood from the following paragraph, which we extract from a leading article in a recent number of the *Daily News*:—

"For our readers to understand the full force of the hardship which is thus intended to be inflicted upon many deserving officers a few words of explanation are desirable. The brigade of Guards consists of three regiments—the Grenadiers, numbering three battalions; the Coldstreams and Scots Fusiliers two each; in all, seven battalions. Each battalion is provided with a Surgeon, and, in times of peace, one Assistant-Surgeon. In the Crimean war, however, additional Assistant-Surgeons were appointed, and since that period some of those commissioned during the emergency have been absorbed into the strength of the regiment. So that at the present time there are four Assistant-Surgeons to the three battalions of Grenadiers, and three each to the other two regiments of the brigade—the Coldstreams and the Fusiliers. The Surgeon-Major of the first battalion in each regiment is the regimental Surgeon. Besides the duties connected with his own battalion, he superintends the Medical administration of the regiment generally. This post is a very desirable one. Its occupant is not subjected to the changes of quarters to which the other Medical officers have necessarily to submit. He remains at head-quarters when the regiment is despatched to various parts of the kingdom, the Surgeon of the second battalion taking charge of the first under these circumstances. A married man so placed can make arrangements which will ensure him an amount of comfort impossible to be attained by an officer subject, at short notice, to be ordered away from home. The acquisition of this post, therefore, is very reasonably an object of desire on the part of those who may one day succeed to it. According to the regimental system, it is filled, when a vacancy occurs, by the battalion Surgeon next in rank in the regiment. In the proposed alteration of the scheme of promotion no change is to be made in this respect. On the other hand, by the existing method, the post of battalion Surgeon, when vacant, is filled by the senior Assistant-Surgeon in the regiment. It is here that the intended change will apply. When a vacancy occurs in the grade of battalion Surgeon, it will be filled up by the senior Assistant-Surgeon, not in the regiment, but in the brigade. So that an officer who has been able, with considerable certainty, to calculate upon his succession to the higher posts, suddenly finds his prospects of promotion deferred, and, in some instances, hopelessly baffled, by an arrangement which introduces between him and the post to which he aspires officers from other regiments of the Guards, who were previously completely out of the question. The result, supposing the scheme to be carried into effect, will be to exclude many gentlemen from the prospect of ever holding a higher position than that of battalion Surgeon. This change will be attended with no corresponding saving of expense to the country, or advantage to the service. It will simply introduce discontent where unanimity has hitherto prevailed. Moreover, by the frequent changes induced, it will go far to destroy a spirit of emulation between the Medical officers of the several regiments, which has not been without its effect in stimulating activity and Professional zeal."

It is now sought to defend the bad faith which the Government are keeping with these officers by quoting the authority of a warrant which is stated to have been in existence since 1860, but which, it is said, has only recently been acted upon. The warrant, however, has never been made public; nobody appears to have been aware of its existence, and it certainly was not in force in 1863, when a gentleman, who although the junior battalion Surgeon in the brigade was senior battalion Surgeon in the Coldstreams, was promoted to the vacant post of Surgeon-Major in his own regiment. The whole thing looks like an attempt on the part of the authorities to perpetrate a job at the expense of a number of officers who are to be deprived of rank and position, in the full expectation of which they entered and remained in the service. It is openly stated that the Duke of Cambridge is principally responsible for the measure. The mysterious warrant of 1860 is, however, to be laid before the House of Commons, but whatever its purport may be, we hope that public opinion expressed through members of that House will interfere to prevent the threatened injustice. We can have no objection to promotion in brigade if it be found best adapted to the exigencies of the service, but the change should not be retrospective; no alteration ought to affect the prospects of those officers who have been appointed under a different system.

## FROM ABROAD.—THE BRUSSELS CERCLE MÉDICAL—THE FRENCH MEDICAL BENEVOLENT SOCIETY—MEDICAL ADVERTISING IN AMERICA.

The idea of establishing a Medical Club in London has often suggested itself, and we believe has even been attempted to be realised. That it has failed in becoming so has probably resulted from the attempt having been ill-directed and too ambitious. It is obvious that advantage would arise from bringing members of the Profession together in a less formal and more social manner than is done by their meeting at the learned societies, which so many of their number do not care to attend; and if this were managed economically and discreetly, we think that it might prove successful, and would often also prove of great assistance for the discussion and consideration of the various matters interesting to our body, which can now only be accomplished through hiring rooms at public taverns, or other disagreeable expedients. But if, misled by a name, any attempt were made to imitate the costly, luxurious, and indolent institutions, known as the clubs, it would be found utterly unfitted to the wants of our hard-working, domesticated, and not over-rich Profession. We have been led to these remarks by a report recently published of the great success which has attended the "*Cercle Médical*" of Brussels, an institution at present unique of its kind in Europe. Why it should remain so, it is difficult to understand; although, certainly, in the matter of clubs, congresses, leagues, and the like, the Belgians seem to have a remarkable aptitude. However this may be, the founders of the Brussels Club have had in view "the creation of a place for agreeable meetings, where all the Practitioners of the capital may daily assemble, drawing nearer the ties of confraternity, until at last those asperities disappear which often impede the exercise of their Profession. Moreover, the Brussels *Cercle* opens its doors wide to foreign Practitioners, offering them a cordial hospitality, and presenting an attentive and well-disposed auditory to any of them who may have anything to impart as the result of any special investigation they may have been engaged in, or of any discovery they may have made of what is likely to be of utility to science or mankind. At first, the institution met with obstacles, many prejudices having to be destroyed before its success could be assured. These the founders of the institution have had the satisfaction of overcoming, so that it is now in a most prosperous state, the Profession having thoroughly comprehended at last that in it they may find not only the elements of distraction and pleasure, but also the most certain guarantee of their rights and dignities." Surely something analogous might be done in London, where, of course, on account of its vast size, two or more of such institutions would be requisite, which yet might easily be harmoniously combined in their working.

The French Medical Benevolent Society has just held its annual meeting, under its President, M. Rayer. The report represents it as being in a very flourishing condition. It consists now of ninety-six local societies, distributed over seventy-seven departments, and the proposal is under consideration of admitting individual members in those departments in which they are not numerous enough to constitute local societies, which at present cannot be done. The total number of members now amounts to 6209, being an increase of 197 over that of last year, notwithstanding the great loss (130) incurred through death during that year. On January 1, 1866, the Society was in possession of 427,277 francs, being an increase of 40,220 francs during 1865. No less than 12,103 francs have accrued from donations and legacies. Not only was a considerable sum (17,107 francs) expended in pecuniary assistance during the year, but the various local societies interfered most actively in the protection of the rights and interests of the Profession, aiding its members, with the power derived from co-operation, in resisting oppression or obtaining legal redress and prosecuting illegal Practitioners, so that 41 convictions were obtained. One abuse they have as yet been unable to control—viz., the usurpation of Medical practice by the religious sisterhoods. This has gone on to such an extent in some parts of Brittany that Medical Practitioners in despair have abandoned the localities, their number having in some of these diminished within the last ten years by 50 per cent. As might be expected, numerous accidents are the result of such an abuse, but thus far it remains unchecked. Besides its own proper business, the Society last year took under its auspices the raising subscriptions for a statue of Laennec, which now amounts to 50,000 francs.

Professional advertising in the American Medical journals differs somewhat from that which is allowable amongst ourselves. We select a few specimens from recent numbers of the *Boston Medical Journal* :—

"Dr. Heaton, 2, Exeter-place, Boston, continues to devote special attention to the radical cure of hernia or rupture in all its forms, including not only reducible hernia, but those cases heretofore considered irreducible. He also attends to the cure of varicocele, hydrocele, strictures, hæmorrhoids, fistula, etc."

"To Physicians and Surgeons who wish to purchase one of the best locations in N.W. Ohio, I have to say that I have such a one for sale. A well-qualified Physician, whose health and inclination will permit the effort, may, by purchasing this situation, enter at once and continue upon a lucrative business increasing yearly. A detail of the advantages, present and prospective, would extend this notice beyond proper limits. Suffice it to say, our village is one of the most important points on the N. Ind. Railroad, a good business place, and growing. My property is excellent, and my practice will compare favourably with that of any Physician in this section of the State. My price for property and business, including office, furniture, medicines, horse, harness, saddle, sleigh, and rolling stock, with hay, grain, etc., is $4000.—E. P. Willard."

"Notice to Physicians.—Stand for Sale.—A desirable stand, situated only quarter of a mile from railroad station, and 10 miles from Providence R. T., in the midst of flourishing manufacturing villages, schools, churches, etc. Horses, carriages, medicines, and Medical books to be included in the sale, if desirable.—Address, M. G., Fiskville Post-office."

"G. B. Windship, M.D., Park-street, Boston.—Special attention to dyspepsia, pulmonary disease, and general debility. Also, advice and practical instruction in reference to physical development. Regular office hours daily from 10 to 12½, 3 to 6½ and 8 to 9 p.m."

"Dr. Rupparer, late of Boston, Fifth Avenue Hotel, New York, gives special attention to the treatment of diseases of the nervous system, and diseases of the throat and larynx."

"Dr. Harkett Derby, No. 6, Beacon-street, gives his exclusive attention to diseases of the eye. Office hours from 9 to 11, and from 3 to 4½."

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PARLIAMENTARY. — THE CATTLE, ETC., CONTAGIOUS DISEASES BILL — THE CHOLERA — OYSTER FISHERIES — THE STRAND UNION WORKHOUSE — EXPERIMENTS ON THE TREATMENT OF THE CATTLE PLAGUE — THE EXHAUSTION OF THE COAL FIELDS—PUBLIC HEALTH ACTS — THE SMOKE NUISANCE — THE WITHDRAWAL OF WATER FROM THE THAMES — POOR-LAW EXPENDITURE.

In the House of Lords on Thursday, April 19,

The Cattle, etc., Contagious Diseases Bill passed through Committee, was reported without amendments to the House, and, the Standing Orders having been suspended, was read a third time and passed.

In the House of Commons,

Sir J. C. Jervoise asked the Vice-President of the Committee of Council on Education whether the attention of the Medical officer of the Privy Council had been directed to a statement in the *Morning Star* of October 25, 1865, that the Emperor and Empress of the French had visited the cholera Hospitals in Paris, and that M. Gustave Girard had made experiments in demonstration of the non-infectious nature of the cholera.

Mr. Bruce said that the Medical Officer of the Privy Council was cognisant of the conduct of the illustrious personages in question, whose courage and humanity on that occasion had excited such general admiration. He was also aware of the daring experiments made by M. Girard, who had placed upon his own tongue the moisture from the brow and the fur from the tongue of a man who had died of cholera. But in the first place, such an experiment only proved the insusceptibilty to that disease of M. Girard, and by no means proved that the experiment might be tried with equal safety by other persons. Even if held conclusive on that point, it did not in the slightest measure invalidate the position taken by the Medical Officer of the Privy Council with respect to the infectiousness of the disease. The hon. baronet had, moreover, overlooked the fact that, as the French Government was at present strongly advocating quarantine precautions against cholera in the East, it might be presumed that their Medical advisers entertained the same opinion as the Medical adviser of the English Government on the subject of M. Girard's experiments.

On Friday, April 20, in the House of Lords,

Lord Clanricarde called attention to the depressed condition of the oyster fisheries, and inquired whether the Government intended to act upon the recommendations of the Fisheries Commission, and especially whether any negotiations had been entered into with France for reciprocal advantages to the fishermen of both countries.

Lord Stanley of Alderley said that negotiations had been entered into with the French Government, but the subject was still open. A Bill relating to the oyster fisheries was prepared, and would speedily be laid before Parliament.

Lord Townshend then called attention to some imputed defects in the arrangements and management of the Strand Union Workhouse.

Lord Granville, in reply, stated that no complaints had been made to the Poor-law Board by the Medical officers of the Workhouse in question, but recently some improvements had been introduced.

In reply to the Duke of Buckingham,

Lord Granville stated that although permission had been granted to the Cattle Plague Commissioners to treat experimentally infected cattle, yet it was thought unadvisable, except upon very strong grounds, to grant such permission to individuals.

In the House of Commons, in reply to an inquiry by Mr. Liddell,

Sir G. Grey said the attention of the Government, in common with most other persons, had been directed to the alleged rapid exhaustion of our coal-fields, and the statements made by many persons with regard to the probable time when they may be exhausted. But the Government was not in possession of any accurate information on the subject. He was not aware that any person was in possession of any information which may be called certain and accurate, but the Geological Survey Department had furnished a good deal of information on the subject, and upon this information he believed some of the statements which had been made were founded. The Government did not see that any advantage would be derived from any other parties independent of the Geological Survey Department being intrusted with the inquiry.

Lord R. Montagu asked the Vice-President of the Committee of Council whether the Government had any intention to introduce a Bill to amend the Public Health Acts, and whether it would contain any clauses which dealt with the pollution of rivers, in accordance with the recent report of the Commissioners.

Mr. Bruce said that it was the intention of the Government to introduce a Bill for amending the Public Health Acts very shortly. It would not deal with the pollution of rivers. The Commissioners only presented their Report on the Thames Valley a few days ago. The more difficult inquiry into the waters of the manufacturing districts of Yorkshire and Lancashire was not completed, and till it was completed no general measure on the subject would be satisfactorily considered.

Sir R. Peel asked the Secretary of State for the Home Department a question with reference to the pledge given by him before the Easter recess as to the introduction of a Bill on the subject of the nuisance resulting from the smoke of furnaces in towns and country districts.

Sir G. Grey: I have addressed a circular letter to some of the largest towns in the kingdom with reference to the subject which my right hon. friend brought before the House. The result of the answers which I have received is that in every one of those towns in different parts of the country there is power on the part of the local authorities to prevent the nuisance arising from the smoke of furnaces, but there is great diversity in the mode in which the law is enforced. [Sir R. Peel: "What law?"] The law requiring the consumption of smoke or preventing nuisances arising from smoke. I shall lay on the table a copy of that circular letter, and I may add that a Bill is in preparation by my right hon. friend the Vice-President of the Council, one of the objects of which will be to provide some summary mode of proceeding by which in the matter of the nuisance of smoke and other nuisances local authorities may be compelled to do their duty.

On Monday, April 23, in the House of Lords,

The Earl of Carnarvon called attention to the statement of the noble Earl the President of the Council in reference to the Strand Union Workhouse. He said that the sick wards of the workhouse were very small, and that the air was contaminated by a large carpet-beating establishment which had been sanctioned in the immediate vicinity. He understood that complaints had been made over and over again by the Medical Officer of the workhouse to the Board of Guardians, and he believed that communications had passed on the subject between the Guardians and the Poor-law Board. The noble Earl had stated that 300 cubic feet of air was the allowance for each person required by the Poor-law Board. But this was the allowance required for each person in the dormitories; in the sick wards the minimum was 500 cubic feet for each patient. This allowance he believed to be far below the mark. The Military Hospital Commission laid down that 1200 cubic feet was the least that should be allowed, and the eminent Medical men who signed a memorandum, which the noble Earl might have received on the subject of workhouses, stated that in their opinion not less than 1000 cubic feet of air was necessary.

Earl Granville explained. The Medical Officers had never made any representation to the Poor-law Board on the subject in question, but the communication to which he had referred had come from the Board of Guardians. As to the number of cubic feet, his answer was given with regard to the casual wards. It would be satisfactory to the noble Earl to hear that a short time ago the Medical Inspector of the Poor-law Board and the architect were desired to make a round of the workhouses in order to make an inspection and report upon this subject.

In the House of Commons, in reply to Mr. Liddell,

Sir G. Grey stated that the Geological Survey Department had collected a large amount of information relative to the exhaustion of the coal fields. If the papers were laid before Parliament in their present shape, he feared they would not be intelligible; but he would communicate with the department, and with their assistance he thought there would be no difficulty in extracting a considerable amount of information connected with the subject, which he would lay on the table of the House.

On Tuesday, in the House of Lords,

Lord Redesdale, in moving to refer the West Middlesex Water Bill to a committee of the whole House, called attention to the increasing quantities of water annually withdrawn from the Thames by water companies, and suggested that new districts should be required to obtain their supplies from other sources.

After some discussion Lord Redesdale's motion was adopted.

In the House of Commons,

Mr. Knight moved the following resolution:—"That, in the opinion of this House, it is expedient that all items of Poor-law expenditure throughout the United Kingdom, not being in-maintenance or out-relief, or otherwise under the immediate control and direction of boards of guardians or parish officers, should become a national charge," which was seconded by Mr. Warner.

The Chancellor of the Exchequer professed himself opposed to all such transfers, except on very strong grounds of public policy. He pointed out that the country had adapted itself to the present incidences of these burdens, that local taxes were raised with greater facility and greater general agreement than Imperial taxes, and that the change would greatly add to the proportion of taxation borne by the working classes.

The motion was then withdrawn.

## THE TYRANNY OF LECTURES.

*(From a Correspondent.)*

The other day, after a ten years' absence, we stood at the gate of our old school, and saw our former teachers—good, easy, prosperous men—pass with the stereotyped smile of recognition on their good-natured faces. There was a time when, as we looked on them, "forsitan et nostrum nomen miscebitur istis" sounded in our ears; on this occasion it was a sadder and more apathetic envy. We also saw an old fellow-student just returned from abroad. The set we had belonged to was a pretty numerous one, composed of men who, out of sheer vanity, worked intensely, but secretly, at all sorts of untimeous hours, affecting to devote themselves entirely to pleasure, while they loved to astonish their neighbours, who wondered at talent which, apparently independent of all habits of industry, could so easily carry away everything in the shape of a prize from the conscientious plodders of their year. It was of the members of this set we talked, as old friends do on meeting, merrily enough, until the frequent repetition of "he's dead," "*he's* dead too," made us look and feel rather serious. After musing a little, as if to recall another name, our friend said, "Except ourselves and ——, they're *all* dead," adding, "Don't you think now we were all too fast then?" Alas, we had been! Somewhere in the country, this white-faced man with a cough, and ourselves carrying a stick more for use than ornament, were the surviving representatives of "*our set.*" A chair in the students'-room was not an unwelcome rest, and as the youths clustered and talked together, we gathered from their discourse that things were not so much altered as we had been led to believe; to be sure, the comfortable reading-room was there for them instead of the cold seatless lobby of former days, and they seemed better cared for; but three more of our men had been plucked last night, and we all discussed the calamity. There was none of the old bitterness against individual examiners—that was happily of the past; indeed, the only decided expression was one of sympathy with the unfortunate trio, who were described as very hard working men, and regret that they had either not gone to a "grinder" at all or not soon enough. Typical cases were quoted of men who had been saved from impending pluck by some weeks' trituration by one whose name seemed a household word, and had been even in our time; one of our set, however, would have sooner left the Profession than be his pupil, except, perhaps, at some midnight hour. Other stars of even greater magnitude were mentioned, but what surprised us most was to hear the opinions of the regular teachers quoted, and what grinding class they recommended their own pupils to attend. Even before the boasted reforms in education were carried out, grinding was looked on as one of the vices clean-minded men speak not of. Occasionally, indeed, some timid working man would find himself being cured of diffidence in a grinder's class, but the latter rather resembled a regiment of *forçats* than a legitimate body of students of Medicine. It used to be said that a man was only forced to grind when he had neglected his classes, but what ignorant prejudice all that was. The grinders had discovered the way to teach, and only acted as middle-men between the lecturer, "always genteel," and the examiner, too often a bully. Now, it would seem that the lecture system—in other words, trying to teach many men, utterly different to each other in mental power, of different ages and acquirements, the same thing in the same words at the same moment of time—is found less efficient than ever, as the number of grinders or tutors has increased and the lecturers send their own pupils to be ground;—their own young who with "yellow beaks the precious food eschew" as they administer it in their class-rooms before they trust them to those

"—— of all men best
Their Æsculapian skill to test."

It may be said, this is only an extension of the tutorial system: of course it is; but it should be more openly substituted for lectures, because if the latter do not teach, why waste precious time attending them? The answer to that invariably is, "lectures guide the reading." But *when* is a man to read? at night? Yes, at night; he cannot do so in the day time, because he is then trotting out and in of lecture-rooms like a rabbit in a warren. Then he may read in the morning. No, he cannot, as his first lecture is at 9 a.m. Even were he sufficiently awake, look at his white cheeks, his dull eyes, and—on the strength of being an old teacher—ask him a few questions;—just a few,—which he'll answer like a kindly, honest fellow as he is,—will suffice to prove to you that, so far as his last night's reading went, he has been *losing a bit of his old age* in reading a dry book from which he has collected a few confused statements and misinterpreted inferences, about some organ or tissue which he has never seen, except in a big diagram painted on a wall by one who never saw it either. Was such reading guided by a lecturer? or, if this combination really teaches, why does the guide leave the student at a grinder's door?

Medical students are not too rich, and by no means fools; their studies include subjects which to them, in common with all other men, must be intensely interesting; is it likely that many of them would pay unnecessary fees, or neglect matters which not only excite, but satisfy curiosity, unless both appetites were spoilt in some mysterious manner? Wherever there is attraction, there is probably repulsion existing somewhere else; the only substitute for the former is compulsion. Now, when we see that students, at expense of scanty funds and leisure, are attracted to tutorial classes, it is but reasonable to infer that there is something repulsive to their common-sense in lecture classes—an inference not by any means contradicted by compulsion in the shape of a marker at the door. To arrive at some cause for all this, we have recently visited several lecture-rooms, and been much struck by the difference in the behaviour and bearing generally of both lecturers and pupils. We will only instance two. In one room the class was small, and the lecturer, who was listened to as gentlemen do listen to each other, gave a lucid account of a difficult piece of anatomy, never repeating himself, never interlarding irrelevant stories. In the fifty-five minutes he had told and shown to his students everything really known on the subject. He did not take up time in telling what was *not*, and only alluded to what *might* be, as suggestive of subjects worthy of his pupils' private and independent research —that was the way he guided *their* reading. In the second case, the attendance was more numerous, but there were fewer *students*. A marker at the door did all the majority desired, namely, registered their presence. Before the lecturer entered, they sang in concert—not old student songs, but slang melodies—and during his lecture they talked aloud, made offensive observations, pinched a kitten and made it squall, blew out the microscope lamps, went into fits of unmeaning laughter, and prevented my hearing a lecture which I have reason to believe was invaluable. The lecturer got through his performance, and seemed to take it all as a matter of course. He once, indeed, said he was sure that only one or two *mauvais sujèts* were creating the disturbance, which he must have been aware was but a pleasing fiction. It may be said, here was attraction in plenty—all the fault lay with the students. Yes, but the subject could only be practically made attractive to a few, so any mad wag present had those in his power who were crammed into the lecture-room against their will; and even if attentive, could merely have heard long statements which they would have to corroborate by their text-books at night. In sections most of that turbulent mob of giggling boys would be found not only intelligent and eager students, but considerate and agreeable companions, who individually would defend their teacher's honour and views to the death. But if during hours which ought to be spent in necessary rest and relaxation they are painfully gathering up the fragments lost in such an hurly-burly as the one we had the honour to assist at, their animal spirits will inevitably burst forth when they are obliged to spend what is to them practically an idle hour. Now, whose fault is it, and what has it to do with "lost old age?" It is the fault of the lecture system, which drives some to idle habits, but more to habits of working at times when their minds and bodies require rest or demand stimulants to enable them to work without rest. Lectures to large classes are now old-world absurdities. They were all very well when now and then a man would return, say from Leyden, with all the anatomical knowledge of the country side in his own individual head, and all the illustrative specimens in his private packing cases, but now that teachers and books abound, it is high time to begin teaching in a rational manner. Is the femur so hard to learn that it requires the assistance of two men and a boy—in other words, a lecturer, a demonstrator, and a private tutor—before a man of ordinary parts can "take it in?"

Every unnecessary hour spent in teaching and learning is so much time robbed from science and from the working lives of both teacher and student. It is true that our science creeps slowly and laboriously on, but that is the very reason why time and labour should be economised. The new emigrant does not, on his arrival, sit down and listen to long stories of how his predecessors made the clearing, so far as it is gone, or the gossip of the settlement; he goes rapidly to where *they* left off, and begins felling the remaining trees as quick as he can. If economy of time be an object, then learning the same thing from several different people, when one would do, must be unwise; but students have to appear at least to do so now. If the day be for work, let work be done—good, honest, remunerative labour, which whistling or yawning in a lecture-room is not. If the night be for rest, let the student sleep the pleasant, healthful slumber of the working man. Let his teaching be tutorial in those subjects involving detail, such as general and minute anatomy and practical chemistry; then let the lecturers on practice give the prepared minds a fine polish and the stored knowledge a definite application. Let the lecturer on Surgery show how to apply mechanics to anatomy and the laws which govern the repair of tissue; the Physician, logic, acoustics, and practical chemistry to his department; each lecturer grinding, with experienced hands, the laboriously inlaid minds to a smooth and convenient surface in which, not only will the colours harmonise, but the pieces won't tumble out just as you expect the company of the honourable Board of Examiners at Tea (do they still give tea?) in Lincoln's-inn-fields.

If rationally taught, student life would be better and happier. Manhood would be more active and useful; while the period of rest, when the more pressing cares of life need no longer harrass—call it old age, or what you will—would be more certainly reached than it is under the existing system.

## THE HORSE GUARDS AND THE SURGEONS OF THE GUARDS.

*(From a Correspondent.)*

Promotion in the Guards has been regulated on the strict regimental system from time immemorial. About the time of the Crimean war some young men from the London Hospitals entered these regiments upon the clear understanding, of course, that they were to be promoted in that way. They have been grievously disappointed, for the Duke of Cambridge has recently endeavoured to break through the old system and establish one of promotion by brigade seniority instead. This was so unjust and detrimental to the interest of several Medical Officers that the matter has been brought before the House of Commons. The reply of the Marquis of Hartington was so very unsatisfactory that it will again be brought before the House as soon as the debate on the Reform Bill and the Budget have been disposed of.

The reason assigned by the Marquis of Hartington is not a little curious. In reply to Mr. O'Beirne, he said that up to the time of the Warrant of 1858 the system of promotion in the Guards was undoubtedly a regimental system; but in that year a Warrant was issued which conferred several advantages on the Medical Department, and that Warrant recommended that the mode of promotion, as a general rule, for the rank of Asistant-Surgeons should be in future by seniority in the service. In 1860 the question arose, in regard to the Surgeons of the Household Cavalry, whether the provisions of the Warrant would apply to that branch of the Service, and it was decided by Her Majesty, on the recommendation of the Commander-in-Chief to the Secretary of State for War, that in the Household Cavalry and in the Guards also, in consideration of the Surgeons having accepted the Warrant, they should enjoy the advantages it conferred upon them. Of course, the Medical officers accepted the Warrant of 1858. How could they have done otherwise than accept what was intended for, and imposed upon, the whole Army Medical Service? An Assistant-Surgeon in the Guards could easily enough see the difference between seven shillings and sixpence and ten shillings, but he never supposed that for the extra half-crown he was tacitly submitting to the imposition of a new rule of promotion, so detrimental to his interests and so utterly opposed to the spirit and custom of the regiment in which he was engaged. The Guards have always been separate and distinct, and to suppose that the terms of the Medical Warrant of 1858 applied to them is absurd. If seniority were the rule of promotion, then an Assistant-Surgeon of the Guards, if senior in service, should be promoted to the rank of Regimental or Staff Surgeon in the general service, and no one would oppose this more than the present Director-General. The authorities evidently felt the unfair nature of the proceeding, and in 1860 the Commander-in-Chief—who is always so very solicitous for the well-being and happiness of any member of the Army Medical Department—recommended her Majesty to establish the brigade, instead of the regimental, system of promotion.

For six years, then, has this decision been held in abeyance, ready to be discharged at the head of an unsuspecting Medical officer on the first favourable occasion. When the proprietor of an orchard indulges in the luxury of man-traps and spring guns, he generally gives a clear intimation to the public of his practice; the warning, indeed, often proves an effectual safeguard without the reality. The Horse Guards have a very different way of doing business. They keep their guns loaded and ready to discharge at the head of any member of the Medical Department; but, like wary sportsmen, they maintain a strict silence about those weapons until they are required. Not a little dismay has been caused by the recent discharge from one of these—a sudden death to the hopes of one at least of the Senior Assistant-Surgeons of the Guards. The Director-General of the Army Medical Department occupies the position where, in the judgment of his subordinates, one might expect to find him. He is beside H.R.H., consenting and concurring in the measure, of course!

Really, the authorities appear to be bent on disgusting their Medical officers, and in maintaining the unpopularity of the public services. I do not believe that this ill-advised measure can stand. It is said that the hope of better things in the Army has had the effect of bringing forward a larger number of well-informed men at the last examination. This has evidently been owing entirely to the publication of the recommendations of the Committee. The Profession must await with some anxiety and foreboding an announcement that those recommendations are to be carried out, for on several occasions candidates have been obtained by spreading rumours that something was to be done for the Department, which something, however, still remains undone.

## REVIEWS.

*On Diseases of the Veins, and Hæmorrhoidal Tumours.* By Henry Lee, F.R.C.S., Surgeon to St. George's Hospital; Hon. Fell. King's Col., London; formerly Surgeon to King's College Hospital; Corresponding Fellow of the Medical Society of Florence, etc. London: John Churchill and Sons.

This volume consists of two distinct parts; the first is a new edition of the Essay on Diseases of the Veins, which gained for its author the Jacksonian Prize for 1849; the second is composed of a series of essays, chiefly practical, on "Affections of the Rectum;" the two, at first sight, dissimilar subjects being brought into association by the interposition of a chapter on "Hæmorrhoidal Tumours."

In the essay on Diseases of the Veins, Mr. Lee traces the successive steps by which our present knowledge of phlebitis and other allied affections has been obtained. Hunter "found that when fatal consequences had supervened after bleeding, the coats of the injured vein were inflamed and thickened, and that this inflammation extended for a considerable distance along the vessels." He also described the process of suppuration in veins, and came to the conclusion that the lining membrane of veins was liable to inflammation which might lead to abscess. Ambrose Paré and others described the formation of abscesses in the liver, and tubercles (indurations) in the lungs after injury of other parts, but failed to obtain any distinct idea of the way in which these originated. Dance, Cruvelhier, and others at length established a connexion between the inflammation of a part originally injured, and the secondary abscesses observed in internal organs; but they, along with Sedillot, probably misled by the belief of Hunter that in inflammation of a vein pus is secreted directly into the current of the circulation, conceived the opinion that these secondary abscesses were produced by metastasis; that is to say, that pus, being carried along in the blood stream, and being arrested in the capillaries of distant parts, as the lungs or liver, gave rise to a capillary phlebitis, ending in abscess, wherever this arrest took place. This theory, which Mr. Lee characterises as "highly ingenious and beautiful," has not stood the test of later research. It has been proved by experiments performed by Mr. Lee himself, by Callender, and others, that the inner coat of a vein does not, as Hunter thought, suppurate after the manner of a serous membrane—that pus is never secreted into the interior of a vein so as to become mingled with the current of the blood. "No one has yet satisfactorily demonstrated the presence of an inflammation limited to the lining membrane of a vein." It is also now known that the appearance which Hunter mistook for pus in the canal of the inflamed vein is in reality produced by an aggregation of white corpuscles, which are found in phlebitis, as in several other diseases, to exist in greatly increased numbers in the blood. Foremost among those whose opinions have of late years attracted attention stands Professor Virchow. This distinguished pathologist, seizing on one of the chief features of the malady—coagulation of the blood in the affected vessel (thrombosis)—contends that the phenomena of what is termed "phlebitis" are due to this condition or to its results. He holds that the "secondary abscesses" are produced by changes which occur around fragments of the softening thrombus, which having become detached are carried along in the circulation till they are arrested in the capillaries of some remote part.

Striking and attractive, however, as this theory may be, and although it no doubt affords an explanation of what occurs in many instances, yet the generality of pathologists hesitate to accept it as the whole truth, and as an adequate explanation of all the phenomena that are observed. There can be no doubt that a great deal of the pathology of "phlebitis" centres in this *thrombosis*, or coagulation of blood in the affected vessel, but concerning its exact bearing on the origin and course of the disease much remains to be made out. As the author remarks, "phlebitis" is sometimes the cause, and sometimes the consequence, of the clot: the former when the vein has sustained any mechanical injury, the latter whenever some irritating substance has been included in the clot. We are told that three distinct varieties of "thrombosis" have been at one time or other included within the term "phlebitis."

1. A spontaneous coagulation of the blood, in the vessels, unconnected with the entrance of any extraneous material. This may take place in many cachectic states, where the circulation is weak, and where there is an absolute or relative increase of fibrin in the blood.
2. A coagulation induced by the entrance of some abnormal material into the circulation, and its action on the circulating fluid.
3. A coagulation due to irritation, injury, or any disease affecting the venous coats themselves.

The author enters into a long discussion of the effects of various noxious agents introduced into the blood, and of such collateral topics as bear upon his subject. The space at our disposal does not allow us to dwell on this part of the work.

We cannot but regret that Mr. Lee should have made no attempt—although we fully appreciate the difficulty of the task—to classify on a pathological basis the very important group of diseases which are now in such hopeless confusion under the various titles "Phlebitis," "Pyæmia," "Purulent Infection," etc. A sweeping reform of nomenclature is here most urgently called for. Much has been done to dissipate error and to bring truth to light; but, however satisfactory and complete the knowledge gained by original investigation may be, it is almost or wholly impossible, in the present state of things, that this should become available for the busy part of the Profession. It is now a matter of utter uncertainty to all who have not time to be constantly studying the literature of the subject what any particular writer means by the terms "Phlebitis" and "Pyæmia." In the present essay the author, in pages headed "Phlebitis," discusses along with this disease pyæmia, thrombosis, embolism, and septicæmia, and although doubtless by attentive study of his argument the reader can extract wherein the distinctions between these various conditions consist, yet to accomplish this will require some leisure and not a little close application. It will be a great thing gained when the terms now in use are either

**altogether banished, and made to give place to a rational nomenclature, or when they have their precise significance defined in accordance with our present knowledge.**

Under the heads "Varicose Veins" and "Varicocele" the author gives a number of cases in illustration of the success which attends his method of operating for the cure of these affections. The gist of this method is, as our readers will remember, the subcutaneous division of the vein in the interval between two points at which the vessel is compressed by means of a pin passing beneath it, and an india-rubber band crossing above it, and exerting the requisite pressure. This operation, of which the details are given, has been planned by the author with the object of obviating the chief source of danger after interference with veins—namely, the detachment of clot *débris*, and the consequent production of embolism.

The section on "Hæmorrhoidal Tumours" is devoted chiefly to the operations which the author prefers in those affections. For the cure of hæmorrhoids which are composed of a soft vascular substance, and which readily bleed, he very strongly recommends the application of nitric acid; while for those in which the mucous membrane has become thickened, and the subjacent parts infiltrated with lymph, he advises that the pile should be seized with a clamp and excised, and the cut surface freely treated either with the actual cautery or with nitric acid. The instruments required for this latter proceeding, and which Mr. Lee has been at great pains to perfect, are of a simple and inexpensive kind. They are fully and clearly described. The operation is intended to take the place of that by ligature, which Mr. Lee, for several cogent reasons, considers open to objection. The success of his own method which he is able to record is very satisfactory.

In the essays on "Affections of the Rectum" the author's object seems to be rather to insist on a number of practical points which he has found by experience to be important than to offer an orderly and complete monograph on any of the subjects of which he treats.

Mr. Lee writes in an easy, every-day way that is well in keeping with the clinical material which he has to convey. Indeed, the style in some parts is rather loose and inaccurate. In spite, however, of these minor drawbacks, the volume will well repay the perusal both of the pathologist and the Surgeon, for it embodies the results of long and laborious research, and of much carefully-considered practical experience.

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*Leprosy, Ancient and Modern; with Notes taken during recent Travel in the East.* By Tilbury Fox, M.D. Lond., M.R.C.P.

This pamphlet, a reprint from the *Edinburgh Medical Journal*, contains some valuable information as to the leprosies of our own and olden times, and the various relations of the allied eruptive conditions. Dr. Fox made good use of the opportunity afforded by a recent trip through the East to study the disease, and thinks that all discrepancies and contradictions may fairly be explained away; that Moses described the *early* stages of leprosy only, under the terms berat cecha and lebena, answering to our morphæa alba and nigra, the leuce and melas of Celsus, and the Greeks states or stages that have recently been shown to antecede the development of the tubercular and anæsthetic stages. These are the forms of eruption which rendered a man unclean.

There has always been a difference of opinion as to whether the Hebrews were affected by a special form of disease, of which no trace remains now-a-days; but Dr. Fox mentions the remarkable and novel fact that in Syria there exists, and has existed for a long period, a form of eruption which is termed *barasel Israily*—literally Hebrew leprosy—regarded as distinct from the baras of the Arabs, even in the traditional record of the Mahommedans. This Dr. Fox diagnosed as nothing more or less than lepra vulgaris, the alphos of Celsus, the disease of Gehazi and Naaman, and the book of Moses, all identical, and constituting the form of leprosy which did not render a man unclean. "It is therefore unnecessary," says the author, "to suppose the existence of a disease peculiar to the Jews," of which, of course, no trace exists at the present time. Further, it is held that the results of modern research give a peculiarly prophetic aspect to the Levitical code, and fully prove its truth.

The relation of syphilis and leprosy, the influence of fishy and oily diet, and other points, are also noticed.

Our readers will not find the like information elsewhere.

*Verhandlungen der Gesellschaft für Geburtschilfe in Berlin. Transactions of the Berlin Obstetrical Society,* 1864.

In the transactions of the Berlin Obstetrical Society for 1864 we have a paper by Dr. Winckler, of Rostock, "On the Action of Chloroform on the Activity of Labour Pains," in their normal and abnormal conditions. He alludes to those who have preceded him in this department of research, particularly to Sachs, and to Johns, of Dublin, but objects to the observations of the former on the ground of inexactness, seeing that there was no observation before or after the administration of chloroform, but only during the period of anæsthesia. To obviate this objection, Winckler gives his observations before and after, as well as during the period when the patient was under the influence of chloroform, and attends to the various stages in each pain, giving the periods of increment, acme, and decrease. He also draws a distinction between normal and abnormal pains, selecting as instances of the latter those occurring in cases of "rigid os." Besides the pains themselves, the duration of which was estimated by the hand resting on the belly, he observed the pulse, the respiration, and the temperature of the vagina; but one source of error he appears to have overlooked when he compares pains without observing the particular stage of anæstheria. From his observations, here given at full length, he concludes that chloroform lengthens the pauses between the pains, whether normal or abnormal, and, without much affecting the other stages of each pain, considerably shortens the period of acme. Spasmodic pains are not regulated, only rendered less painful by its use, and it appears to have little or no effect on temperature; but, on the other hand (and this has attracted some attention at home), it increases the tendency to post partum hæmorrhage.

Unfortunately, from the small number of cases cited (two normal and two abnormal), his conclusions do not carry that weight to which the accuracy of his observations would otherwise entitle them.

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# GENERAL CORRESPONDENCE.

## CARRIAGES FOR SMALL-POX PATIENTS.

Letter from Lieut.-Colonel T. St. Leger Alcock.

[To the Editor of the Medical Times and Gazette.]

Sir,—There are now three cases of small-pox in the barracks of the regiment under my command at Hampstead. I attribute this inconvenience to the circumstance of the Small-pox Hospital being full. The first case was sent there and returned for the above reason, thus preventing the measures of disinfection which had been ordered. The consequence has been that the sister of the little boy first attacked is now ill, and a young girl of 18 of another family is sickening. As there is no Hospital carriage in the parish, the removal of infectious patients is attended with great danger to the public health.

I am, etc., T. St. Leger Alcock,
Lieut.-Colonel 6th Middlesex Militia.

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## REPORT OF THE COMMITTEE ON THE RANK, PAY, AND POSITION OF NAVAL AND MILITARY MEDICAL OFFICERS.

[To the Editor of the Medical Times and Gazette.]

Sir,—At a recent meeting of the Fellows of the College of Physicians that venerable body, after a little self laudation, are reported to have endorsed with their approval the labours of the above-named Committee. And the College of Surgeons, following suit, have also delivered themselves of an opinion couched in the most favourable terms.

With all respect for those representative bodies, and with a grateful sense of the services they have rendered to the cause of the Army and Navy Medical officers, I must demur to the conclusion they have arrived at, and express my firm conviction that the Committee's recommendations, even if fully carried out, will fail to obtain recruits for the Navy.

The "bait" of 2s. 6d. a day additional pay for the first five years is too transparent to be successful; and the staff-pay two years earlier than at present is no equivalent for the loss of time on half-pay. In point of fact, there are no beneficial recommendations whatever. The increase of pay to Assistant-Surgeons for the first five years of service was not asked for, nor is it required. And continuous service time would be more acceptable to Surgeons than the staff-pay after eighteen instead of twenty years' service as at present. The question of rank is, and will remain, a dead letter; while the distribution of prize-money is still left to the judgment of the Board of Admiralty for the time being.

Under these circumstances, the rising generation of young Surgeons do well to pause and ponder, for until continuous service time, a more liberal promotion to the higher grades of the Profession, and retirement after twenty-five years' service with the rank and minimum half-pay of a Deputy-Inspector-General, be granted, the Medical officers of the Navy cannot be contented. And unless those in the service are contented, I feel safe in affirming that it will be hopeless to expect that others will join.

Continuous service; an increase in the Inspectorial class by the appointment of Deputy-Inspectors-General to all Hospitals and flag-ships; and the rank and minimum half-pay of a Deputy-Inspector-General to all Staff-Surgeons after twenty-five years' service who may not be fortunate enough to obtain promotion, and who may then wish to retire. These may be called the three points of the charter, and nothing less will give complete satisfaction.

London, April 21. A RETIRED SURGEON, R.N.

## REPORTS OF SOCIETIES.

## ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, APRIL 10, 1866.

DR. ALDERSON, F.R.S., President.

A PAPER, by Dr. MOREHEAD, was read, entitled,

### NOTES ON THE PATHOLOGY OF PNEUMONIA AND HEPATITIS.

1. The object of this paper is to show that the pathology of inflammation of the lungs and of the liver cannot be rightly understood unless it be kept clearly in view that in both organs there is a double system of capillary circulation; that of the bronchial and hepatic arteries being for the nutrition of tissue, and that of the pulmonary artery and of the portal vein for functional purposes, the one being of arterial blood, and the other of venous blood. The pathological question in respect to both organs is, which system of capillaries is the seat of inflammation in pneumonia and hepatitis? 2. *Pneumonia.*—It has been lately argued before the Society by Dr. Waters that the branches of the pulmonary artery which constitute the pulmonary plexus are the nutrient vessels of the air-cells and the seat of inflammation in pneumonia, because—1st, capillaries of the bronchial artery do not exist in the air-cells; 2nd, the absence of the bronchial arteries in some animals shows the capability of the pulmonary vessels for the purpose of nutrition. It is argued in the present paper that if inflammation be an altered state of the nutritive processes of the affected part, then the capillaries immediately concerned in inflammation must necessarily be those which in their normal state circulate arterial blood for purposes of nutrition; that the blood which is a factor in inflammation must always be blood which in the normal state is a factor in nutrition. It is maintained, therefore, that capillaries of the bronchial arteries are those immediately concerned in the nutrition of the air-cells, and in pneumonia, because—1st. They are the nutrient vessels of the visceral pleura, of all the tissues of the bronchial tubes, the coats of the bloodvessels, the nerves, and lymphatics, and the connecting areolar tissue of the lungs, and the seat of inflammation in visceral pleuritis and bronchitis. 2nd. It is improbable that bronchial capillaries should ever be discoverable in the air-cells, because (*a*) inflammation of the air-cells must always be followed by turgescence of the pulmonary plexus, and (*b*) artificial injection of a bronchial artery always in part fills the pulmonary plexus; hence bronchial capillaries, if existing in the air-cells, are almost certain to be veiled by the larger pulmonary plexus under the only circumstances in which it is reasonable to expect to see them. 3rd. Though admitting, as is very likely, that bronchial capillaries do not exist in the air-cells, it does not follow that the blood of the bronchial arteries is not the nutrient blood of the cells and the factor in inflammation. May not the thin walls of the cells be nourished by a process analogous to that which is effective in the cornea, articular cartilages, and lamellated osseous tissue? The capillaries of the termini of the bronchial tubes and of the interlobular areolar tissue carry the blood near enough to the air-cells to admit of their nutrition by imbibition of the plasma. 4th. The argument, from analogy, that because there are animals without bronchial arteries, there may be nutrition by the pulmonary plexus, fails because we are dealing with an animal with, not without, bronchial arteries, and because it applies with equal force to the other tissues of the lungs as well as the cells. Further reasons are also advanced, drawn from the manner of termination of the bronchial arteries and from facts of the fœtal circulation. 3. Then it is explained that though the pulmonary capillary circulation is not the immediate agent in the nutrition of the cells or in inflammation, still it plays a very essential (secondary in point of time, though not of importance) part in the pathology of pneumonia, because inflammation of the air-cells obstructs in various evident ways aëration, and this must be followed by more or less stagnation of the blood in the pulmonary capillaries, small in degree in the first stage, but complete in the second stage (hepatisation), and unless this be borne in mind we cannot understand the morbid anatomy of pneumonia; and, as is fully explained in the paper, there are questions relating to symptoms, progress, and treatment which are not intelligible without a distinct recognition of stagnation of blood in the pulmonary plexus, not as constituting inflammation of the air-cells, but as a necessary sequence of it, and a part of pneumonia. 4. The question of position of the exudations, whether into or external to the cells, is shortly noticed, and regarded as one of great simplicity, not requiring the microscope for its elucidation, but bearing in the structure of the lung the proof that the exudation must be chiefly into the cells. The analogy between pleuritis and pneumonia is noticed, in the slight anatomical difference in the tissues concerned, in the exudation being on a free surface in both—in pleuritis tending to become organised, in pneumonia to liquefy. The difference depending on the exudation in pleuritis being on the free surface of a closed sac; that of pneumonia on the free surface of sacs exposed to the air. 5. *Hepatitis.*—The question in regard to hepatitis is noticed very briefly. It is argued that the capillaries of the hepatic artery are the nutrient vessels of the liver and the factor in inflammation; but that the symptoms, pathology, and treatment of hepatitis cannot be rationally explained unless the important facts in the anatomy and physiology of the portal circulation in the liver be borne in mind.

Dr. WILLIAMS said that he had not been able fully to comprehend the meaning of the author in the elaborate and ingenious views just read; but Dr. Morehead, who was his old and valued friend, had apprised him that he was about to communicate a paper on the subject, and requested that he (Dr. Williams) would attend. He was very happy to do so, although the opinions expressed by Dr. Morehead appeared to be in opposition to those entertained by himself. It was upwards of thirty years since he (Dr. Williams) first propounded the opinion that the essential seat of pneumonia is in the great capillary plexus of the pulmonary artery and vein. This view seems to have been generally adopted by the Profession; and even during the present session they had had a paper confirmatory of it from Dr. Waters, of Liverpool. Dr. Morehead now maintained an opposite view—that the first and essential seat of Pneumonia is in the capillaries of the bronchial arteries, the congestion of the pulmonary capillaries being a secondary effect. But all the prominent features of pneumonia declare it to be, from first to last, an affection of no subordinate or diminutive set of vessels, such as those of the bronchial membrane, but of an important vascular plexus standing in close relation with the blood of the whole body: so that, as he (Dr. Williams) had remarked when Dr. Waters' paper was discussed, pneumonia might be represented to be a general or blood disease, rather than a mere local inflammation. He would not reiterate the arguments which he had used on that occasion, but would point out, as an objection to the notion of Dr. Morehead, the remarkable diversity which existed between the two diseases, pneumonia and bronchitis. For if pneumonia always originated in the same vessels that were the seat of bronchitis, there ought to be more or less of a constant tendency of the diseases to pass into each other. There could not be general or capillary bronchitis without more or less pneumonia; and pneumonia could not exist without a considerable and spreading bronchitis. Yet how different was the fact if we appealed to actual observation. Considering the proximity of their seats in the same organ, it was most striking to observe the marked difference between the two diseases, pneumonia and bronchitis. This difference has reference to their causes, their symptoms, their physical signs, and their anatomical effects. Of course he spoke of the typical forms of the maladies; for he was ready to admit that cases occur in which the diseases may be mixed or in combination, so that we have a broncho-pneumonia, or pneumonia with bronchitis. But these cases are by no means so common as those of the pure diseases, in which their respective characters stand out boldly and distinctly as affections that cannot and ought not to be confounded. The causes of pneumonia would be found to be those acting more generally and profoundly on the bloodvessels and blood than those which excite bronchitis. The latter might result from common chill or exposure to cold; but if the cold was intense or so long continued as to deeply disturb the circulation, as in prolonged cold bathing, or if after fatigue or exhaustion from other causes, or if combined with the operation of deleterious gases, then the great pulmonary plexus would be congested, and pneumonia would be the result. Some causes of pneumonia operate through the blood itself. Thus he might cite an experiment of Magendie, that of injecting phosphorated oil into the veins, and inflammation of the lungs was produced. So febrile poisons and the poison of the rattlesnake and of some fungi, operating through the blood, at once develope inflammation in the capillaries of the lungs, which constitutes a formidable complication in the operation of these deleterious agencies. In all these and similar causes of pneumonia we recognise influences which seriously and extensively affect the blood and its circulation, and develope their operation on the great blood-purifying organ; and if we study the symptoms of pneumonia, we find the same evidence of profound and general impression on the system. The rigor is more marked and more constant than in any other inflammation, and was mentioned by Chomel and Grisolle as a symptom characteristic of pulmonary inflammation. Then follows an equally distinctive intensity of heat. How often when applying his ear to the back in examining the chest had he been struck by the feel of pungent heat in the patient's body—a heat often rising several degrees above 100° Fahr. So in sthenic cases at this period the face is flushed with the throbbing headache of fever; the skin dry; the urine scanty, dark, and without its normal saline matter, which is retained in the inflamed lung. And if to these symptoms we add a strong, frequent pulse, we have such a condition of inflammation, local and general, that it is no wonder that blood-letting should be trusted as the great remedy. He (Dr. Williams) had used it frequently in years long past, and with the best effects; but he admitted that of late years it was very rare to meet with a case in this state, and blood-letting was seldom called for. The flush soon gives place to pallor, and the pulse loses its strength and fulness, and assumes the liquid jerky character of a half-filled artery; the blood, in fact, being in great part arrested in the inflamed lung, and, therefore, not available for the general circulation. No wonder, then, that now an opposite treatment is called for, and that stimulants become the best remedy. And now, if we compare the corresponding symptoms in bronchitis, we shall find a marked difference. The rigor, if present, is less marked; the heat and flush are more transient, and less intense; the pulse, though frequent, has neither the strength of the first stage of pneumonia nor the collapsing liquidity of the second. In extensive brouchitis it becomes small and frequent as the disease advances; and instead of the pallor of pneumonia from the arrest of blood in the lung, we have the purple lividity of the surface from the blood circulating in an imperfectly arterialised state. Again, the blood-stained expectoration of pneumonia is another token of its origin in a large and blood-filled capillary plexus, beyond the mere mucous secretion of bronchitis. Then, if we come to the physical signs of the two diseases, we find further evidence of their difference, even in the commencement. In bronchitis the signs are those of bronchial obstruction, more or less complete. Rhonchi attending inspiration and expiration, first lengthening both, subsequently shortening the former and prolonging the latter, with more or less diminution of the proper vesicular murmur. In pneumonia the first sign—the crepitation—comes at once from the vesicular tissue. There may be no general or bronchial rhonchi; but at the seat of the inflammation the fine crepitation comes out sharp and close to the ear at each inspiration, and so confined to the spot in the vesicular tissue of the lung that if you remove your ear to a spot an inch or two from it you cease to hear it altogether. Like vesicular respiration, it is heard only in the spot in which it is produced; and unlike tubular respiration and rhonchi, which are commonly heard to some distance. In the second stage of pneumonia the consolidation developes the tubular sounds of breath and voice, while in advanced bronchitis there are no signs. In the naked-eye anatomical results of the two diseases we find the distinction equally marked. In bronchitis, the lung is distended with air imprisoned in the obstructed bronchi; spongy and frothy on incision; and although parts are often much congested from weakened circulation and impaired aëration, yet this condition is not sufficient to supersede the air in the cells, and there are no signs of consolidation. In pneumonia, in the first stage there is still air in the cells; but the lung feels heavy, pits on pressure, and on incision exudes abundantly frothy serum or spumous blood. The transition to the stage of hepatisation is marked by the gradual substitution of solid deposit for the air and part of the fluid previously present. Seeing, then, that bronchitis, the acknowledged affection of the bronchial arteries, so entirely differs from pneumonia in its whole course, could any further light be thrown on the subject by an appeal to microscopic anatomy? In his early attempts in this mode of investigation he (Dr. Williams) had been struck by the large size and number of blood-filled capillaries, even in the earliest stage of pulmonary inflammation; which forcibly suggested the idea that they were pulmonary, and not merely bronchial. Subsequent observers had come to the same conclusion; Dr. Waters being the most recent. Still this field was open to further investigation, which would be more conclusive than speculative reasonings on the subject. The attempt of Dr. Morehead to explain the development of pneumonia from a primary affection of the bronchial capillaries was ingenious, but far-fetched and wanting in simplicity. Why should not this very characteristic inflammation have its origin as well as its seat in the pulmonary capillaries?—which, conveying arterial blood, and backed by the force of the right ventricle, have in themselves all known capabilities of inflammation; while their intimate relation with the whole mass of blood in the body serves to explain much of those remarkable features which distinguish pneumonia from the common group of visceral inflammations.

Dr. Sibson said that he, like Dr. Williams, had some difficulty in following Dr. Morehead's paper. He gathered, however, that the author, while he considered that in pneumonia the bronchial capillaries were the primary seat of pneumonia, yet that the pulmonary capillaries were also affected with congestion and stasis, and that the air-cells were the seat of exudation. He in this respect coincided with the observations of the best recent pathologists. In a paper in the Provincial Medical Transactions for 1844 (p. 440) the speaker described the condition of the pulmonary vessels in pneumonia, from preparations in which those vessels were injected from the pulmonary veins. The pulmonary capillaries were much enlarged, irregularly swollen, and tortuous in the bronchial tubes entering the inflamed air-cells, which were filled with exudation; and it was very remarkable to notice the abruptness with which the injection stopped short at the point where stasis was established. The rapidity with which the disease usually passed through its whole stages, from the first ushering in of inflammation to the complete restoration of the function of the lung, was surprising. Active congestion, stasis, exudation into the whole of the air-cells, solidifying the affected lung, softening and conversion into pus of the exudation, its complete evacuation and the readmission of air into the cells, the removal of stasis and re-establishment of circulation in the capillaries, succeeded each other in steady progression, and in doing so occupied, on an average, only the short space of nine or ten days. The speaker owned that every time he witnessed these remarkable changes he was filled with wonder. It must be allowed that both the bronchial and pulmonary capillaries were affected in pneumonia, when it was considered that the bronchial vessels were distributed to the whole structure of the lung (bronchial tubes, connective tissue, interlobular structure, and pleura—structures which were all involved in the inflammation), and that they not only immediately adjoined, but anastomosed extensively with, the pulmonary capillaries. The existence of this anastomosis had been established by Ruysch, Haller, and Reisseisen, as well as by Guillot, Rossignol, and Adriani. The question as to whether the bronchial or the pulmonary capillaries were first affected in uncomplicated acute pneumonia, would perhaps never be brought to the test of direct observation, owing to the difficulty of obtaining the lung at the earliest stage of the disease; it would therefore probably have to be decided by a process of reasoning. In some of what might be termed the marginal pneumonias the primary vascular seat of the affection could be fixed upon. Thus it could with precision be said that the disease commenced in the pulmonary capillaries in those cases depending on passive congestion, from obstacle to the flow of blood along the pulmonary veins, as in hypostatic pneumonia, and in pulmonary apoplexy, which differed from pneumonia, in the character of the exudation (being almost pure blood, composed of fibrin and red corpuscles, with a few white; while in pneumonia there were, in addition, numerous exudation—white—corpuscles), and in the extent and kind of limitation, but agreed with it in the seat of the exudation, its stages, and the existence in many cases of pleuritic exudation superficial to the part affected with pulmonary apoplexy. In bronchitis, a subject to which the attention of the Society had just been called by Dr. Williams, the injections described in the paper alluded to showed that the pulmonary vessels were enlarged, tortuous, varicose, and looped on the inner surface of the bronchial tubes; the bronchial capillaries, which were superficial to the pulmonary, were also undoubtedly affected.

Dr. **Salter** wished, in the first place, to correct an erroneous impression to which, from some remarks that had fallen, the paper seemed to have given rise—viz., that the author meant in any way to confuse bronchitis and pneumonia, or to imply any connexion between them. What the author evidently meant was, not that in pneumonia there was any bronchial inflammation, but that true pneumonia, having the recognised symptoms, signs, seat, and morbid anatomy of pneumonia, might nevertheless be due to derangement, not of the pulmonary, but of the bronchial vessels. The anatomical question involved in the paper was a very interesting one—namely, the fact of communication between the two independent circulations—bronchial and pulmonary. The purpose served by these two coexistent circulations in the lungs (the nutrition of the lung-tissues with arterial blood and the carrying off of venous blood without its going to the left side of the heart) is such as to imply that there should be no communication between them. Such a communication, however, undoubtedly existed. But it had been shown by Rossignol and Adriani that the communication was such as not to involve a mixture of the bloods. Thus the bronchial arteries could be injected from the pulmonary veins, and the pulmonary veins from the bronchial arteries, in both cases the blood being arterial; but the bronchial vessels cannot be filled from the pulmonary arteries—that is, venous blood cannot get into the bronchial circulation. These observers had also shown that the mucous membrane of the smallest bronchiæ was also supplied from the pulmonary artery; and there was one circumstance, otherwise difficult of explanation, that this distribution satisfactorily explained—the fact, namely, that the production of slight asphyxial congestion by the shutting off of air, as for instance in asthma, was always attended with the exudation and discharge of little pellets of bronchial mucus. The circulation in which engorgement was produced by shutting off of the air being the pulmonary, and not the bronchial, it would be difficult to understand how it should give rise to mucous exudation unless the pulmonary vessels had to a certain extent a bronchial distribution. But such being the case, the phenomenon was perfectly intelligible. He (Dr. Salter) thought that the author's definition of the inevitable seat of inflammation, based on the word "nutrition," gave to that word too narrow a signification. When inflammation is said to be a disturbance of nutrition, the word nutrition is taken in its widest sense, as standing for all those vital or other processes of which the capillaries are the seat. In relation to the arterial condition of the blood, there was not really that difference between pulmonary capillaries and other capillaries which had been supposed. No doubt the blood delivered to the pulmonary capillaries was venous, but it immediately became in them arterial, and in that state left them, so that while in the systemic capillaries it passed from arterial to venous, in the pulmonary it passed from venous to arterial, and was probably as much arterial in the latter as in the former; so that as far as the arterial character of the blood went, the pulmonary capillaries might as well be the seat of inflammation as any other.

**Alleged Starvation in Shoreditch Workhouse.**—An inquest was held on Friday, April 20, in Hoxton, on the death of an infant, named Griffiths, whose death was alleged to have resulted from neglect in the Shoreditch Workhouse. It was stated that the father and his family were received into the Workhouse, and that after their admission the mother was not supplied with food necessary for her condition, and that she was so weak as to faint when she attempted to suckle her child. The jury returned a verdict to the effect that the food ordered by the Medical officer for the mother was insufficient.

## OBITUARY.

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### E. J. SEYMOUR, M.D.

There are many, both within and without the Profession, who will mourn with deep regret the death of Dr. Seymour, which took place at his house, in Charles-street, Berkeley-square, on Monday, the 16th, after a short, but very suffering illness. Dr. Seymour was one of the Profession who had long enjoyed the confidence of the public, but especially of the more aristocratic part of society. He was educated at Cambridge, and, after an early marriage, removed to Italy, where he practised successfully, chiefly at Florence. On returning to England, he soon fell into extensive practice, and was elected Physician to St. George's Hospital. He was considered one of the most distinguished of the staff of that Hospital. In the school he was remarkable for his facility in communicating knowledge, and was much looked up to by the student, to whom he was ever a kind and considerate friend. Dr. Seymour held the office of Commissioner of Lunacy, in consequence of which he paid considerable attention to the subject, and in his later years was much consulted in mental disorders.

## BOOKS RECEIVED.

Life and Death in our Mines. By Jabez Hogg, F.L.S. Pamphlet from the *Intellectual Observer* of February, 1866. Pp. 16.

*** An able and interesting exposition of the diffusion of gases, the history of safety lamps, and Mr. Ansell's fire-damp and gas indicator.

A Tariff of Medical Fees for Bridgewater and its Neighbourhood. Pamphlet. Bridgewater: A. Graham. 1865.

*** An attempt, and we hope a successful one, to enable the patient to pay his Doctor for skill and time, not for bottles of physic.

The Dictionary of Chemistry. Part xxxiii. Longmans.

*** Contains nearly 200 pages, and is occupied chiefly with an account of phosphorus and its compounds.

The Pocket Formulary and Synopsis of the British and Foreign Pharmacopœias, comprising Standard and Approved Formulæ for the Preparations and Compounds employed in Medical Practice. By Henry Beasley. Eighth Edition, including the Formulæ of the British Pharmacopœia. Pp. 583. London: Churchill and Sons. 1866.

*** This excellent manual should be in the possession of every Practitioner who has not an abnormal memory. It is convenient in size, clearly printed, and closely packed with information.

On a New Method of Applying Remedial Agents to the Cavity of the Tympanum. By Edward Bishop, M.D., M.R.C.S.E., Surgeon to the Metropolitan Infirmary for Diseases of the Ear, Sackville-street, [illegible] London: Churchill and Sons. Pp. 19. 1866.

*** The author's object in these papers is "to bring before the Profession a mode of applying remedial agents directly to the seat of lesion in those cases where disease exists in the middle ear or in the passage leading to it." He proposes to do this by means of tepid pulverised water, and describes an ingenious instrument for the purpose. Dr. Bishop has already found its use satisfactory, and the patency of the Eustachian tube may be secured by forced expiration, by which air is driven into the middle ear—Valsalva's experiment, which "every schoolboy knows."

## MEDICAL NEWS.

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**University of Aberdeen.**—At the late Medical Graduation term, the following candidates received promotion to

THE DEGREE OF M.D.

Frederick Page Atkinson, M.B., C.M. (hon.), Kew, Surrey
Anthony Charles Colborne, M.B., C.M. (highest honours), London
John Smith Fowler, M.B. (hon.), C.M., Aberdeen
Alex. Riddoch Gray, M.B., C.M., Aberdeen
Alexander Ogston, M.B., C.M. (highest honours), Aberdeen
Charles Edward Saunders, M.B. (hon.), C.M., Cuckfield, Sussex
James Dear Smith, M.B., C.M., Mayo
Francis Smith, M.B., C.M., Boston, Lincolnshire
Wm. Heath Strange, M.B., C.M., London.

And the following candidates, after the usual Examinations, received Degrees in Medicine and Surgery:—

THE DEGREE OF M.B.

Wm. Scott Aitken, Greenock
Edwin Atherstone, M.R.C.S., Cape of Good Hope
John Attygalle, M.R.C.S., Ceylon
Richard Carter, M.R.C.S., and L.S.A., Newbury, Berkshire
George Edgelow, M.R.C.S., and M.R.C.P., Teignmouth, S. Devon
Alfred John Freeman, M.R.C.S., Southsea, Hants
John Murray Gibbes, M.R.C.S., Sidmouth, Devon
Wm. Robert Gordon, Banffshire
Benjamin Graham, M.A., Morayshire
Robert Grant, M.A., Banffshire
Alfred Swaine Lethbridge, Devonshire
Richard John Lupton, M.R.C.S., L.S.A., L.R.C.P., Bradford
George Maconachie, Forgue
Patrick Manson, Aberdeen
Wm. M'Donald, Cromdale, Morayshire.

**Lewis Wayne Morgan, M.R.C.S., L.S.A., Pontypridd, Glamorganshire**
**David Nicholson, Aberdeen**
**Henry Rayner, M.R.C.S., and L.S.A., Hythe, Kent**
**Robert William Tibbits, M.R.C.S., L.S.A., Bristol**
**Charles Meymott Tidy, M.R.C.S., L.S.A., Hackney**
**Frederick John Wadd, London**
**James Williamson, Aberdeen.**

THE DEGREE OF C.M.

**Wm. Scott Aitken**
**Edwin Atherstone**
**George Edgelow**
**John Murray Gibbes**
**Wm. Robt. Gordon**
**Benjamin Graham**
**Robert Grant**
**Alfred S. Lethbridge**
**Richard John Lupton**
**George Maconachie**
**Patrick Manson**
**Wm. M'Donald**
**Lewis Wayne Morgan**
**David Nicholson**
**Henry Rayner**
**Chas. Meymott Tidy**
**Fred. John Wadd**
**James Williamson.**

Of the above-mentioned candidates,

Wm. Scott Aitken
Henry Rayner
Chas. Meymott Tidy

received their Degrees in Medicine and Surgery, with highest Academical Honours;

George Edgelow
David Nicholson
James Williamson

received their Degrees in Medicine, with Academical Honours.

At the same time,

Alexander Dyce Davidson and
John Thomas Hughes

were certified as having passed all the Examinations, and are entitled to receive Degrees on their attaining the necessary age.

And the following were declared to have passed part of their Examinations:—

Charles Adam
John Arthur
James Cameron
Joseph Carbery
James Allan Coutts
Matthew Dickson
J. K. V. O. D'Uminy
Alex. G. Duncan
Charles Edward Hocken
Francis W. Jackson
Sydney Johnson
Hugh Johnstone
Joseph F. Keith
Charles Maclean
Alexander M'Arthur
Donald M'Ewen
Robert M'Pherson
Douglas Moir
William Muil
Arthur H. Nowell
James Allan Philip
Francis W. Smith
Arthur Stephen
David Tulloch
Francis A. Van Der Smagt
Alexander Wilson.

The next Professional Examination for Degrees in Medicine commences on Saturday, July 28, 1866.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The lowing gentlemen having undergone the necessary Examinations for the Diploma were admitted Members of the College at a meeting of the Court of Examiners on the 24th inst., viz.—

Messrs. Henry Warlow, L.S.A., Haverfordwest; John Williams, Fishguard, Pembrokeshire; Edward Lodewyk Crowther, Hobart Town; George Spearman, Plymouth; Arthur Matthews, Salehurst, Sussex; Henry Kirwan King, Camberwell; Edward Matthews Owens, L.S.A., Sutton, Surrey; Frederick William Fowke, Byfield, Northamptonshire; and Henry Maynard, Durham, Students of Guy's Hospital. Richard Bond Moore, Wolverhampton; David Hawley Burn Anderson, Edinburgh; Henry Aubrey Husband, L.S.A., Jamaica; William Square, Plymouth; Joseph Goodall, Walworth; and William Barnet Burn, Limehouse, of St. Bartholomew's Hospital. Hugh Ferguson, Haverstock-hill; John Hornsey Casson, Ironvill, Derbyshire; and Arthur Griffith Evans, Nasberth, Pembrokeshire, of the Middlesex Hospital; Frederic Morell Mackenzie, Tiverton, Devon; and William Edwin Ditchett, Lout, Lincolnshire, of the London Hospital. James Webb Booth, L.S.A., Huddersfield; and Thomas Baron, Ulceley, Lincolnshire, of St. Thomas's Hospital. George Henry Snape, Liverpool; and Eli Crew, Tithbury, Gloucestershire, of King's College. Samuel Shapland White, Barnstaple, N. Devon, of the Charing-cross Hospital.

The following gentlemen were admitted Members on the 25th inst., viz:—

Edward James Leverton, Truro, Cornwall; Mowbray Jackson, Bowbrickhill, Bucks; Lestock Holland Reid, Toronto, Canada West; Frederic Harry Haynes, Evesham, Worcestershire; and Herbert Chrippes Upton, Petworth, Sussex, students of St. Bartholomew's Hospital. George Vivian Poore, Andover; John Mildred Creed, Melbourne, Australia; and Thomas Bailey, L.S.A., Gough-street North, of University College. Frederic Steuart Colquhoun, Tiverton, Devon; Thomas Horder, Salisbury; and Waren Tay, Worcester, of the London Hospital. Henry Morris, Petworth, Sussex; and Arthur Goodwin, Chesterfield, of Guy's Hospital. William Bennett Rule, Maida-hill; and Alfred John Leggatt, Lowndes-square, of St. George's Hospital. Frederick Stocks, Wakefield; and George Lucas, Burwell, Cambridgeshire, of St. Thomas's Hospital. James Forbes Sargent, Bentinck-terrace, Regent's-park, of St. Mary's Hospital. Edward Ireland, Kendal, Westmoreland, of King's College. Frederick Baldock Farley, Cretingham, Suffolk, of the Middlesex Hospital; and William Edmond Richardson, of Leeds.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, April 19, 1866:—

Charles George Langdon, St. Bartholomew's Hospital; James Robinson, Ulverstone, Lancashire; Samuel Woodcock, Glossop, Derbyshire; James Tily, Walkern, Herts; Thos. Prince Fothergill, Bedale, Yorkshire.

The following gentlemen also on the same day passed their First Examination:—

John Greaves Wiseman, Guy's Hospital; Edward Noble Edwards, Guy's Hospital; Ernest Thomson R. Evans, St. Bartholomew's Hospital; Owen Tudor Gronow, St. Mary's Hospital.

## APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

**Armistead, J. W.**, M.R.C.S.E., has been appointed Assistant-Medical Officer to the Leeds Public Dispensary.

**Clements, G.**, M.R.C.S.E., has been appointed Senior House-Surgeon to the Royal Infirmary, Manchester.

**Doudney, E.**, has been appointed Assistant-House-Surgeon to the Kent and Canterbury Hospital.

**Hickman, William**, M.B., F.R.C.S., has been appointed Surgeon for out-patients at the Samaritan Free Hospital.

**Sansom, A. Ernest**, M.B., has been appointed Honorary Medical Officer to the Booksellers' Provident Institution.

**Watson, Spencer**, F.R.C.S.E., has been appointed Assistant-Surgeon to the Central London Ophthalmic Hospital.

## BIRTHS.

**Baines.**—On April 22, at 11, Cranley-place, Onslow-gardens, the wife of Matthew Baines, M.D., of a son.

**Biddle.**—On April 18, at Yately, Hants, the wife of T. J. Biddle, Staff Assistant-Surgeon, of a daughter.

**Cowan.**—On April 6, at Achentoshan, the wife of J. B. Cowan, M.B., of a son.

**Duka.**—On April 18, at 37, Coleshill-street, Eaton-square, the wife of T. Duka, M.D., Surgeon Bengal Army, of a son.

**Elliston.**—On April 16, at Ipswich, the wife of W. A. Elliston, M.D., of a daughter.

**Felce.**—On April 6, at Launceston, the wife of S. Felce, L.R.C.P. Edin., of a son.

**Greig.**—On April 12, at 4, Sunnyside, Sandgate, Kent, the wife of Dr. Greig, Royal Artillery, of a daughter.

**Marshall.**—On April 23, at Holly House, Mortlake, the wife of W. Marshall, M.D., of a son.

**Wallis.**—On April 17, at Mullingar, the wife of W. Wallis, Staff Surgeon 12th Depôt Battalion, of a son.

## MARRIAGES.

**Alderson—Willett.**—On April 19, at St. Matthew's, Brixton, F. H. Alderson, M.R.C.S., to Eliza, eldest daughter of F. Willett, Esq., Derwent-villa, Brixton-road.

**Callon—Cartwright.**—On April 18, at Wolverhampton, W. J. Callon, M.D., to Beatrice Teresa, fourth daughter of J. Cartwright, Esq., of Wolverhampton.

**Rickard—Legh.**—On April 19, at Lewisham, Dr. H. Rickard, R.N., to Catharine Emma, third daughter of E. Legh, Esq., The Limes, Lewisham.

**Wade—Pickering.**—On April 21, at Henley-on-Thames, Seaton Wade, Surgeon H.M.S. *Asia*, to Mary Esther, third daughter of the late W. B. Pickering, Esq., of Wilton House, Denton.

## DEATHS.

**Elliott, Archibald**, Surgeon R.N., at Belle Vue House, Exeter, on April 17.

**Hensman, Thomas**, M.R.C.S.E., L.A.S., at 26, Canning-street, Liverpool, on the 27th ult., aged 58.

**Johnstone, J. M.**, M.D., at Larkhall-place, Bath, on April 18.

**Laity, John**, M.R.C.S., at Marazion, Cornwall, on April 8, aged 39.

**Macbeth, William**, Surgeon Her Majesty's 105th Regiment, at Fort William, on February 11.

**West, Thomas**, M.D., at Newnham House, near Daventry, Northamptonshire, on April 21, aged 70.

**Yule, John Alexander**, at sea, on board the *Euxine*, on his passage home from China, on April 10.

## POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

### RESIGNATIONS.

*Isle of Thanet Union.*—Mr. G. P. Phillips has resigned the Minster District; area 15,797; population 3479; salary £25 per annum. Also the Workhouse; salary £120 per annum.

*Ongar Union.*—Mr. James Shilleto has resigned the Workhouse; salary £40 per annum.

*Weymouth Union.*—Mr. W. P. Brodribb has resigned the Portland District; area 3555; population 8468; salary £35 per annum.

*Worksop Union.*—The Blyth District is vacant; area 7072; population 1660; salary £20 per annum.

### APPOINTMENTS.

*Barnsley Union.*—Peter D. Muir, M.D. University of Edinburgh, to the Wombwell District.

*Bradford (Yorks) Union.*—John Foster, M.R.C.S.E., L.S.A., to the Horton East District.

*Camberwell Parish.*—Edward Pinder, L.R.C.P. Edin., M.R.C.S. Edin., L.S.A., to the Camberwell District. John C. Roberts, L.R.C.P. Edin., M.R.C.S.E., to the South Peckham District.

*Chailey Union.*—Lewis Smythe, Graduate in Medicine University of Glasg., F. and M.R.C.S. Eng., L.S.A., to the Fifth District.

*Chertsey Union.*—George John Sealy, M.D. St. And., M.R.C.S. Eng., L.S.A., to the Weybridge District.

*Cockermouth Union.*—William P. Murphy, M.R.C.S. Ire., L.S.A., to the Second Cockermouth District.

*Kington Union.*—William Langston, M.R.C.S.E., L.S.A., to the Pembridge District.

*Newport (Monmouth) Union.*—William James, M.R.C.S.E., L.S.A., to the Western District and the Workhouse.

*St. Austell Union.*—Samuel Mason, L.F.P. and S. Glasg., M.R.C.S.E., L.S.A., to the St. Blasey District.

*Weobley Union.*—William H. Kerbrey, M.R.C.S.E., L.S.A., to the Dilwyn District.

RECOGNITION OF MEDICAL SERVICES BY THE FRENCH GOVERNMENT.—The *Moniteur* contains a list of 300 medals granted by his Majesty to those of the Medical Profession who proved during the late visitation of cholera their zeal and devotedness in the care of the sick.

THE BRITISH MUSEUM.—The accounts of the British Museum have been laid before Parliament as usual. Professor Owen reports the acquisition of 30,402 specimens in the departments of natural history; room has been made for the exhibition of a selection from them, but the bulk have been stored for exhibition and scientific applications when the required space may be obtained. Mr. Gray reports the acquisition of specimens which serve to show the changes that take place in the gradual development of the growth of species of animals, while some illustrate the slight differences which exist between allied species that belong to closely connected localities, thus exhibiting to students the variations that occur under these circumstances, which is a question of much interest and much discussion at present.

EYE WARDS AT ST. BARTHOLOMEW'S HOSPITAL, CHATHAM, WITH OUT-PATIENT DEPARTMENT FOR THE SPECIAL TREATMENT OF EYE CASES.—We understand that the trustees of St. Bartholomew's Hospital have determined upon establishing an Ophthalmic Hospital in connection with that institution, and that Mr. Woolcott, the oculist, founder and late Surgeon of the Kent County Ophthalmic Hospital at Maidstone, has been solicited to act as the Consulting-Surgeon. The workmen employed in Her Majesty's dockyards at Chatham and Sheerness will receive this intelligence with welcome, as accidents to the eye of a serious nature and of very frequent occurrence, have happened since the building of ironclad ships in the dockyard.

CHOLERA ON BOARD AN EMIGRANT SHIP.—Letters from Halifax state that cholera broke out among the German emigrants on board the *England* during her passage from Liverpool. She left the Mersey on the 28th of March and Queenstown on the 29th, and she had then over 1000 passengers, of whom 400 were Germans, on board. On the fifth day after leaving Queenstown cholera appeared among the steerage passengers, and raged with great virulence despite the efforts of two doctors, who were fortunately on board. By the time the *England* put into Halifax the deaths were 46; and in two days after her arrival they had increased to 140. On the 11th of April, when letters left, there were 25 deaths per day. The whole of the deaths were among the steerage passengers and the crew; among the latter there were five deaths. The authorities at Halifax took prompt measures to alleviate the condition of the sufferers, and at the same time to prevent the spread of the disease. The Admiral sent down the hulk *Pyramus* as Hospital ship, and the governor 80 tents, in which the healthy survivors were encamped on Macnab's Island.

DISCOVERY OF A MAMMOTH.—At the last sitting of the Academy of Sciences a letter was received from M. de Baer, of St. Petersburg, announcing that a mammoth, still covered with its skin and hair, had been discovered in the frozen soil of Arctic Siberia. This discovery had been made in 1864 by a Samoyede in the environs of Taz Bay, the eastern branch of the Gulf of Obi. The news only reached St. Petersburg towards the end of 1865; but as the bodies of large animals will keep a long while in those regions, if they are not completely uncovered, and as this mammoth was still enclosed in the frozen soil, the Academy of St. Petersburg has, with the aid of the Russian Government, sent M. Schmidt, a distinguished palæontologist, to examine the animal and its position in the locality. It is hoped M. Schmidt will arrive before the decomposition is too far advanced, and that a correct notion may be obtained of the outer appearance of the animal, and also, from the contents of the stomach, of its natural food. The pre-historical figure of the mammoth drawn on a piece of ivory, found in a cavern of Périgord by M. Lartet, will then admit of verification.

THE GREAT PRIZE IN ELECTRICITY.—The French Government has issued an invitation to the *savants* of all nations to compete for the prize of 50,000 frs. which will be decreed five years hence to the author who shall have discovered the means of rendering Volta's pile economically applicable to manufactures as a source of heat, to illumination, to chemistry, mechanics, or practical Medicine. The *concours* will remain open for five years, dating from April 18, 1866.

BLISTERING IN CHRONIC GONORRHŒA.—M. Tarneau, a French Army Surgeon, states that he has employed this means with success in two cases, one dating two years and the other six. Of six cases of 50 days' duration, four were cured; and of eleven cases, which had reached from the thirtieth to the thirty-fifth day, the application of the blister was successful in nine, it requiring to be applied a second time in one of these. The blister, two centimetres in width, is applied along the course of the urethra, and in none of the cases has it been attended with other than slight inconveniences, ischuria or strangury never having occurred. The means seems to be more efficacious in proportion to the length of time the affection has lasted, and is well worthy of notice.—*Receuil de Med. Mil.*, March.

THE MORTALITY AT HONG-KONG.—Colonel Sargent has suggested to the Committee now examining into the causes of last year's mortality at Hong-Kong, the employment of floating barracks for the troops on that station. He proposes that the obsolete men-of-war now lying in ordinary at our naval stations should be utilised for the purpose. On the subject of his proposal a contributor to the *Times* writes:—"Imagine a large and crowded city (Hong-Kong), hemmed in between a harbour and a steep mountain, with sea vapours, land vapours, and town vapours steaming up all day, left in the shade for an hour or two before sunset every evening. It is the very arrangement for malaria on the largest possible scale. The rich merchants, and all who can afford it, drive round the mountain and spend the evening and the night on the sunny side. We presume that our soldiers cannot do this, and that it would not be possible to perch them up over the town, though even that would not take them out of the deadly shadow. But whatever the dilemma, the difficulties, and the cost, we cannot afford to lose a regiment there once in three years. It appears from Colonel Sargent's letter that even the best barracks that can be built are not safe under the circumstances. So there is really much to be said for his suggestion of floating barracks, and we hope it will be well considered."

HYDROPHOBIA.—A girl residing at Neuville-les-Dames, France, has just died from hydrophobia. She had never been bitten by any dog, but had often played with one which was killed three weeks since in a rabid state, and had allowed the animal to lick her face when she had a small sore on her lip. —*Guardian.*

THE following are the last week's Cattle Plague Returns.

| Census Divisions. | 1. Attacked. | | | 2. Result of reported Cases from the Commencement of the disease. | | | | |
|---|---|---|---|---|---|---|---|---|
| | Week ending April 14. | Week ending April 7. | Week ending March 31. | Attacked. | Killed. | Died. | Recovered. | Unaccounted for. |
| 1. Metropolitan Police District . . | 23 | 63 | 92 | 7946 | 3478 | 3523 | 346 | 599 |
| 2. South Eastern Co. . | 4 | 6 | 8 | 5060 | 1618 | 2786 | 446 | 210 |
| 3. South Midland Co. | 344 | 396 | 526 | 18204 | 6394 | 9895 | 1548 | 367 |
| 4. Eastern Counties . | 127 | 126 | 217 | 10611 | 4672 | 4771 | 767 | 401 |
| 5. South Western Co. | 2 | 18 | 42 | 1660 | 589 | 795 | 207 | 69 |
| 6. West Midland Co. . | 132 | 444 | 513 | 12257 | 3866 | 6239 | 1365 | 787 |
| 7. North Midland Co. | 510 | 511 | 537 | 14591 | 6779 | 6054 | 1087 | 671 |
| 8. North Western Co. | 921 | 890 | 880 | 56957 | 11909 | 34014 | 6151 | 4883 |
| 9. Yorkshire . . | 324 | 338 | 534 | 33041 | 6195 | 18267 | 5814 | 2765 |
| 10. Northern Counties. | 34 | 280 | 281 | 7090 | 3938 | 2491 | 941 | 120 |
| 11. Monmouthshire & Wales . . | 101 | 126 | 122 | 7965 | 598 | 5974 | 1084 | 309 |
| 12. Scotland . . | 60 | 154 | 204 | 46214 | 5935 | 27067 | 10679 | 2513 |
| | 2582 | 3361 | 3956 | 221996 | 55971 | 121896 | 30435 | 13694 |

*Note.*—43 Inspectors who reported cases last week have not reported in time for this return—viz., for the county of Cambridge, 1; Cornwall, 1; Cumberland, 3; Lancaster, 1; Lincoln, 5; Middlesex (extra Metropolitan), 2; Northampton, 1; Oxford, 1; Stafford, 2; Worcester, 2; Yorkshire, 5; "The Metropolis," 1; and Scotland, 18. These Inspectors returned 790 cases last week.

CINCHONA CULTIVATION IN INDIA.—From a report sent in to Government by Mr. McIvor, the superintendent of

Government cinchona plantations on the Neilgherries, we learn that the number of plants planted out during the month of January remains the same as in last month—viz., 244,871. The increase by propagation is 42,894, being 11,082 under the average of the last six months, making the total number of plants at the end of the month 984,143. The average growth of eleven plants of *Cinchona Succirubra* planted out by his Excellency the Governor and other gentlemen at Neddivuttum on August 30, 1862, during the month is $\frac{8}{11}$th of an inch, or $\frac{8}{11}$th of an inch under the growth of last month. One of the two plants cut down on March 20, 1863, for the bark submitted to Mr. Howard for analysis, has made strong shoots of 82½ inches in height, giving the growth of half an inch during the month. The twelve plants of *Cinchona Officinalis* (a shrubby species), on the Dodabetta plantation, gives an average growth of 2¾ inches, or ¼ of an inch under that of last month. The total number of plants issued to the public during the month is eight, making the total distributed 83,684. —*Homeward Mail.*

EVERY aspirant to Surgical honours is sure to be told early in his course by some kind friend or other that to be a good Surgeon a man must have a lion's heart and a lady's hand. Well—he looks down at a hand of anything but feminine proportion, and looks back to his sensations at the first operation he witnessed; and he is apt to conclude that he has chosen the wrong path in life. By-and-by, he finds that by constant practice in the use of instruments his fingers have acquired a new delicacy and flexibility; and he finds too, that as the source of the lion's courage lies in consciousness of strength, so the moral courage and firmness typified by the lion's heart may come to him as sure results of better knowledge and training, and self-reliance. Uncertainty and ignorance can hardly produce anything but cowardice or rashness; true courage is associated with judgment and reflection.—*Introductory Address at St. Thomas's Hospital, October 2, 1865, by William M. Ord, M.B. Lond.*

# NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Dr. Smyth's interesting case shall be inserted, if possible.

*Dr. Fearnside, Preston.*—We shall be very glad to be favoured with Dr. Fearnside's other papers.

*Dr. Grindlay.*—Mr. Clement, F.R.C.S., and Dr. Brady, are both Members of Parliament. Dr. Michell has not been a Member for some years.

*E. B.*—A capital and complete account of the alleged preservative virtues of belladonna against scarlatina is to be found in the *British and Foreign Medico-Chirurgical Review* for June, 1855.

*A Provincial Fellow.*—The annual dinner of the Fellows takes place on the day of election, at the Albion Tavern. Mr. Wormald, the President of the College, will take the chair on the next occasion. Write to Mr. Hulme, of Gower-street, the Honorary Secretary.

*To Correspondents.*—We are requested by the Secretary of the Anthropological Society to correct a misstatement contained in a paragraph on Mr. Laing's discoveries in the mounds at Caithness, which we inserted last week from the *Pall-mall Gazette.* It was at the Anthropological, and not at the Ethnological Society, as asserted by our contemporary, that doubt was first thrown on the accuracy of Mr. Laing's deductions. The Anthropological Society were the first to circulate Mr. Laing's statements, which they published. They were also the first to call in question his conclusions.

*A Surgeon, Liverpool.*—The late Dr. Scott, of Southsea, and Messrs. Cock and Arnott performed the operation of Œsophagotomy; the first two gentlemen with success.

*A Successful Student.*—The admirable dissections to which you allude and on which you were examined, were prepared by Dr. Pettigrew, the Assistant Conservator of the Museum.

*Christ's Hospital.*—Perhaps the following are the lines to which you refer:

"Jerusalem's curse is not fulfilled in me,
For here a Stone upon a Stone you see."

*A Young Member.*—Generally speaking, it is not wise to sign a document without first reading it. The following is the declaration to which you have bound yourself:—"I, John Jones, of Timbuctoo, do solemnly and sincerely declare that, while a member of the Royal College of Surgeons of England, I will observe the byelaws thereof; that I will obey every lawful summons issued by order of the Council of the said College, having no reasonable excuse to the contrary: that I will demean myself honourably in the practice of my Profession, and to the utmost of my power maintain the dignity and welfare of the College." The document is signed in the presence of a College official, and preserved amongst the archives of the Institution

*Wm. Farrer, Esq.*—The gentleman alluded to by Sidney Smith left behind him £100,000, with the following laconic account of how he had acquired the fortune by different diseases:—"Aurum catharticum, £20,000; aurum diureticum, £10,000; aurum podagrosum, £30,000; aurum apoplecticum, £20,000; and aurum senile et nervosum, £20,000."

We observe that a new edition of Mr. Cecil Austin's "Cattle Diseases Prevention Act, 1866," has lately been published by Nicholls, of Frederick-street.

*Vaccination Bill.*—Copy of a letter addressed to the Vice-President of the Privy Council by the Board of Works, Holborn District:—

"Sanitary Department, Little Gray's-inn-lane, E.C.,
April 13, 1866.

"The Right Honourable H. A. Bruce, Esq., M.P.

"Sir,—I am directed by the Board of Works for the Holborn District to submit for your consideration the expediency of expunging from the Vaccination Bill now before Parliament that portion which enacts a compulsory registration of all successful vaccinations.

"This registration, necessarily incomplete, has now been carried out for twelve years without, as far as this Board has been able to learn, ever having been applied to any useful purpose, whether public or private. It entails additional labour and trouble on the parent and vaccinator, and expense upon the ratepayers.

"The great objection to it is that it acts as a discouragement to vaccination, not only by the trouble it gives, but because the poor and uneducated have an aversion to be registered for any purpose. For this reason, as this Board has twice represented to the Home Secretary, a large percentage of the births in this district go unregistered.

"The Board considers such registration to be unnecessary—

"1st. Because, as far as the public vaccinators are concerned, a complete return of all operations, whether successful or unsuccessful, is made week by week to the Board of Guardians.

"2nd. Because, as a matter of fact, such register in this district has never been referred to. The Board are informed that Medical examiners of recruits for the army, navy, militia, public and charity schools, insurance companies, etc., never search any other register for evidence of vaccination than the arm of the examined, where, if successful, it is always indelibly registered.

"There are grounds also for believing that it is unnecessary for carrying out compulsory vaccination and other purposes of State hygiene.

"The Board are of opinion that one certificate, either of successful vaccination or of insusceptibility of the operation, should in every case be given by the vaccinator to the parent or guardian of the child.

"I am directed to furnish you with any further information in my possession that you may desire to have on this very important subject.

"I am, Sir, your most obedient servant,
"SEPTIMUS GIBBON, M.D., Medical Officer of Health."

### REGISTRATION OF VACCINATION.

The following is part of a letter from Mr. Felce, read by Dr. Richardson at the late Vaccination Meeting:—

"A more adequate remuneration to the public vaccinator would do much to improve the present unsatisfactory state of affairs; but so long as the cases of successful vaccination are only partially registered, any Vaccination Act must prove a failure. We all know how efficiently the registration of births and deaths is carried out, and I would, therefore, append to this more closely than is now done a system of registration of vaccination. Whenever the birth of a child is registered let a notice be given to the parent or guardian that he or she must, within a certain time, register the vaccination of the said child with the same functionary who has registered its birth; in short, make the production within a given period of a certificate from a registered Practitioner compulsory, not the actual operation. This would simplify the whole matter, and instead of the present cumbrous, complex, and, therefore, inefficient machinery, we might have an Act simple in its details, and ensuring a correctly-kept register, which could always be open to proper officials, whose duty it should be to prosecute and enforce a penalty in all cases neglecting to comply with the regulation, and this, I take it, would soon be but rarely necessary, for I believe that the 'registration of vaccination' would soon cease to be considered more of a hardship than the compulsory 'registration of a birth, death, or marriage.'"

### ICE IN CHOLERA.

A correspondent of the *Englishman* gives an account of the successful treatment of a case of cholera, apparently in an advanced stage, by the application of ice to the spine, as recommended by Dr. Chapman. The writer says:—"On Sunday, the 25th February, about 10·30 a.m., my servants requested me to go and see a man who they said was dying of cholera, and to give him some medicine. I proceeded to the place, where I found a man lying on the ground in the greatest agony, with the usual symptoms of cholera,—vomiting, etc.; he was much emaciated, and to me appeared to be rapidly sinking. I had no medicine in the house. I ordered one of my servants to go round among the neighbours and try and get some medicine, but in this I was unsuccessful. I recollected, however, having read in the *Times* a letter in which the writer advocated the use of a bag of ice down the spine. Feeling that if I did no good, I could, under the circumstances of the case, do no harm, I made up my mind to try whether ice would do any good. I now proceed to give you an account of what I did, and as to what the results were. 10.30 a.m., the man, a Mussulman, a hackery-wallah, arrived with his own and other hackeries from Calcutta. He had been for two or more hours purging and vomiting violently; voice scarcely audible; pulse imperceptible; hands, arms, legs, and feet quite cold. He was throwing his legs about and twisting his body in great agony; he complained much of thirst. I gave him water with a little carbonate of soda in it. He appeared to be sinking fast. 11 a.m., I procured some ice from a neighbour. Having no gutta percha bag, I took the leg of a pair of flannel trousers and made a long bag to reach from between the shoulder-blades to the bottom of the spine, of a width of three inches; into this I put broken ice and applied it on the spine. After I had applied the ice, the purging and vomiting ceased, and by 11.20 the spasms were much diminished. 11.30.—The patient was much easier. On questioning him, he said in a very low voice that he felt easier. A little before 12, I found that his pulse was perceptibly stronger, and that his arms and legs, which were previously as cold as stones, began to be slightly warm. The flannel in which the ice was put was now saturated with water, and as the cold was to be a dry, not a wet cold, one of my natives suggested the use of a bottle, on which I got a preserved fruit bottle, into which I put the ice, and had the bottle held against the spine. 12.30.—No more vomiting, etc.; the arms and legs getting warmer. No pain, very great thirst; I let the man drink as much as he liked. From this time until 1.30 p.m., I kept the bottle of ice on his back; when finding that his hands, arms, legs, and body were becoming hot as if he had a fever, I removed the bottle of ice, and as I was about to leave my house for tiffin with a neighbour, I told my khansamah if fever came on, to put in the place of the ice bottle a bottle of hot water. 4.30.—I returned to the man. He was fast asleep, and a more deadly object I never saw. At 5.30 he awoke and asked for food. I gave him some thick conjee with sugar and brandy. 7.30 a.m., Monday, the 26th.—The man is sitting up; convalescent, but weak. He wants to take his bullocks and hackery away. The above are the facts of the case."—*Homeward Mail.*

### MERCURIAL FUMIGATION.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Is there really any such great superiority in mercurial fumigation over inunction? To me the former appears a very laborious and tedious method of inducing the specific action of mercury. Why cannot the Surgeons of such Hospitals as the Lock be a little more logical? Would it not be a very easy matter to select, we will say fifty cases, as nearly as possible of the same type of disease, and treat half by inunction and half by fumigation, and then compare the results? I am young at present in the Profession, and from having been kept "at my books" till I was twenty-three, I was inclined, when I then commenced Medical studies, to attend too much to book work. I have since found out, by my short term of practice, how much more easy and efficacious it is to gain knowledge by experiment, or, which is the same thing, by experience. What splendid opportunities of knowledge have Hospital Practitioners!

I am, &c.,

M.B.AUG.

### THE PURITY OF THE ATMOSPHERE.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Will you permit me, through your columns, to inquire whether any of your readers has ever repeated, or heard of having been repeated by others, and with what results, the experiments for determining, by means of a standard solution of permanganate of potash, the amount of organic or oxidisable impurities present in various atmospheres, which, on the sole authority of Dr. Angus Smith, have been so generally accepted as reliable, and so frequently quoted by writers on sanitary subjects?

I am, &c.,

London, April 24. AIR-TEST.

COMMUNICATIONS have been received from—

Dr. SMYTH; J. TOYNBEE; WESTERN MEDICAL SOCIETY; Dr. G. JOHNSON; Dr. T. B. MORIARTY; W. B. WILLIAMS; APOTHECARIES' HALL; CHARLES HUTTON; SPENCER WATSON; GRAVE AND GAY; WESTERN MEDICAL AND SURGICAL SOCIETY; Dr. FEARNSIDE; J. S. BRAZIER; M.B.AUG.; Mr. J. BURTON; J. B. CURGENVEN; R. B. CARTER; Mr. WOOLCOTT; Mr. SPENCER WELLS; Dr. BENCE JONES; Mr. J. LEINTON; Mr. J. CHATTO; Mr. F. H. MARSH; Dr. KENNION; Dr. HUGHLINGS JACKSON; Dr. B. W. RICHARDSON; Dr. MURRAY; Mr. C. WILLIAMS.

BOOKS RECEIVED—

Houghton's Threefold Nature of Health and Disease.—Symon's Outline Sketch of Rainfall Investigations.—The Fifteenth Annual Report of the Wilts County Asylum.—Morehead's Notes on the Treatment of Cholera.—The Australian Medical Journal (February).—Handyside's Observations on Arrested Twin Development.—The New York Medical Journal (March).—Beraud's Atlas of Surgical Anatomy.—Report on the Cattle Plague up to March 20, 1866.—The New York Medical Record.

NEWSPAPERS RECEIVED—

The London Mirror—The Sunday Gazette.

## VITAL STATISTICS OF LONDON.

*Week ending Saturday, April 21, 1866.*

### BIRTHS.

Births of Boys, 1161; Girls, 1083; Total, 2244.
Average of 10 corresponding weeks, 1856-65, 1903·2.

### DEATHS.

| | Males. | Females. | Total. |
|---|---|---|---|
| Deaths during the week .. .. .. | 814 | 703 | 1517 |
| Average of the ten years 1856-65 .. .. | 637·1 | 614·9 | 1252·0 |
| Average corrected to increased population.. | .. | .. | 1377 |
| Deaths of people above 90 .. .. .. | .. | .. | .. |

### DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

| | Population, 1861. | Small pox. | Measles. | Scarlatina. | Diphtheria. | Whooping-cough. | Typhus. | Diarrhœa. |
|---|---|---|---|---|---|---|---|---|
| West .. | 463,388 | 1 | 16 | 4 | 3 | 9 | 5 | 1 |
| North .. | 618,210 | 10 | 9 | 6 | — | 16 | 21 | 5 |
| Central .. | 378,058 | — | 7 | 2 | — | 15 | 5 | 1 |
| East .. | 571,158 | 7 | 10 | 11 | 1 | 17 | 9 | 4 |
| South .. | 773,175 | 6 | 8 | 4 | 3 | 27 | 8 | 5 |
| Total .. | 2,803,989 | 24 | 50 | 27 | 7 | 84 | 48 | 16 |

### METEOROLOGY.

*From Observations at the Greenwich Observatory.*

| | |
|---|---|
| Mean height of barometer .. .. .. .. .. .. .. | 29·844 in. |
| Mean temperature .. .. .. .. .. .. .. | 50·8 |
| Highest point of thermometer .. .. .. .. .. | 66·4 |
| Lowest point of thermometer .. .. .. .. .. | 38·9 |
| Mean dew-point temperature .. .. .. .. .. | 42·6 |
| General direction of wind .. .. .. .. .. .. | S.W. & W.S.W. |
| Whole amount of rain in the week .. .. .. .. | 0·36 |

### BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, April 21, 1866, in the following large Towns:—

| Boroughs, etc. | Estimated Population in middle of the Year 1866. | Persons to an Acre. (1866.) | Births Registered during the week ending April 21. | Deaths. | | Temperature of Air (Fahr.) | | | Rain Fall. | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Corrected Average Weekly Number.* | Registered during the week ending April 21. | Highest during the Week. | Lowest during the Week. | Weekly Mean of the Mean Daily Values. | In Inches. | In Tons per Acre. |
| London (Metropolis) | 3067536 | 39·3 | 2244 | 1400 | 1517 | 66·4 | 38·9 | 50·8 | 0·36 | 36 |
| Bristol (City) . . | 163680 | 34·9 | 125 | 73 | ‡85 | 60·9 | 40·8 | 49·9 | 0·06 | 6 |
| Birmingham (Boro') | 335798 | 42·9 | 251 | 163 | 182 | 60·8 | 41·2 | 50·4 | 0·09 | 9 |
| Liverpool (Borough) | 484337 | 94·8 | 387 | 281 | 332 | 55·8 | 41·5 | 50·5 | 0·27 | 27 |
| Manchester (City) . | 358855 | 80·0 | 271 | 203 | ‡247 | 63·5 | 35·0 | 49·7 | 0·14 | 14 |
| Salford (Borough) . | 112904 | 21·8 | 97 | 57 | 75 | 60·0 | 36·0 | 48·8 | 0·19 | 19 |
| Sheffield (Borough) . | 218257 | 9·6 | 191 | 115 | 124 | 60·5 | 37·5 | 47·9 | 0·17 | 17 |
| Leeds (Borough) . | 228187 | 10·6 | 189 | 116 | 145 | 62·3 | 33·6 | 49·7 | 0·07 | 7 |
| Hull (Borough) . | 105233 | 29·5 | 80 | 49 | 49 | .. | .. | .. | .. | .. |
| Nwcastl-on-Tyne, do. | 122277 | 22·9 | 84 | 65 | 67 | 57·0 | 37·0 | 47·7 | 0·22 | 22 |
| Edinburgh (City) . | 175128 | 39·6 | 124 | 84 | 83 | 58·7 | 36·0 | 46·3 | 0·60 | 61 |
| Glasgow (City) . . | 432265 | 85·4 | 373 | 252 | 299 | 57·0 | 37·2 | 47·1 | 0·93 | 94 |
| Dublin (City and some suburbs) . | 318437 | 32·7 | 190 | †156 | 198 | 60·5 | 39·2 | 50·1 | 0·52 | 53 |
| Total of 13 large Towns . . . | 6122894 | 34·4 | 4606 | 3014 | 3403 | 66·4 | 33·0 | 49·1 | 0·30 | 30 |
| | | | | | Week ending April 21. | Week ending April 21. | | § | | |
| Vienna (City) . . | (1863)<br>560000 | .. | .. | .. | .. | .. | .. | .. | .. | .. |

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·844 in. The barometrical reading decreased from 30·13 in. on Sunday to 29·62 in. on Thursday.

The general direction of the wind was S.W. and W.S.W.

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* The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.

† Registration did not commence in Ireland till January 1, 1864; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in that city were the same as the averages of the rates in the other towns.

‡ The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

§ The mean temperature at Greenwich during the same week was 47·8°.

## APPOINTMENTS FOR THE WEEK.

### *April 28. Saturday (this day).*

*Operations* at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free Hospital, 1½ p.m.

ROYAL INSTITUTION, 3 p.m. G. Scharf, Esq., "On National Portraits."

### 30. *Monday.*

*Operations* at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.

MEDICAL SOCIETY OF LONDON, 8 p.m. Clinical Discussion. Cases by the President, Dr. Leared, Dr. Tilbury Fox, and Mr. Walter J. Coulson.

### *May* 1. *Tuesday.*

*Operations* at Guy's, 1 p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; St. Peter's Hospital for Stone, 3 p.m.

ANTHROPOLOGICAL SOCIETY OF LONDON, 8 p.m. Meeting.

PATHOLOGICAL SOCIETY, 8 p.m. Meeting.

ROYAL INSTITUTION, 2 p.m. Annual Meeting.

### 2. *Wednesday.*

*Operations* at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.

HUNTERIAN SOCIETY (Council, 7½ p.m.), 8 p.m. Dr. R. Bennett, "On Certain Derangements of the Nervous System occasioned by Shock, especially in Reference to Railway Accidents."

OBSTETRICAL SOCIETY OF LONDON (Special Council, 7½ p.m.), 8 p.m. Dr. Thomas Radford, "Cases of Lacerations of the Uterus, with Remarks." Mr. Robert Ellis, "Anæsthesia by Mixed Vapours."

### 3. *Thursday.*

*Operations* at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.

HARVEIAN SOCIETY OF LONDON, 8 p.m. Mr. Berkeley Hill, "On a Case of Empyemia, with Fistulous Openings, Cured by Repeated Evacuations of the Pus." Mr. Haynes Walton, "On Detachments of the Retina, their Causes and Treatment, with Specimens."

ROYAL INSTITUTION, 3 p.m. Professor Huxley, "On the Methods and Results of Ethnology."

### 4. *Friday.*

*Operations.* Westminster Ophthalmic, 1½ p.m.

MEDICAL SOCIETY OF LONDON, 8 p.m. Meeting.

ROYAL INSTITUTION, 8 p.m. Professor Abel, F.R.S., "On Substitutes for Gunpowder."

## EXPECTED OPERATIONS.

St. Peter's Hospital for Stone and Urinary Diseases—The following Operations will be performed on Tuesday at three o'clock:—
By Mr. Armstrong Todd—For Recto-vesical Fistula.

# ORIGINAL LECTURES.

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NOTES ON

# SOME OF THE MORE RARE FORMS OF FRACTURES AND DISLOCATIONS,

BEING EXTRACTS FROM LECTURES (CLINICAL AND OTHERWISE)
DELIVERED AT
The London Hospital.

By JONATHAN HUTCHINSON, F.R.C.S.,
Surgeon to the Hospital and Lecturer on Surgery.

(Continued from page 411.)

*Detachments of Part of the Lower Epiphysis of Humerus or Fractures of Condyles—Detachment of Lower Epiphyses of Humerus—Case of Union in Malposition: Restoration of Free Motion in Six Months—Detachment of Lower Epiphysis of Humerus treated as a Dislocation: State of Things Two Months Afterwards.*

I HAVE already mentioned an example of a compound injury in which the line of fracture passed almost exactly through the epiphysal line by which the three separate points of ossification at the lower end of the humerus are joined to the shaft. Detachments of the whole or of a part of this lower epiphysis of the humerus are very frequent in practice. The common accident known as fracture of the internal condyle is, when it occurs in children, as it most often does, usually a detachment of the inner epiphysis. I have a few notes to make respecting this accident. It is to be recognised by the circumstance that the inner condyle appears deficient, does not project sufficiently, and on further examination you find that there is a little portion of bone displaced in front of the inner part of the joint, and that this is moveable. In adults the displacement is rarely so great as in children, and in them crepitus can often be produced, whilst in the latter this sign is usually wanting. I believe that the displacement, if there be any, is always forwards and towards the middle line, so that the breadth of the bone is diminished. It is, of course, caused by the muscles attached to the condyle (the pronators and flexors), which have no antagonist behind. A month or two after the accident you almost invariably find a solid lump of bone fixed in front of the joint, and somewhat impeding its motions. At the end of six months this inconvenient projection has much diminished in size; indeed, if the patient be a child, the bone may have become so moulded that all trace of the injury excepting a slight loss of width in the condyle has disappeared. Now, looking at the character of the displacement, what ought to be the position of the arm in which this fracture ought to be treated? Usually, I believe, an angular splint is employed, but clearly a state of extreme flexion would be that most likely to restore the detached condyle to its place. The forearm should be pronated and the elbow bent to the utmost. In this position the offending muscles would become useful as pads by which the fragment would be pushed back towards its proper position. The position described may be obtained either by fastening (with plaster) the patient's forearm in such a position that he could apply the palm of his hand to the side of his neck (same side), or that his palm would lie flat on the upper part of his sternum. The latter is the more comfortable, but the less effectual.

*Detachment of Lower Epiphyses of Humerus.*—We will pass now to that class of cases in which the detachment involves the whole of the lower epiphysis. I think I have seen about half a dozen recent examples of this form of injury, and at least twice as many old ones in which advice was sought in consequence of the awkward deformity which often follows it. It is by no means a frequent accident, and I have never had an opportunity for dissecting a specimen, nor have I ever seen a specimen in a museum. Yet the symptoms in recent cases are so marked that there can be little room for mistake. This group of cases presents three very interesting points for our investigation:—1. The symptoms produced; 2. The treatment which ought to be adopted; and 3. The results to be expected.

The symptoms of a transverse detachment of the lower end of the humerus at the epiphysal line are like those of a dislocation at the elbow backwards. There is conspicuous deformity; the end of the elbow projects backwards; the tendon of the triceps is prominent and curved; the forearm looks shortened. You make your diagnosis by ascertaining the relation of the tips of the condyles (external and internal) to the olecranon and head of radius respectively. Bear in mind that this epiphysis is very short, and that the lower fragment will be scarcely high enough to reach the upper edge of the greater sigmoid notch. Still, however, the symptom which I have pointed out, the relative position of the internal condyle and olecranon will be a definite one. In addition to this sign, you will find that there is very free mobility; that the elbow can be easily pushed a full inch further backwards; and that when it is so the lower corners of the upper fragment project in front, and the inner one even threatens to perforate. By first reducing the deformity by extension, you may usually elicit some kind of crepitus. In addition to the displacement of the lower fragment backwards, I believe it is usually somewhat rotated; and in the cases which I have seen the rotation has always been inwards, so as to leave the inner extremity of the lower fragment prominent beneath the skin. I have never seen an instance of displacement forwards. Three times I have examined the relation of parts after this accident immediately after the injury, and before any swelling had occurred to conceal them. In one of these, a boy of 10 fell from a horse just in front of the Hospital, and was carried straight into the receiving-room, where I chanced to be at the time. As the deformity was very characteristic, we took him over to the College, and the stereoscopic photograph which I now show you was taken within twenty minutes of the accident. So rapid, however, was the swelling, that the points had already been much masked. You can still, however, by the exercise of a little faith recognise in the photograph the prominences of the inner and outer angles of the upper fragment as they project forwards and press against the skin. The projection of the olecranon backwards is very evident. It looks, indeed, like an ill-marked dislocation backwards. When I first saw the arm there was a deep rounded hollow or dimple in front just over the tendon of the biceps, caused probably by adhesions of the skin to the deep fascia below. This was obliterated very quickly by swelling. Three-quarters of an hour after the accident all the points of bone were buried in the effusion which had occurred; yet the injury had been by indirect violence, and there was no contusion of the parts nor any extravasation of blood. No doubt the rapidity and extent of the swelling were in part to be explained by the fact that in this injury the synovial membrane of the joint is torn.

The two other cases to which I have referred presented symptoms so precisely similar to the above that I need not describe them. One of them occurred only about a month ago, and I was able then to demonstrate its features to you.

In attempting to reduce the displacement in these cases you will find that the action of the triceps upon the olecranon, dragging the forearm and lower fragment of the humerus together backwards is the chief hindrance. Thus, what French Surgeons call a *movement en totalité* is effected, leaving the lower end of the shaft of the humerus prominent in front. Your first idea as to position would probably be to relax the offending muscle by extending the arm. No worse practice could possibly be adopted. Remember that in all positions of the forearm the relations of the ulna to the lower or epiphysal fragment will remain the same, or nearly so, this fragment being maintained by the muscles arising from the tips of the condyles in a position of flexion—*i.e.*, at right angles with the axis of the ulna. Now, if you put the elbow straight it follows that the lower and upper fragments must be at right angles to each other, and as there will probably be some shortening, the broken surface of the lower fragment (*i.e.*, its upper surface) will be in apposition with the posterior surface of the lower end of the shaft. Should union occur in this position, the patient will be unable to flex his arm beyond a very limited extent. I think, then, that in these accidents we ought to flex the elbow as much as the patient can bear, and keep it so, avoiding by all means any approach to the straight position. This rule applies to fractures just above the elbow, and to detachments of the epiphysis (see page 410). It applies with especial force to fractures, for in the case of separation of epiphyses, as the patients are young, there is always much more to be hoped in the way of subsequent moulding of the growing bone, even if it may in the first instance have united in bad position.

That the arguments used are more than mere theory the frequent results of practice fully prove. We every now and then meet with examples of injury near to the elbow in young persons, after which permanent inability to flex the elbow, with a simulation of some of the symptoms of an unreduced dislocation backwards, has resulted. The inability to flex is always the chief inconvenience, and it may, I think, be certainly obviated by keeping the limb bent in the first instance. I fully admit that it is difficult, if not impossible, to effect accurate coaptation of the fragments. There is almost certain to be some overlapping, but still the bent position is the best one.

Every one must have seen instances in proof of the assertion that the growing bones of children, although united with much displacement, will gradually become so moulded that their natural form is restored. I will quote but one example out of several which I have seen, in which very disagreeable deformity at the elbow, resulting from these injuries, was subsequently almost wholly remedied.

*Case of Union in Malposition—Restoration of Free Motion in Six Months.*

In October, 1863, Mr. Rea Corbet, of Stanford-le-Hope, brought to the Hospital for Mr. Curling's opinion a boy, aged 11, who had sustained an injury to his elbow seven weeks before. It had been treated (not by Mr. Corbet) in a position between extension and a right angle, and was now almost straight, and with but little motion. Different opinions had been given as to the nature of the accident. Mr. Curling kindly asked me to examine the case, and I think we quite agreed that it was in all probability an instance of union in bad position, after detachment of the epiphysis. The symptoms were well characterised. It was agreed not to employ forcible extension, but to use an angular splint and passive motion, and trust to time for a re-modelling of the deformed extremity of the bone. Six months later Mr. Corbet reported that the motions of the joint were almost perfect.

I have already remarked that this accident simulates at first sight a dislocation backwards, and no doubt a certain number of cases are treated as such. Of this the following case appears to be a definite example. Possibly if the mistake were more frequently made, and the cases all treated as dislocations ought to be, and usually are, in the flexed position, the average results would be at least as good as they now are. Splints are by no means essential, and often inconvenient.

*Detachment of Lower Epiphysis of Humerus treated as a Dislocation.— State of things two months afterwards.*—In August, 1862, a young gentleman, 8 years old, was brought to me from the country, his parents being anxious respecting a certain amount of deformity and stiffness which remained after a so-called "dislocation of the elbow." The accident had occurred two months before, and the Surgeon under whose care the boy had been had considered it a dislocation merely. It had been "reduced" and kept bandaged, in a sling, but without splints.

The joint was now wholly free from swelling, and the outlines of the bones could be easily felt. A certain degree of deformity was evident to the eye, the outer condyle projecting too much. The irregular margin of the detached epiphysis at this part was easily felt. The lower extremity of the shaft was a little too forward, and there had also been some lateral displacement of it inwards. There was a certain amount of thickening at the place of union, but not very great. Supination and pronation were perfect, but extension and flexion, although possible through a considerable range, were not nearly normal.

It is interesting as an instance of union in good position obtained without the use of splints.

(To be continued.)

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PATHOLOGICAL SOCIETY OF DUBLIN.—The concluding meeting of this Society for the session took place on Saturday the 21st ult., when the gold medal for an essay on diseases of the kidneys was awarded to Mr. Gerald Yeo. The President, Dr. M'Dowel, in presenting the medal to Mr. Yeo, complimented him very highly on the great ability displayed in his essay, which, he said, evinced not only extensive knowledge of the literature of the subject, but the results of diligent and accurate clinical study.

THE LATE MRS. CARLYLE.—This lady was the daughter of Dr. Welsh, of Haddington, who practised Medicine in that town up to the year of his death, 1819. At her funeral, one of the pall-bearers was her late father's partner, Dr. Thomas Howden. She lies by the side of her father in the centre of the ruined choir of the old cathedral of Haddington, known as the *Lucerna Loudoniensis*, or Lamp of Lothian.

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# THE PHYSICAL AND CHEMICAL CHANGES IN LIVING BEINGS FROM A MEDICAL AND PHYSIOLOGICAL POINT OF VIEW.

By Dr. LIONEL BEALE, F.R.S.,

Fellow of the Royal College of Physicians, Professor of Physiology and of General and Morbid Anatomy in King's College, London, and Physician to King's College Hospital.

## ON OXIDATION.

OXYGEN is often spoken of as being a life-giving substance and necessary to *life*, and this view is generally entertained without question, for when one of the higher animals is deprived of oxygen its death results almost instantly. But are there not living beings which not only live in the absence of oxygen, but are destroyed by its presence (Pasteur)? Do not many living things live, at least, for a long time deprived of oxygen? And can it be affirmed that all the matter that lives in a man or a higher animal is dependent for its life upon a supply of oxygen? How, then, can oxygen be a life-giving substance or necessary to life in all cases, or how can life be the result of the action of oxygen? Before affirming that oxygen is a life giver and that life is the result of oxidation, ought we not to try to ascertain what effect oxygen really does exert upon living matter and living beings?

Let us consider how oxygen acts upon the simple anatomical element or cell, which consists of germinal or *living* matter and *lifeless* or formed material.

First, as regards the influence of oxygen upon mere cell growth and multiplication. It is a well-known fact that cell growth proceeds most rapidly in parts which, so far from being most freely supplied with blood rich in oxygen, derive their nutrition from blood which is of a dark colour, charged with carbonic acid, and which circulates very slowly. Consider the state of things in a pneumonic lung when cell multiplication is taking place with marvellous rapidity. What millions of masses of living matter are produced in the air cells of the lung in the course of a few hours, and this notwithstanding the blood is almost at a standstill or quite stagnant. Little, indeed, must be the proportion of oxygen transmitted to these rapidly growing cells under the conditions present. Or look at what is going on in a common boil or in an abscess. How rapidly cell multiplication is proceeding. The living matter of the tissue increases to a great extent. It divides and sub-divides rapidly. Much of the old tissue is taken up and converted into living matter, and yet is it not obvious that the oxygenating process must be terribly reduced or altogether at a standstill? Or look at the rapidly growing cancer, with its small supply of arterial blood. Or take an ordinary gland like the liver, which consists almost entirely of cells which grow and multiply, and appropriate materials of blood which has already been deprived of much of its oxygen. Or notice the rapid cell multiplication which takes place at an early period of development, before vessels are formed, and when but little oxygen can penetrate into the substance of the developing mass, compared with the amount introduced at a later period. Even during the remainder of the intra-uterine life how little oxygen is introduced into the blood of the fœtal vessels compared to the quantity that might be introduced if this gas were required in considerable proportion for the development of the tissues. Or remark the rapid growth of vegetable textures associated with the absence of any arrangement for the absorption and free distribution of oxygen.

I might adduce many other examples demonstrating the same fact, that rapid cell growth and multiplication may occur under conditions actually unfavourable to the introduction of a large supply of oxygen. In truth, in those cases in which *vital* processes are taking place with the greatest activity, we find a small, not a large, supply of oxygen. By the *greatest activity of the vital processes* I mean to imply simply that a greater quantity of lifeless matter becomes living matter in a given time. Many Physicians and some physiologists, however, maintain, oddly enough, that the highest state of vital activity is when little change of this kind takes place, and they seem to think that the tissues of a man exhibit a greater degree of vital activity than those of a child or of a fœtus; and the normal, slow-changing tissues, a higher degree of vital activity than the rapidly-growing cancer. In fact, they make slow change, not rapid change, synonymous with a high degree of vital activity. An old organism must, therefore, exhibit a higher degree of vitality than a young one, and according to this view the old, hard, dead, and, perhaps, slowly-decaying cell-wall, than the new, soft matter within which is undergoing the most active change.

Oxygen, then, cannot be a life-giving substance. It is not a stimulus to life, nor does it combine with matter that is alive, neither is it an *excitant* of vital phenomena. Vital phenomena are manifested although little oxygen is present, and certain living beings may increase—pass through the various phases of their existence—without any oxygen at all. Oxygen is not a substance actively concerned in supporting life. It performs a very secondary part. It seems to be mainly concerned in facilitating the removal of the products resulting from death. As we shall see, it plays a highly important part in the changes of the higher organisms, but not as a direct supporter of life. It converts the substances resulting from death into materials that can be rapidly removed, so that there may be no impediment to the access of the inanimate pabulum to the living matter. Oxygen promotes the removal of old material, that new material may be readily transmitted to the living matter, and so supply the place of that which dies. Oxygen acts upon dead, not upon living matter. It is the dead material upon the outer part of cells that become oxidised, not the germinal matter within.

The quantity of oxygen is therefore a measure *not of the vital activity*, but of the *decay taking place*. The quantity of oxygen required is a measure of the work resulting from the chemical change in lifeless tissue, but has little or nothing directly to do with the development and building up of new tissue to supply the place of that which is removed. The dead red blood corpuscles are oxidised, not the living white ones. The white ones grow and multiply most rapidly, to a less extent in the rapidly moving and highly oxygenated arterial blood, than in those places where the rate of flow is not active, as in the portal venous blood, and wherever the circulation is slow and the blood almost stationary.

On the contrary, the free supply of oxygen often causes germinal matter which is growing abnormally fast to increase more slowly. It actually *reduces the rate of vital changes*, and in doing so promotes the return of an organism in which the vital changes have been abnormally active, to the healthy condition in which these changes are far more slowly carried on. The most perfect state of health is not that in which vital change is most active,—or the state of things when an abscess is being formed would be a higher condition of health than when the textures are in their normal condition. Have we not found by experience that in such states of system as the scrofulous, which are characterised by the too abundant growth and multiplication of germinal matter, and the too rapid formation of a soft, and not lasting, imperfectly-formed tissue, oxidation is the real remedy to check this *morbid increased vital activity?* Nay, is it not probable that cod-liver oil, and other remedies found useful in this large and important class of diseases, facilitates the process of oxidation by supplying carbon and hydrogen, which may combine with some of the nitrogen of the too-abundantly formed nitrogenous constituents, and thus aid in the formation of a greater amount of readily oxidisable compounds than was possible before, and in this way prevent the too rapid development of evanescent tissue, which must soon run into decay, and the too free multiplication of cells which interferes with the more slow process of the formation of normal and more lasting tissue?

(To be continued.)

THE COMING SUMMER.—The hot weather set in so intensely last week that most of us no doubt anticipate a lovely but oppressive summer. Dr. Hjaltalin predicts for us rather the contrary. He observes that in his own country the mean temperature has been five degrees below the usual mean of winter; this must almost necessarily be followed by a tremendous northern icedrift, the effect of which will be felt by England amongst other countries. The Atlantic will receive the drifting ice blocks, which will melt, and be the occasion of much rain and hail, accompanied by a fall in the mean heat of the coming summer.

A CASE OF SPONTANEOUS TETANUS AT NEWTON, IN DEVONSHIRE.—A lad of about 12 years of age, the son of Captain Wakeham, has just died from lockjaw, which came on spontaneously. This is a very unusual circumstance, as tetanus is almost always the result of some injury. The lad was attended by Dr. Gillard and Dr. Deake.—*Western Mercury.*

## ORIGINAL COMMUNICATIONS.

# THE COLLAPSE OF CHOLERA COMPARED AND CONTRASTED WITH OTHER FORMS OF COLLAPSE.

By GEORGE JOHNSON, M.D., F.R.C.P.,
Physician to King's College Hospital, Professor of Medicine in King's College.

THERE are certain morbid phenomena which, occurring in different cases, appear on a superficial view to be identical or very similar, but which are found on more minute examination and analysis to be essentially different in their nature and origin. For instance, that collection of symptoms which we designate *coma* may sometimes be caused by a narcotic poison in the blood. In another case coma may be a result of general plethora and congestion or inflammation of the brain, while in yet another case it may be a consequence of anæmia and a defective blood supply to the brain; and again, in a fourth class of cases, direct pressure on the brain by a piece of broken bone or by a clot of blood may be the cause of coma. In each of these classes of cases it is manifest that the success of treatment depends upon the recognition of the cause of the coma. The treatment which would be curative in one form of coma might be fatally mischievous in another.

The causes of *collapse* are as various and as opposite as the causes of coma, and the practical importance of a correct pathological interpretation of each class of cases can scarcely be over-estimated.

1. Collapse may be the result of loss of blood or of such blood constituents as are drained away by excessive purging.
2. It may be a result of what is commonly called "nervous shock." The sources of nervous shock are very various; as examples I may mention great terror or other painful mental emotion, violent mechanical injury, such as the crushing of a limb, a blow on the epigastrium, the agonising abdominal pain that immediately follows perforation of the stomach or bowel and the consequent escape of the contents into the cavity of the peritoneum, the pain and peritonitis consequent on strangulated hernia, etc.
3. Collapse may result from the operation of certain poisons which paralyse the heart, as, for instance, the upas Antiar poison of Java.
4. Lastly, we have the collapse of cholera.

I purpose now to indicate the main points of agreement and of difference between these various forms of collapse. There is one point of agreement between them all, one condition which is common to them all, and it is this: the circulation of the blood is so retarded or enfeebled that there is a defective blood supply to the various tissues and organs of the body. The cause of this defective circulation is different in each class of cases.

1. When collapse is a result of hæmorrhage or of excessive purging there is an absolute deficiency of blood in the vessels, and with this there is probably some weakness of the heart consequent upon a defective blood supply to its nutrient vessels.
2. When collapse is a result simply of nervous shock there is no deficiency of blood in the vessels, but there is a defective movement of blood, occasioned by an enfeebled condition of the muscular walls of the heart, consequent on the influence of shock transmitted through the nerves of that organ.
3. Again, when collapse is a result of the paralysing influence of a poison on the heart, the enfeebled and defective blood current is a consequence of the diminished contractile power in the heart's walls.
4. Lastly, we have choleraic collapse, in which again there is a defective circulation of blood; but before I describe the cause of this it may be well to point to certain facts which appear to indicate an essential difference between this form of collapse and the other three classes of cases. In all cases of collapse there is more or less coldness of the surface of the body, while the pulse is reduced in volume and in force; but whereas in all other forms of collapse there is great *pallor* of the surface in consequence of a defective supply of blood to the minute vessels, in the collapse of cholera the surface is more or less *blue* in consequence of defective respiration and an accumulation of blood in the veins. This appearance of the body during life is found to correspond with a very

remarkable anatomical condition discoverable after death, and always found after death which has occurred during the stage of choleraic collapse. The left cavities of the heart are found to be nearly or quite empty, while the right cavities, the venæ cavæ, and the pulmonary artery are filled and even distended with blood. If this were all, there would be nothing to distinguish the post-mortem appearances in choleraic collapse from those which are found in many cases of pulmonary disease, or in cases of ordinary asphyxia; but a yet more remarkable condition remains to be noticed, and it is this,—the tissue of the lung is more or less pale, dry, and anæmic. In consequence of the small quantity of blood in the minute vessels, the collapse of the lung when the chest is opened is so complete that nearly all the air is expelled from the cells, so that the lungs are non-crepitant, and appear almost like those of fœtus, while the weight of the two lungs has been found to be on an average as much as seventeen ounces less than the average weight of healthy lungs (Parkes on "Cholera," p. 13). Here we have a combination of appearances such as is found after death from no other form of disease,—appearances which show in the most unmistakeable manner that during the stage of collapse the great bulk of the blood which is sent from the right side of the heart is arrested in the branches of the pulmonary artery before it has reached the capillaries of the lung: and in this most remarkable condition of the lung and heart we have the explanation of the impeded circulation and the defective blood current during the collapse stage of cholera. The defective blood current in cholera is not mainly a consequence of loss of blood or of blood constituents, as in cases of hæmorrhage or excessive purging, neither is it due to diminished contractile power of the heart consequent on nervous shock or the paralysing operation of a poison, but it is a direct result of a partial arrest of blood in the pulmonary vessels, and a corresponding small supply to the left cavities of the heart and the arteries.(a) We have conclusive proof that the floodgates have been closed at a particular point of the blood-stream in the fact that there is an accumulation of blood behind the point of obstruction, and a deficiency in those parts of the circulatory system which lie beyond the impediment. It is scarcely necessary to remark that no such anatomical evidence of an abrupt arrest of blood is found after death from the other forms of collapse to which allusion has before been made—namely, collapse from hæmorrhage or excessive purging(b), from nervous shock, or from poisons which tend to paralyse the heart. Can we explain this remarkable arrest of blood in the collapse stage of cholera? I believe that we can. We know that the admixture of certain foreign bodies with the blood will cause an arrest in the lungs and sudden death. Thus the accidental admission of atmospheric air into the veins during the performance of Surgical operations in the axilla or root of the neck has occasionally been followed by speedy collapse and sudden death. The mixture of blood with a large quantity of air is retarded and arrested in the pulmonary vessels. Mr. Erichsen found, by experiments performed on a dog recently killed, that blood mixed with air required nearly twice the pressure to drive it through the pulmonary vessels that would suffice to drive unmixed blood through the lung. (*Edinburgh Medical and Surgical Journal*, vol. lxi.) Again, Blake and others have found that solutions of certain salts, when injected into the veins of a dog, speedily destroy life by arresting the blood in the minute vessels of the lungs. A solution of sulphate of soda or of nitrate of silver acts in this manner; and after death the left cavities of the heart are found nearly or quite empty, while the right cavities and the pulmonary artery are distended. (Blake's experiments are recorded in the *Edinburgh Medical and Surgical Journal*, vols. liii., liv., and lvi.) These experiments show that certain irritants introduced into the veins cause an arrest of blood in the lungs similar to that which has been proved to occur in cholera. Now, there is a large amount of evidence to show that the phenomena of cholera are the result of the presence of a morbid poison in the blood—indeed, the existence of a morbid poison as the essential cause of the disease is very generally admitted. There is evidence, too, that this poison acts as a strong irritant upon the muscular tissues, both voluntary and involuntary, in the very painful cramps and spasms which affect the limbs and the intestines. The most probable explanation of the arrest of blood in the lungs during the collapse of cholera is, that the morbid blood acts as an irritant upon the muscular walls of the minute pulmonary arteries, causing them to contract upon their contents, so as to retard and even to arrest the flow of blood through the lungs.(c)

Let us here carefully distinguish between fact and theory. The arrest of blood is a demonstrated anatomical fact. It is a fact, too, that this arrest occurs, not in the capillaries, but in the minute arteries. It is a fact that these arteries have muscular walls, and that they have the power of contracting under the influence of various stimuli. It is a fact that the contraction of a minute artery retards and lessens and even arrests the stream of blood. It appears to me, then, that short of an actual demonstration, which is here impossible, the various facts to which reference has been made, afford as complete a proof as can be given that the immediate cause of the arrest of blood in the lungs is the contraction of the minute arteries upon their morbid contents. But it may be asked, and has been asked, why does the arrest occur in the pulmonary arteries only?—why not in the systemic arteries also? In answer to this it is to be observed that the two sets of vessels have very different endowments in accordance with their different functions. The pulmonary artery readily transmits black venous blood, while the systemic arteries offer great resistance to the passage of black blood. This is abundantly proved, not only by Dr. John Reid's well-known experiments, but also by the daily observation of cases of cardiac and pulmonary disease. Then Blake found that certain inorganic salts injected into the veins of dogs are retarded in one set of vessels, and not in the other. We have, therefore, no difficulty in conceiving that a morbid poison, such as that of cholera, might cause a great impediment in the pulmonary vessels, and little, if any, in the systemic vessels. I am not prepared to say that there is no direct impediment in the systemic vessels during choleraic collapse; but that the obstruction is chiefly in the pulmonary vessels is manifest both from the symptoms during life and from the appearances after death.

The theory of the arrest of blood in the lungs by arterial spasm receives strong support from the remarkable temporary effect of the hot saline injections into the veins. Since the year 1832 it has been well known that all the symptoms of choleraic collapse may be removed in the course of a few minutes by this operation. Unfortunately the *modus operandi* of the proceeding was misinterpreted. The relief was supposed to be mainly due to the addition of liquid to the blood, and so it was believed to establish the truth of the theory that collapse is a result of loss of water. Now it is as nearly certain as anything of this kind can be, that the liquid of the injection acts chiefly as a vehicle of *heat*; that the heat relaxes the spasm of the minute pulmonary vessels; the blood then moves freely onwards to the left side of the heart and into the systemic arteries, the circulation is restored, and thus the state of collapse is for the time removed. Dr. Mackintosh, who injected no fewer than 156 patients, stated that "the good effects of the injection were rapid in proportion to the heat of the solution," and the temperature of the injection which he employed varied from 106° to 120°; while Dr. Parkes (*op. cit.*, p. 219), who injected only a tepid solution, appears to have obtained much less striking results than Dr. Mackintosh got from his hot injections. It appears, therefore, in the highest degree probable that the real action of the saline injections is that which I have suggested. That the symptoms of collapse should for a time be so completely removed by this simple proceeding affords proof conclusive, if such proof were needed, that choleraic collapse is not the result of "nervous shock," as some pathologists have imagined. It is not to be supposed that in any form of collapse from nervous shock the injection of a hot liquid into the blood would immediately restore the power of the heart and effect that wonderful improvement in the patient's condition which had so often resulted from this operation in the collapse of cholera.

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(a) It seems not unlikely that during the stage of collapse the contractile power of the heart must be somewhat diminished in consequence of the small stream of blood which reaches its muscular tissue through the coronary arteries, so long as the arrest in the lungs continues.

(b) In giving the above explanation of the collapse of cholera, we do not shut our eyes to the fact that excessive purging may alone cause feebleness of pulse, coldness of the surface, and other symptoms of exhaustion, which may even be fatal; but these symptoms, as we have shown, are essentially different from those which are characteristic of choleraic collapse.

(c) Dr. John Paterson, in a recent number of the *Medical Times and Gazette* (April 14), objects to the theory of a blood poison as the essential cause of cholera; that it is inconsistent with the perfect integrity of the cerebral functions which is so commonly observed in cholera. I would remind Dr. Paterson that there are many undoubted morbid poisons which have no direct action on the brain, and that most morbid poisons, although they enter the blood, appear to have special affinities for certain tissues and organs, while they leave others intact. Thus the poison of measles specially affects the skin and the mucous membrane of the air passages; that of scarlatina, the skin, the fauces, and the kidneys; that of cholera, the mucous membrane of the stomach and intestines, the muscles, which are painfully cramped; and, lastly, in severe cases, the pulmonary blood-vessels, which are perilously contracted.

And here it may be well to remark, that the essential difference between choleraic collapse and all other forms of collapse is shown most convincingly in the different and even opposite effects of the same treatment in the different classes of cases. Thus alcoholic stimulants, while they are beneficial in all other forms of collapse, usually aggravate the symptoms of choleraic collapse, and the probable reason is, that in ordinary cases of collapse, the alcohol passing freely through the lungs stimulates the left ventricle, and thus assists the circulation, while in the collapse of cholera it is arrested in the lungs and adds to the distension of the right cavities of the heart.

Venesection, again, which would be fatally exhausting in other forms of collapse, when practised during the collapse of cholera, has in numberless instances been attended with great and immediate relief—the pulse increasing in power and volume while the blood has been flowing from the veins: the only rational explanation of this result being, that by lessening the over-distension of the right cavities of the heart, it increases their contractile power.(d) Without doubt the main reason why the practice of venesection in the treatment of cholera has of late been so entirely discontinued is, that such a practice is seen to be utterly inconsistent with the commonly received theory that the collapse of cholera is the result of excessive purging. It is not uncommon to meet with believers in this theory of collapse who will absolutely deny the possibility of any sufferer from cholera ever having been benefited by venesection. Yet the writings of the earlier Indian Practitioners abound in the most striking illustrations of immediate and permanent relief from this treatment. Here is the testimony of one of the ablest of these men ("Treatise on Cholera Asphyxia, or Epidemic Cholera," by G. H. Bell, 1831):—"In no situation has the Physician more reason to be proud of his art than when, in the course of a few minutes, a patient, from the agonies of cholera and from the pains of death, is placed in safety, and not only restored to sensation of health, but to one of positive bliss. A very common expression on such an occasion is, 'Oh, sir, I am in heaven.' The effect of blood-letting would, indeed, sometimes appear almost miraculous. A patient will be brought in on a cot, unable to move a limb, and, but that he can speak and breathe, having the character, both to touch and sight, of a corpse; yet will he, by free venesection alone, be rendered, in the course of half an hour, able to walk home with his friends." There is only one mode in which those who advocate the theory of collapse from loss of blood-constituents can consistently deal with such evidence as this—they can only take refuge in incredulity. This they do; but the facts remain, and refuse to be ignored.

Opium, which is especially useful in many cases of collapse from nervous shock, has a deadly influence upon cases of choleraic collapse. It prevents or retards the natural cure by vomiting and purging, it favours the accumulation of the morbid poison in the blood, and thus adds to the fatal obstruction of the pulmonary circulation.

In conclusion, I have only to observe that all the most striking symptoms of choleraic collapse receive their explanation from the arrest of blood in the lungs, and the consequent small supply to the systemic arteries. So simple and complete is the explanation thus afforded of the chief physical and chemical phenomena of the disease, and the influence of various modes of treatment, that it can scarcely be doubted that in this anatomical fact—this arrest of blood in the minute branches of the pulmonary artery—we have the true key to the pathology of cholera.

## THE CASE OF CHOLERA IMPORTED FROM ROTTERDAM TO BRISTOL.

By DAVID DAVIES, M.R.C.S., &c.

Henry T., aged 20, seaman, a native of Bristol, sailed from Java last December, arrived at Rotterdam on April 14; left that place for London by steamer early on Sunday morning, April 22; arrived in London at 8½ a.m. on Monday, the 23rd, and immediately left London by train for Bristol. He was quite well when he left London. About 11 a.m., when in the train, he was taken with violent diarrhœa and vomiting, but the latter symptom was not prominent. A lady in the same compartment gave him some brandy. He reached his friends' house about 4 p.m.; he came under my notice about 5 p.m.; his symptoms then were extreme prostration; a small, thready, quick pulse; cold extremities; forehead and face covered with a cold, clammy perspiration; violent pain from spasmodic contractions of the abdominal, gastrocnemii, and other muscles. The eyes were sunken; the intellect collected and perfect, with an air of indifference about the serious nature of his illness. The evacuations had been of the rice water character, but when I saw him the fluids of the body were nearly drained. He had not been drinking to excess—had not taken more than a glass of porter and a glass of brandy and water. I pronounced the case at once to be one of Asiatic cholera. His treatment was warm applications to the feet and abdomen, rice water gruel freely in small quantities, and the following draught immediately, and to be repeated according to circumstances:—℞. Æther sulph., ♏xx.; spt. ammon. arom., ʒj.; tr. cardamom., co., ʒj.; tr. opii, ♏x.; mist. camph. ad., ℥jss. This with the warm applications, relieved the spasms of the muscles, and it was not administered more than three times. He was apparently better; the attendants exhausted with their attention to him fell asleep, and when they awoke he was dead, having been ill about eighteen hours. His death must have occurred a little after 4 o'clock on Tuesday morning. I believe the diarrhœa stopped from the exhaustion of the supply of fluid in the body. The belly was collapsed, and the intestines evidently with hardly any fluid or air in them. When I first saw him there was but a slight oozing of watery fluid from the rectum. If any remarks should be made by any one against the treatment pursued, I beg to state at once I am not going to defend it, as I have yet to learn the treatment of "cholera in a state of collapse."

Being diffident in applying the term "Asiatic" to an isolated case without being supported by another, I laid the history of the case before a very able pathologist and high authority on epidemic diseases, Dr. William Budd, who visited the house and examined the corpse with me. He unhesitatingly expressed his opinion that it was a case of "Asiatic" cholera. At this time I was not aware there was any cholera at Rotterdam. On the 24th I wrote to apprise the Registrar-General of the case, who communicated it to the Privy Council. On the 25th His Worship the Mayor of this city received a communication from the Privy Council, apprising him of the existence of cholera at Rotterdam. This was dated April 23, so my letter must have crossed that communication in the post.

The following were the means adopted for preventing the spread of the disease:—The linen soaked with the discharges was buried; the closet, which has a good eject, washed down and flushed, and afterwards disinfected with a quantity of chloride of lime; the house permeated with free chlorine gas. The body was put in a coffin, covered with sawdust, and screwed down. I am sorry it was not buried until Thursday, the 26th ult. The inmates of the house were requested to be careful in their diet, but to live rather more generously than usual. As the house is isolated and nearly surrounded with water, I am sanguine there will be no offspring from this case.

This was not a Bristol case, but evidently one imported here from Rotterdam to die shortly after its arrival. So it must not be considered as in the least reflecting on our sanitary condition.

This morning (April 29) I visited the Rotterdam steamboat the *Balmoral*, which reached here last evening. I was told by one of the men that the disease prevails extensively at Rotterdam; that vessels in the harbour pump water from the river for drinking purposes. I am not acquainted with Rotterdam; but if the above statement be correct, it is no wonder that sailors visiting that port should contract the disease.

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(d) One of Blake's experiments affords very interesting confirmation of this doctrine (*Edin. Med. and Surg. Journ.*, vol. lvi., p. 120). He had ascertained by repeated experiments that a solution of a salt of soda injected into the vein of a dog caused death in a few seconds—usually in less than a minute—by arresting the circulation through the lungs, and he had found that when the distended and motionless right cavities of the heart were punctured immediately after death, the escape of a portion of their contents usually led to a renewal of the heart's contractions. He, therefore, performed the following experiment, with a view to ascertain the influence which venesection might have in prolonging life in these circumstances:—"The animal (a dog) was prepared by exposing the two jugular veins. A solution, containing three drachms of nitrate of soda, was injected into the venous system—a quantity more than sufficient to arrest the passage of the blood through the lungs. A few seconds after the injection, violent opisthotonos came on. This was instantly relieved by dividing both the external jugular veins—congestion in the brain being thus prevented. The animal lost a great deal of blood, but notwithstanding this it survived the experiment two hours. The respiration continued regular; there were no convulsions; in fact, the animal seemed to be suffering only from loss of blood, the presence of so large quantity of soda in the blood being, apparently, in no way injurious, except by its action on the lungs. At the end of two hours, the animal died asphyxiated, owing to the air cells becoming filled with frothy serum."

I shall add a few words about the treatment of the premonitory stage of cholera. In 1849 I saw some hundreds of cases of cholera and choleraic diarrhœa. I have no theory to oppose, support, or to offer. My experience was this: In collapsed cholera under any treatment two-thirds of the patients will die, and one-third will recover. I have seen administered large and small doses of calomel, etc., with the same result; but I consider choleraic diarrhœa as amenable to treatment as the ordinary summer diarrhœa of this country with astringents, opiates, etc. Every case of choleraic diarrhœa in 1849 in which I administered castor oil or any other purgative died. My rule at last was, when a person was subject to choleraic atmosphere, to keep the bowels quiet at any other risk. When cholera had broken out in the workhouse of this city at Stapleton in 1849, I volunteered with Mr. Stock and Mr. Joseph Williams to enter the house and attend the patients. On the first day after our arrival 21 corpses were taken out of the house; on the third day my much lamented colleague and that brave man, Joseph Williams, fell a victim to the disease. The epidemic was running rapidly through the house, containing about 800 paupers, and was gaining upon us until we hit on the happy expedient of having all the inmates drawn up in a line three times a day—viz., 10 a.m., 2 p.m., and 5 p.m. Those who had been twice to the closet before 10 had a dose of chalk mixture with ten drops of laudanum; at 2 another dose if necessary, and the same at 5 p.m. In this way we soon got the disease under. I found that either from apathy or ignorance the inmates would not inform us of diarrhœa until too late unless they were closely questioned and the closets watched. Should any remarks be made adverse to this view, I have neither time nor inclination to dispute about it. Let every one examine for himself and form his own opinion.

With regard to the sanitary state of this city, I consider that on the whole we are well prepared to meet the anticipated epidemic. Our main drainage is good and efficient. Under the Board of Health, with the assistance of four very able Nuisance Inspectors, the Medical Inspector has done all in his power to remedy the evils in our courts and alleys. The Board of Health have been trying to do away with all privies in common, and they do not allow, where practicable, more than two houses to use the same privy. They have paved at the public expense — or the landlords', where possible — hundreds of courts and lanes; they have required all privies to have good ejects, to be well cemented, and of certain dimensions. I send you a copy of their requirements, drawn up by their surveyor. They have endeavoured to remove all pigs and other nuisances out of the city.

I do not mean to say that they have fully succeeded, or that the sanitary condition is as good as could be desired. They have to combat at one time the filthy habits of many of the poor, the poverty of many of the landlords, who are but a step above paupers, and above all the evils connected with the geographical arrangements of an ancient city, once a fortified one, which has not passed through a "fire of London."

Our water supply is good—that is, we have a private company, which is prepared to supply any amount of good water from the Mendip Hills in Somersetshire; but I am sorry to say many of the landlords of poor tenements refuse to take it in, and there is no power to compel them. In many of the courts here the poor have only excessively hard water, in every case contaminated with organic matter. Should cholera enter these courts the inhabitants will suffer severely in spite of all other good arrangements. The chief magistrate of the city and the Common Council, as well represented at the Board of Health, are alive to the danger which threatens the United Kingdom, and in my opinion Bristol is as well prepared for the coming ordeal as any place in England. Time will show whether I am right or wrong.

At present the powers of officers of health are too feeble to do all that is required, but it is in the power of the Government to amend this deficiency.

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PARAFFIN.—Two sisters and a brother, named Thompson, residing in Finsbury, were severely burnt on Friday by the bursting of a paraffin lamp.

# REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

## DERBYSHIRE GENERAL INFIRMARY.

### LIGATURE OF THE EXTERNAL ILIAC ARTERY FOR INGUINAL ANEURISM—RECOVERY.

(Under the care of J. WRIGHT BAKER, Esq., Surgeon to the Infirmary.)
[Reported by W. G. CURGENVEN, Esq., House-Surgeon.]

THIS case, in which an abscess communicated with the femoral artery so that a false aneurism was formed, is a very important one. It brings to mind an affection which, while it is so rare that it may easily be left out of consideration when a diagnosis is being formed, is one which it is most important to recognise at once, for if the condition of things is misunderstood, the Surgeon will probably either do that which is very likely to cost the patient his life—open a large aneurism which he has taken to be an abscess, or he will leave undone that by which recovery might, perhaps, have been secured—the ligature of the artery above the seat of disease. There are now a sufficient number of cases on record to prove that large arteries are occasionally opened by ulceration of their coats where they lie in contact with an abscess. Mr. Liston first called especial attention to this fact in a paper(a) in which he related the particulars of his well-known case in which he opened a cyst communicating with the internal carotid, believing it to be an abscess, and in which he was obliged, in consequence of the gush of blood that followed the puncture, to tie the common carotid. In this paper and its appendix are given several instances in which large arteries communicated with abscesses. Mr. Busk has recorded an instance(b) in which an abscess opened the arch of the aorta.

In the Museum of St. Bartholomew's(c) is a specimen which shows an opening between the arch of the aorta and a mediastinal abscess. Mr. Crowfoot gives a case(d) in which a tuberculous abscess in the lung perforated the wall of the pulmonary artery.

Other examples of the same occurrence might doubtless be readily found.(e) The published cases, of which the subjoined is typical, are strikingly like each other in many of their features. They have been met with in children or young adults, in whom common aneurism is extremely rare. The average age in ten cases was eighteen, and in five the patients were under twelve. The abscess has generally been acute and of an unhealthy character, and with which we may suppose ulceration was very likely to be associated—in many instances strumous, in some following scarlet fever. The diagnosis has often been very obscure. In some cases it is distinctly stated that no bruit could be detected (in the present case it will be noticed that the bruit, although distinct at one period, became inaudible afterwards), and in several there has been no pulsation.(f) The condition is attended with extreme peril to the patient: the collection of blood usually increases very rapidly, so that rupture of the cyst soon occurs. When this event has taken place, or when the Surgeon has inadvertently made a puncture, large and quickly repeated hæmorrhages have carried off the patient in a few hours, or at the longest in a very few days. Death occurred in almost all the cases in which the aneurismal sac was opened either by bursting or by puncture. In some instances recovery followed ligature of the artery above the diseased part, as in Mr. Baker's case.

Charles H., aged 24, an iron turner, was admitted into the Derbyshire General Infirmary on June 15, 1865, with an aneurism over the left common femoral artery.

He states that three months previous to his admission he was suffering from an abscess in the left groin, for which he could not account, as he had never had gonorrhœa or syphilis.

The abscess attained a large size, and was opened by a Medical man, pus escaping freely, and with it a small quantity of blood. A month subsequently to this, he suddenly felt pain at the upper and inner side of the thigh, and after some little time noticed a small swelling, which was situated over the region of the femoral artery a little below Poupart's ligament. The swelling increased in size, and he poulticed it, thinking that another abscess was forming. Mr. Baker was now summoned to attend him, and, finding that he was suffering from an aneurism, advised his immediate removal to the Infirmary.

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(a) Med. Chir. *Trans.*, 1842.

(b). Med. Chir. *Trans.*, vol. xxix., p. 297.

(c) Series xiii., 122.

(d) Med. Chir. *Trans.*, xxvi., 154.

(e) See Mr. Symes's "Contrib. to Path. and Pract. of Surgery," 1848, p. 263.

(f) See Holmes's "System of Surgery" (vol. iii., p. 358), as to the absence of bruit and pulsation in aneurism.

On admission, there was a firm, pulsating tumour extending from Poupart's ligament downwards for about four inches, the vertical axis corresponding with the position of the femoral artery. Transversely the extent measured seven inches. The circumference of the thigh over the most prominent part of the tumour measured twenty-one inches and a-half, as compared with sixteen inches on the sound limb. The integument over the tumour was very tense and slightly reddened; at one point it was of a deep purple hue, and seemed inclined to burst. He suffered severe pain at times of a sharp lancinating character down the whole length of the limb, with dull, heavy aching in the knee. There was no œdema of the limb. The bruit, which was distinctly heard by Mr. Baker shortly before his admission, was now no longer audible. At the upper border of the tumour was a sinus, through which a small quantity of dark sanious fluid escaped. This the patient stated was the point where the incision had been made into the abscess three months previously. His countenance was very pale. Pulse 130, feeble. No heart or lung affection, or any disease of arteries or veins.

June 17.—As the case was one requiring immediate attention, and pressure could not be borne on the vessel above the aneurism, Mr. Baker, after a consultation with his colleagues, Mr. Fearn and Mr. Dolman, proceeded at once to tie the external iliac artery. The patient having previously had his bowels opened by an enema, and chloroform having been administered, an incision about four inches long was made half an inch above and parallel with the outer half of Poupart's ligament. The abdominal muscles and transversalis fascia were cautiously divided, the peritoneum was pushed upward, and the artery felt beating at the bottom of the wound. The sheath of the vessel was then scratched through, the aneurism needle passed around the artery from within outwards, and the vessel tied. Little hæmorrhage occurred during the operation. The wound was brought together by sutures, and a firm pad of lint applied. He was removed to bed and the limb enveloped in cotton wool.

18th.—Passed a good night after taking an anodyne. Complains a little of pain of a stitchy character in the left iliac region. The limb is warm and comfortable. The measurement of the thigh over the aneurismal tumour has decreased by an inch and a-half. Pulse 130.

20th.—Complains of flatulence and a feeling of heaviness at the epigastrium. No tenderness anywhere in the neighbourhood of the wound. Skin hot; pulse 136; tongue furred.

22nd.—Going on favourably. Pulse 120. Bowels open. Both limbs of the same temperature. Circumference of the limb over the tumour now measures 18½ inches. Dark sanious fluid still continues to ooze from the sinus at the upper border of the tumour.

July 2.—The integument over the most prominent part of the tumour, which was of a purple hue, has burst, and a dark sanious fluid escapes through a small opening. On making some slight pressure on the tumour, blood escapes, both from the opening above mentioned and from the sinus at its upper border, showing that they each communicate with the aneurismal sac.

8th.—The ligature has come away (twenty-one days after the operation). The sac of the aneurism is now almost empty, and the sinus above appears to be closing. The wound caused by the operation has healed everywhere, except at the situation of the ligature.

August 5.—The patient expressing a wish to go out, left the Infirmary to-day. He was directed to return and show himself occasionally to Mr. Baker.

September 28.—The patient presented himself at the Infirmary to-day. He is much improved in health. The limb is warm and comfortable, and he states that he can walk with ease about two miles daily. He suffers a little pain in the knee if he walks too much. All the sinuses have closed. There is no difference now in the circumference of the two thighs. No pulsation can be felt either in the popliteal or posterior tibial arteries, but the collateral circulation is thoroughly established.

January 4, 1866.—The patient again presented himself at the Infirmary. All trace of the sac has now disappeared. He enjoys excellent health, and has pursued his work since September.

*Remarks.*—The aneurism in this case occurred at an unusually early age, and it was evidently connected with the abscess in the groin. Though the origin of this abscess is uncertain, it seems quite clear that it began independently of the aneurism. The patient denied having suffered from gonorrhœa or syphilis. It was probably, therefore, a strumous abscess, and considering its large size, was acute. If that were so, the cause of the aneurism would be similar to that by which the internal carotoid artery is sometimes opened, when suppuration has taken place in the tonsil or deeper cervical glands. The coats of the vessel being in close contact with the abscess, become ulcerated and give way, and the blood filling the cavity converts the abscess into an aneurism. The sinus at the upper border of the tumour, which at first slowly discharged a little dark fluid blood, probably communicated with the aneurismal sac, although this was not clearly made out at first. The aneurism up to the time of the patient's admission continued to increase. With regard to the treatment, the femoral vessel could not be compressed above the aneurism, as the latter was situated too high, but compression of the abdominal aorta might have been attempted as proposed, and successfully carried out in a case of aneurism of the abdominal aorta by Dr. Murray, of Newcastle-on-Tyne. This plan of treatment, although suggested on account of the spare frame of the patient, was not pursued, as the symptoms seemed so urgent, the patient suffered so much, the tumour was extremely tense, and in all probability would have soon given way.

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Medical Times and Gazette.

## SATURDAY, MAY 5.

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## THE HEALTH OF THE COUNTRY.

From more quarters than one we can perceive indications that people are anxiously looking in the direction whence the advent of our dread enemy—cholera—may be expected.

The recent death of a seaman at Bristol from what is stated to have been cholera of the Asiatic type is well calculated to inspire feelings of mingled hope and fear,—hope that in the main we shall be found better prepared to meet the attack than on previous occasions; but fear, also, that in particular instances the destroyer will but too probably find an easy prey.

The Quarterly Report of the Registrar-General on the state of the public health during the three months ending March 31 —the "winter" quarter as it is officially reckoned—supplies data from which one may reasonably draw conclusions of a not very re-assuring character.

There is, it is admitted, a certain relation, traceable within limits, between the meteorological character of a season and its death-rate. In winter we expect a low temperature, and with it a high mortality from diseases of the respiratory organs, as well as from typhus and other causes of a like nature. *Cæteris paribus*, cold is more inimical to health than heat. But a high temperature has also its attendant evils, which are, however, more readily controlled by precautionary measures than those which follow cold; and cholera, diarrhœa, etc., lie dormant through the winter only to realise the truth of the French axiom "*reculer pour mieux sauter.*" Rapid transitions from heat to cold, and sudden atmospheric changes of all kinds are likewise unfavourable to health; under those conditions we get a share of the dangers of two extreme seasons. It is precisely this unsettled state of the meteorological elements which is greatly chargeable with the high mortality rate of which the Registrar-General's return speaks. In the short space of three months we have gone through nearly all the possible climatic changes. According to Mr. Glaisher, January was warmer than in any year since 1851, yet in that month we had stormy weather and gales of wind, as well as the heavy fall of snow which converted our streets for the time into a Slough of Despond. The high temperature of January (6° daily above the average) was continued till the middle of February, whilst from that date to the middle of March the air was almost continuously cold, to the extent of a daily defect of 3°; and from thence to the end of March we had alternations of heat and cold every few days. Vegetation has flourished abundantly, but not so the health of those for whose use vegetation is so bountifully designed. Thus we learn that the deaths in the quarter were 138,233, which implies a rate of mortality above the average of ten previous winters. The mortality in the quarter was at the rate of 26·5 deaths per annum to 1000 living, the average of ten previous winter quarters being 25. And here is the conclusion which the facts supply:—

> "But it is a remarkable circumstance that this excess above the average was contributed entirely by the large towns; for in the country districts the death-rate (22·6) was actually lower than the average (23·0). In the districts comprising the chief towns it was 29·7, against the average 26·8. These results confirm the conclusion that there were other destructive causes at work besides unfavourable states of the weather—that the diseases above mentioned (scarlatina, measles, whooping cough, etc.) which commit so much havoc in towns, were still more extensively fatal, and only acquired additional vigour from influences peculiar to the season."

This brings us round to the point we had in view when we projected this article. The weak joint in our harness is precisely that at which the enemy will most vigorously assail us. And no one can mark the weekly rates of mortality prevailing in our chief centres of industrial and commercial activity without fervently praying that a visitation of cholera may be averted. We have had very recently a mortality in Liverpool at a rate of not less than 57 per 1000 per annum, and although the rate has now subsided considerably, it is fearfully high still. Taking the whole quarter, the mortality in Liverpool borough was at the rate of 46 deaths annually to every 1000 persons living, whilst in London the rate was only 26 per 1000. On this subject generally the Registrar-General writes:—

> "If the map of England were shaded to represent the rates of mortality of last quarter in the registration districts, the eye, travelling from the lighter south to the darker north, would be instantly drawn to a spot of portentous darkness on the Mersey; and the question would be asked whether cholera, the black death, or other plague, imported with bales of merchandise, had been lately introduced into its busy and populous seaport. Happily this has not been the case; but fever, probably developed or aided by the mild and damp atmosphere of the season, and by overcrowding in an increasing population, has been busy and fatal in Liverpool, and in other towns of the same county and of Yorkshire. The annual mortality of the borough of Liverpool in the three months was excessive, and demands immediate and earnest consideration; it rose to 4·593 per cent. This implies that if this death-rate were maintained for a year, forty-six persons out of a thousand in the population would die in that time, or fifteen more than died in Glasgow, its northern rival, nineteen more than in London. The mortality of the city of Manchester, though far less than that of Liverpool, was higher than in any other of the thirteen selected towns of the United Kingdom; it was 3·742 per cent., and that of Leeds was hardly less."

We regret that we have not space at this time to notice a very able paper by Mr. Leigh, the Registrar of a sub-district of Manchester, "On the Causes of the Vitiation of the Atmosphere of Manchester," which the Registrar-General appends to his Report. But we hope to recur to the subject on a future occasion, when we can give it the attention its importance demands.

Meanwhile we earnestly press upon our Medical brethren, especially such as hold the responsible post of "Health Officer," the necessity, urgent as we believe it to be, of taking energetic action whilst there is yet time. In Liverpool, Dr. Trench has the satisfaction of knowing that the municipal authorities are ready and willing to give him due support; which is unhappily the opposite of the experience of some of our London colleagues. Those towns wherein no health officer has been appointed should delay no longer, but should choose the best man they can find, pay him liberally, and back him up against all opposition. Only in this way can we hope to meet cholera in the field successfully.

## THE CHOLERA.

When we say that the cholera is likely to come, we must never forget that what comes is no mere abstraction, but something really existing in a material form. Possibly it may be borne on the wings of the wind, in the shape of dry dust or stinking wet fog, each defiled with cholera germs. And we must confess that we cannot bar out the wind. But, luckily, the cholera is far more likely to come, as it has done during the last week, in the gross material form of some unfortunate English sailor who has drank the venom at a North German port, or some sordid German emigrants who make England a halting place on their road to America. The late case at Bristol shows us that the disease may lie latent in the body of the sufferer for 36 hours; and the cases on board the steamer *England* show that it may lurk in filthy clothes for a much longer period. Surely there can be no objection to rational quarantine measures for all immigrants from infected places, such quarantine to include simple detention of the passengers, whether on board ship or in some building ashore, and the disinfection of their persons and clothing by means of hot water and soap.

We may congratulate ourselves that as yet the disease has not got a footing amongst us. The case at Bristol fell luckily into the hands of a man of great resolution and experience, and the Bristolians, humanly speaking, are safe in Mr. Davies's hands. At Liverpool, as we learn from Dr. Trench,

> "There are two cases of cholera; the first, a man, apparently Dutch, but of whom no correct history can be obtained, is supposed to have landed at Hull and crossed over to Liverpool by railway. He was brought into the Workhouse on Monday, the 30th April, in a state of collapse. Reaction soon took place. He has not been purged since his arrival in Hospital, but the suppression of urine continues. The other case is a woman (Dutch), admitted May 1st. This latter is a more marked case than the first, which, as we are told, would not have been called cholera if it had not come from Rotterdam. Cases very similar to these, however—that is, isolated and not very marked cases of the disease—were seen before the epidemic in the summer of 1854."

The outbreak of cholera at Rotterdam has, as far as we have been able to ascertain, assumed no very alarming proportions. It appears that the total number of cases which have occurred up to the present time amounts to four, and of these two have proved fatal. The authorities in England have received no information beyond the fact that cholera has made its appearance at Rotterdam, and that measures have been adopted with the view of guarding against the spread of it. The Rotterdam journals of the latest dates make no mention of any additional cases beyond the four original ones; and had there been any, the public would, according to the general custom, have been made acquainted with the fact.

## THE WEEK.

### THE CATTLE PLAGUE RETURNS.

The Report of the Veterinary Department of the Privy Council is at length in the hands of the public. We merely refer to it to note that the contents fully corroborate the view which has been propounded by Dr. Farr in reference to the rise and fall of Rinderpest; that the decline commenced long before the Cattle Diseases Prevention Act came into operation. The series of diagrams show that Rinderpest attained its height February 17. The Act passed on the 20th, but did not come into operation at once; indeed, not until the beginning of March. The real decrease was possibly earlier even than that stated (February 17), because the stage of incubation would still account for the appearance of a large number of attacks, ten days after an actual fall in virulence had taken place. If the influence of the incubatory stage be taken into account, Dr. Farr's theory becomes still more sustainable.

### QUECKETT MICROSCOPICAL SOCIETY.

At the ordinary monthly meeting, held on Friday, April 27, in the library of University College, Mr. M. C. Cooke (V.P.) in the chair, a paper was read by Mr. Samuel Highley, F.G.S., F.C.S., "On the Application of Photography and the Magic Lantern to Microscopical Demonstrations." The author gave a short *resumé* of the early history of the subject, incidentally noticing that Wedgwood was the first who applied photography to microscopical purposes, a description of the apparatus used for taking negatives, and, lastly, proceeded to exhibit the *results* of various workers by projecting on a large screen, 8 or 9 feet square, by means of his achromatic oxy-hydrogen lantern, a magnificent series of enlarged photographs selected from all departments of nature. Amongst others were uric acid crystals, diatoms, sections of vegetable stems, palates of molluscs, spiculæ of sponge, starch granules, fleas, lice, blood corpuscles, salicine, and a host of other substances. We may mention that the eye of the fly appeared on the screen about 6 or 7 feet in diameter. The uric acid crystals and blood discs were especially well displayed. This mode of illustrating structural peculiarities is a most useful one, and its success was highly appreciated by the very full attendance, the room being completely filled. The Chairman announced that arrangements were being made for field excursions during the summer for the purpose of obtaining and comparing together actual specimens of interesting objects in natural history. Seven members were elected and fourteen candidates proposed.

### NEW VIEWS ON LIGHT.

A recent number of the *Fortnightly Review* contains a paper by Dr. Akin, being a discourse delivered before the Natural History Society of Cambridge on the Nature of Light. The author observes that whilst we pay great attention to the *propagation*, we omit that which should be the primary topic of every complete account of light and its phenomena—viz., luminosity itself, the actual emission of light dependent upon the conditions of ponderable particles of matter. There are three sets of rays, Newtonic (luminous), Herschellic (caloric), and Ritteric (chemical). These, it would appear, are mutually more or less transmutable. Dr. Akin especially notices what is called *ray-renovation* in proof of this opinion, and he takes the particular instance of phosphorescence by irradiation for illustration. Vincenzo Casciarolo, the Bolognese cobbler, in 1630, observed that luminosity resulted from the previous exposure of a certain object to light. It was subsequently found that the colour emitted by the "phosphori" was the same even when the latter were exposed to different coloured rays of the spectrum. Wilson afterwards made out that the light was emitted by phosphori not only *after* but *during* the action of the incident light; but it was left for Seebeck, Matteuci, and Becquerel to show that not only ordinary but even Ritteric (chemical) rays were capable of inducing phosphorence. Professor Stokes, in 1852, during his investigations on "internal dispersion," found that this phenomenon was due to the emission of Newtonic (light) rays by renovation, in consequence of the incidence of rays of different refrangibility, even of Ritteric rays; he named the occurrence fluorescence, but it is now acknowledged that the phenomena of phosphorescence and fluorescence are the same in kind. It remained yet to be shown that the visible Newtonic could be produced from the invisible Herschellic (calorific) rays, the converse, as it were, of fluorescence, to which Dr. Akin applies the term *calcescence*. Dr. Akin awaited an opportunity of putting the hypothesis to test, by cutting off all but the Herschellic from passing through a prism, and thus giving rise by renovation to Newtonic rays; but in the meantime Professor Tyndall succeeded by experiment in producing such a result. We know, therefore, that the different kinds of rays are mutually convertible, as it were—a fact which harmonises well with the great doctrine of the correlation of physical forces.

### ROYAL COLLEGE OF PHYSICIANS.

On Tuesday afternoon Professor Du Bois Reymond, of Berlin, delivered, at the Royal College of Physicians, a discourse upon the "Difference in the Action of Acids, Alkalis, and other Substances on the Contractility of the Muscles and the Excitability of the Nerves." The learned lecturer observed that, though the subject had some relation to practical Medicine, yet it was at present a distant one. No doubt at some future time important facts would come to light and guide us very materially in therapeutical operations. There would appear to be much ground for believing in the truth of Haller's original view that the muscles themselves are excitable, independently of the nerves. Until lately, the arguments adduced in reference to this subject have seemed, however, to indicate an equal likelihood that the muscles are alone excitable through the intervention of the nerves. The experiments of Claude Bernard with curara have apparently proved that the muscle remains irritable, although the nerve ceases to be excitable—an experiment based upon the identical principle upon which those of Harless, of Munich, with ether were conducted. Before, however, the Professor attempted this particular experiment, he performed another, intended to demonstrate that the nerves are, in point of time, excited before the muscles. He connected two muscles with two moveable flags, laying the nerve of one muscle along the body of another muscle, so that a current passed along the latter might also affect the superlying nerve running to the other muscle; on sending a shock along the course indicated, the flag connected with the muscle to which the nerve ran moved before that connected with the muscle towards which the current was directly sent, thus showing that nerve is excited before muscle. The lecturer then returned to Claude Bernard's experiment,—the leg of an animal poisoned by curara was attached by one end to one flag, by the other to a fixed point. Another leg of a non-poisoned frog was connected in like manner with a second flag. When a current was passed directly through both muscles, the flags moved simultaneously; when through the nerves, the flag connected with the muscle of the non-poisoned animal only moved. This experiment seemed to show that the nerves are killed, not only outside, but within the muscle; but that direct stimulation of the muscular fibres still produces contraction, that the muscle is irritable *per se*, independently of the nerves. A strong objection has been urged against this explanation, however. There is at both ends of the sartorius muscle of the frog a certain limited portion wherein no nerves can be found, and which behaves differently from other parts supplied by nerves, and the want of excitability made evident in experiments with curara is said to be due to an absence of nerve filaments. The curara, it is said, acts on the part of the nerves contained within the muscle, but does not affect that still nearer—that is, within the sarcolemma of the muscle; if the minute filaments were destroyed, the muscle tissue would be like that in which no nerves are found—non-contractile by direct stimulation. The experiments with curara, then, cannot settle the question.

Prof. Du Bois Reymond then observed that all the stimuli generally employed acted equally alike on nerve and muscle, but that it was possible to solve the question by the employment of chemical agencies. It is easy to discover bodies which act differently on nerves and muscles. Strong hydrochloric and nitric acids act alike on nerves and muscles, but a weak solution of hydrochloric acid excites contraction when applied to the section of a muscle, but has no effect of this kind when applied to the motor *nerve* connected with its muscle. Experiments to this effect were exhibited. Strong glycerine, on the other hand, does not produce the least effect when applied to the cut section of a muscle, but causes strong tetanus when brought into contact with the afferent nerve of a muscle. Ammonia produces contraction of a muscle even when its fumes alone are allowed to reach the surface of a section, but the nerve is at once killed by it without the production of any contraction of the muscle, and the attempt to produce contraction by passing a current through a nerve treated in this way signally fails. The evidence of contraction in these experiments was the raising of a little flag by the shortening of the muscle. Dr. Du Bois Reymond then attempted to illustrate the proposition that there is an inherent excitability of muscle quite independent of all nervous influence. It is imagined that this excitability is brought about by some change in the relative condition of the ultimate molecules of the muscular structure.

## THE ST. PANCRAS "LAYING-OUT" CASE.

Mr. Farnall has held his inquiry into the case of the child whose treatment was brought under public notice by Mr. Hillocks, and the Poor-law Board have given their opinion on the matter. It is contained in a lengthy letter addressed by them to the directors of St. Pancras, some extracts from which are found below. Discreditable as many of the circumstances are, it appears to us that, when divested of the sensational colouring imported into the case by Mr. J. Hillocks, the facts, as stated at the investigation, considerably lighten, even if they do not altogether remove, the *odium* cast upon the Medical officer.

The inference drawn by the public from the original statements was that the child was prepared for burial, and might have been buried alive; or, by exposure whilst awaiting burial, might have perished. The evidence, however, shows that it was neither thus prepared nor thus exposed. It was in its ordinary garments, and not in such as would have been placed upon a corpse. It is probable that the pauper nurse was to blame, and that fact forcibly illustrates the wickedness of confiding the sick and dying to those who possibly themselves are almost in need of support and attendance, or who, from defective education and want of special training, are totally unqualified for such posts, and who, moreover, have not the motive to exertion which a paid officer would find in the fear of losing a situation. It would appear, as regards the Medical officer's part in the matter, that on the Monday previous to the death of the child he did not think it near its end, and if this were so, it might not have been necessary for him to visit it again on Tuesday. On Wednesday he gave directions that all the children should be taken to him in the Lying-in Ward, and it is to be regretted that this child was not taken to him, nor his attention specially drawn to it; but for that omission he can hardly be held responsible. The chief defect in the workhouse arrangements appears to be the absence of a paid nurse in charge of the infants. The proper administration of wine or other stimulants—which, by the way, should always be ordered in writing—would then be secured, and this duty would not be left to irresponsible and ignorant pauper attendants. On the whole, we think that any one who heard and considered the evidence will arrive at the conclusion that, as Mr. Hillocks thought it right to move in the case, he would have exercised greater discretion had he seen the Medical officer or the matron, or, if it were needful, stated the case to the directors. There was even open to him the alternative of an appeal to the Poor-law Board—a course certainly more dignified, and we believe quite as effectual, as a sensational letter addressed to a newspaper.

⁂ The letter of the Poor-law Board, dated "Whitehall, April 26, 1866," signed by Mr. Fleming, and addressed to Mr. Plaw:—

"The Board, having carefully considered the Report, together with the evidence taken at the inquiry, are of opinion that the Medical officer of the workhouse is censurable for not having seen the child from Monday, March 12, on which day his attention was drawn to it, until its death on the following Thursday. He ought, according to the tenor of his instructions, to have duly visited the nursery on Wednesday. It appears, however, that on that day he did not go into the nursery, but directed that the infants who required his aid should be brought to him in an adjoining room, and that this child was not brought to him with the others. The Board think that this is not a sufficient excuse for his omission duly to attend to a case for which he had prescribed on his previous visit; and they consider that the duty of the Medical officer was not, on this occasion, discharged in a satisfactory manner.

"The Board are further of opinion that the resident midwife, who had the general charge of the nursery, is seriously to blame for not having, under the circumstances, either sent for the Medical officer subsequently to his seeing the child, or taken care that his attention was called to it on March 14. They further think that, even if Medical aid could not then have been of any avail, it would have been a proper precaution on her part to have procured the attendance of the Medical officer when the case was brought to her notice by Mr. Hillocks.

"The act chiefly complained of—namely, that the child's face was bandaged while it was still breathing—was the act of the pauper nurse, and shows her to be unfit for the duties entrusted to her. It is alleged, however, that the child had been lying in an apparently cold and insensible state for some hours, and was thought by the other women in the room, who were watching it, to be dead; and that the nurse loosened the bandage as soon as she perceived a slight motion in the child's lips. It should also be observed that the child was lying in its ordinary clothes, and was not laid out for burial.

"Although the Medical officer did not give a written order for the allowance of wine for the child, the Board see no reason to doubt that the wine was given; and it had not only milk allowed for it, but it was placed in the care of the mother of another child, in order that she might suckle it, together with her own child.

"The Board request that their opinion as to the conduct of the officers referred to may be communicated to them by the directors. They think it necessary that a paid and trustworthy nurse should at once be appointed to the nursery, and that she should be made responsible for the supply of the nutriment or of any stimulants ordered by the Medical officer for the children; also, that the Medical officer should be required to keep the Medical Relief Book (Form C), according to the order of the Board of August 21, 1856. There will then be a record of his visits and a written direction given by him for any extra nourishment which he may consider necessary in any case.

"The Board further desire to draw attention to Article 89 (No. 16) of the same order, which requires the master of the workhouse to give immediate information of the death of any pauper in the workhouse to the Medical officer."

## FROM ABROAD.—ACTION CONCERNING NYSTEN'S DICTIONNAIRE—GERMAN LUNATIC ASYLUMS—FRENCH SCIENTIFIC CONGRESS—DISLOCATION OF THE MAXILLA DURING LARYNGOSCOPY.

An interesting trial took place recently in Paris. Most of our readers are acquainted with the "Dictionnaire de Médicine de Nysten, refondue par Littré et Robin," which, consisting of about 1800 pages with double columns, and profusely illustrated, is sold for about fifteen shillings, and has met with immense success. Nysten died in 1818, and seven or eight editions of the work have successively appeared under the editorship of various men of talent, and latterly under that of MM. Robin and Littré. During this repeated process of re-editing, as might be expected, the original text of Nysten has disappeared, but still the name has been continued on the title-page, especially because it has become a title of the book rather than the name of the author, people speaking of the Dictionary as a Nysten just as they would say a Buffon. This, Nysten's widow has complained of for some time as a grievance, and, in a letter addressed to MM. Littré and Robin, observes,—"The moral and philosophic spirit of the old dictionary has entirely disappeared from the edition of which you are the editors, and I beseech you in honour and conscience to remove the name of Nysten from a book which, in consequence of the changes you have made has ceased to be a work of his hands." This protest having been found unavailing, Madame Nysten had recourse to the *Tribunal Civil*, which ordered that in future editions the name of Nysten should be suppressed completely, but mulcted the plaintiff in costs. This she did not feel disposed to submit to, and having appealed against the judgment to the Paris Court of Appeal, the following decree was rendered:—

"Seeing that the rights and duties of husband and wife which spring from marriage do not all finish with the marriage itself, and that the wife partakes with her children of the honour and consideration which attach to the memory of her husband, and that she has a right personally when these are sought to be injured to demand reparation; and seeing that the Dictionary to which Nysten gave his name has undergone, in the course of successive modifications, a complete re-casting; that the spiritual system in which he conceived it has entirely disappeared under the pen of its new editors; that Baillière and Son were wrong in maintaining, after reiterated reclamations, the name of Nysten on the title-page of a book which had no longer anything in common with the philosophical and moral doctrines of the original author; and that they have thus caused damage to Madame Nysten by offending against the memory of her husband and by obliging her to resort to legal procedures, it is therefore decreed that the judgment appealed against be annulled and amended so that Baillière and Son be condemned in 2000 francs damages and to the expenses of the original action and this appeal."

Dr. Laehr has recently published an account of the German Lunatic Asylums, and his general statement may interest our readers. From this it appears that at the beginning of 1865, in the whole of Germany, comprising 11,459 square (German) miles, and containing 46,000,000 inhabitants, there were 141 Asylums, 92 of these being public and 49 private establishments. There were also 28 Asylums building or in process of reconstruction. These 141 Asylums contained a total of 19,550 patients, viz., 17,823 (9426 males and 8397 females) in the public, and 1727 (900 males and 827 females) in the private Asylums. The entire cost in 1864 amounted, in the public establishments, to 2,573,655 thalers, or 122 thalers per patient. There are 261 Medical appointments, viz., 83 Medical directors, 54 chief Physicians, and 124 Assistant-Physicians. The Asylums are distributed in the various German monarchies as follow:—*Prussia*, with 5094 square miles and 19,252,363 inhabitants, has 32 public Asylums, with 4796 patients, and 27 private, with 944 patients, the number of Medical officers employed being 89. *Austria*, as far as regards the German territories, with 3586 square miles and 13,000,000 inhabitants, has 14 public Asylums, with 3065 patients, and 4 private, with 150 patients, the Medical officers amounting to 45. *Bavaria*, with 1388 square miles and 4,807,440 inhabitants, possesses 9 public Asylums, with 1850 patients, and 2 private, with 19 patients, 24 Medical men being attached to them. *Saxony*, with 271 square miles and 2,343,994 inhabitants, possesses 4 public Asylums, with 1955 patients, and 5 private, with 137 patients—Medical attendants, 23. *Hanover*, with 693 square miles and 1,923,492 inhabitants, has only one State Asylum, at Hildesheim, for 856 patients, having 8 Medical attendants; there is also 1 private Asylum, and recently two new Asylums have been built at Göttingen and Osnabruck. *Wurtemburg*, with 354 square miles and 1,748,328 inhabitants, has 2 public Asylums for 309 patients, and 6 private for 342, the Medical officers amounting to 26. Almost all the lesser States possess one or two Asylums, but the details of these would not prove generally interesting.

The thirtieth French Scientific Congress will be held at Amiens from the 1st to the 10th of August. It will be, as heretofore, divided into five sections—1. Physical, Chemical, and Natural Sciences; 2. Agricultural, Trade, and Commerce. 3. The Medical Sciences. 4. History and Archæology. 5. Literature, Philosophy, Social Economy, and Belles-lettres. Among the subjects which are announced for discussion in the third section are the following:—Laryngeal exploration; diagnosis of diseases of the bladder and urethra by means of the endoscope; physiological and pathological advances due to the ophthalmoscope; application of the dynamoscope as a means of ascertaining the certainty of death; causes of the presence of sugar in the urine; therapeutical application of ice; causes and effects of emboli; hypodermic injections; transfusion of blood in hæmorrhage; is there any foundation in the alleged transmission of diseases by vaccination; has the recent epidemic of cholera given rise to any changes in our ideas concerning the disease? Trichiniasis; the practical value of thoracentesis in acute pleurisy; origin of entozoa in the human body; vivisections in a surgical and physiological point of view; the means of dissipating prejudices against certain alimentary substances, especially horse flesh; should the preparation and sale of absinthe be prohibited, as also the sale of alcoholic substances above a certain degree? Here is, at all events, variety enough, and these form only part of the matters to be taken into consideration.

Dislocations of the jaw from muscular action, as in yawning, laughing, etc., M. Guinier, of Montpellier, observes, are not infrequent; but he believes that he is the first to record an instance in which the accident has been produced during laryngoscopic exploration. In order that the mirror may give an efficient and complete reflection of all the accessible portions of the vocal apparatus, the patient must be in an active state, and, by a co-ordinate exertion of muscular movements, endeavour to afford as large a display of the vestibular orifice of the larynx as possible. Flattening the base of his tongue, or maintaining it out of the mouth by the fixation of its extremity, and especially lowering and, at the same time, advancing the lower jaw—such is the combined procedure most favourable for laryngoscopic examination. This movement, which is entirely voluntary, becomes in some measure automatic, and is sometimes effected with a certain degree of energy by persons habituated to the laryngoscope and very desirous of obtaining the benefit of its employment. The carrying the jaw downwards and forwards, either gradually or suddenly in an exaggerated manner, may give rise to its dislocation, especially in some women whose articulations are very loose, and in whom the articular ligaments bear a certain amount of distension.

The case which gave rise to these observations was that of a phthisical woman, 38 years of age, suffering from chronic ulcers of the larynx, and in whom complete dislocation forwards was twice produced at intervals of a month, while cauterisation was being applied by means of the laryngoscope. It was easily reduced by pressure with the thumbs on the last lower molars, and drawing forward the ascending ramus embraced by three fingers of each hand. The accident may easily be prevented by cautioning the patient to moderate his co-operation, so as not to effect with too great energy the double movement of depressing and advancing the lower jaw. An excess of action in the external pterygoid muscle seems to be the chief agent in effecting the dislocation. With even a moderate separation of the jaws, such as is requisite for the employment of the mirror, the condyle of the jaw is already carried forwards; and the external pterygoid, then brought into action, exerts strong traction on the condyle, so that in predisposed persons, dislocation may readily take place.

### PARLIAMENTARY.—CONTAGIOUS DISEASES BILL—BUILDING FOR THE UNIVERSITY OF LONDON—QUEEN'S UNIVERSITY BUILDINGS IN IRELAND—ISLE OF MAN LUNATIC ASYLUM—INSPECTION OF ASYLUMS—QUARANTINE AND CHOLERA—CAPITAL PUNISHMENT AMENDMENT BILL—CATTLE DISEASES PREVENTION ACT.

In the House of Commons on Thursday, April 26,

**The House went into Committee on the Contagious Diseases Bill.**

**Clauses from 1 to 14 were agreed to.**

**Mr. Ayrton proposed to amend the 15th clause, which related to women submitting themselves voluntarily to periodical**

Medical examination by requiring them to make a declaration that they were persons which the law recognises only to punish.

After some discussion, the House divided with the following result:—For the amendment, 5; against it, 76; majority, 71. The Bill was then ordered to be reported to the House.

On Monday, April 30,

The House went into Committee of Supply.

A long discussion took place on the proposal of a vote of £20,000 for erecting a building for the use of the University of London. The Government proposition is that the new building should be located on the northern side of the garden of Burlington House. The whole sum to be expended is £65,000, £20,000 of which are to be spent this year. Other sites were mentioned by various speakers, such as the Thames Embankment and the space for the hitherto unbuilt wings of University College, but ultimately the vote was acceded to without a division. We congratulate the members of the University on the prospect of so satisfactory a settlement of the question.

£7000 were voted for the Queen's University Buildings in Ireland.

£2000 for the Isle of Man Lunatic Asylum.

£9735 were voted for the officers and Commissioners of Lunacy and the cost of inspecting lunatic asylums.

On the vote of £1444 for quarantine expenses,

Mr. Bentinck desired to know what were the duties of the officers on board the quarantine hulks, when, owing to the absence of disease or of an epidemic of any kind, a state of quarantine was unnecessary.

Mr. Childers said this establishment was but a skeleton, and formed one of the smallest which could be kept up if it was the intention of Parliament to maintain quarantine. There were differences of opinion upon the subject, but at present Parliament retained the system, and made the Privy Council responsible for its observance. Under these circumstances it would not be prudent to dispense with this vote. As long as Parliament thought fit to make Government responsible, if anything were to happen which could be prevented by quarantine, the House would be very indignant if there should be any neglect on the part of the authorities. The sum that was asked, £1444, was not very large.

General Dunne said he did not think the House knew why this establishment was kept up. He had been in countries where quarantine was carried out with great strictness, but he should like to ask how quarantine was to be applied here. In the Mediterranean, and wherever quarantine was carried out efficiently, there are officers in each port to examine every ship. But what organisation was there in this country to carry quarantine regulations into effect? The Rinderpest had been imported, and so might cholera at any time. In Bristol, the other day, a man had been brought in stricken down with cholera. There was no organisation in this country which for one moment could keep out such a disease as cholera, which was now impending. As long as we had free trade, and men could enter the country without any difficulty whatever, a vote of £1400 would not keep out the disease.

Mr. Ayrton wanted an explanation of this item. In London the expenditure under this head was only £20, notwithstanding the number of persons that arrived there and the vast trade which it carried on. At Portsmouth, where nobody arrived, £800 was expended on the establishment, which consisted of eight mariners doing nothing, one mate looking after them, and one superintendent. At Rochester, where nobody went except at a general election, there was a mate looking after four mariners, and the expenditure amounted to £369; and at Southampton, where people did land, there were no mariners, mate, or superintendent, but there was a Medical Officer, who could be of no use without mariners to attend to the vessels on their arrival. In fact, from the nature of the expenditure, the whole thing was what might be familiarly described as a little job.

Mr. Childers said the superintendent, mate, and mariners at Portsmouth formed the crew of the hulk stationed there to receive persons from ships coming from abroad in a dangerous condition. The officer at Southampton was a Medical Superintendent, and it was his duty to visit ships coming from abroad, and to send persons who might be suffering from dangerous diseases to the hulk at Portsmouth. The same was the case with the hulk at Rochester, which received persons sent there from London. He could not give a satisfactory answer just then of the small expenditure in London, but he should look into the subject.

Mr. Pollard-Urquhart hoped the Government would not give up the quarantine establishment, as it might be made a most useful instrument for the prevention of disease. At Odessa and the towns north of the Black Sea, where plague used to rage at one time, quarantine had been established during the last thirty years, and there was no plague there now. The same was the case at Constantinople; as soon as they introduced a strict system of quarantine, the plague came to an end. In Malta the system was attended with similar success. With such undeniable facts before us, we ought not to be in a hurry to abandon quarantine in deference to some new-fangled notions.

Mr. Candlish said the sum asked for was either too much or too little—one or other conclusion was inevitable. In the northern ports there were no quarantine establishments at all.

Mr. Sandford said that was a proper occasion for asking the Government what course as to the enforcement of quarantine regulations they intended to take with regard to the impending visitation of cholera. He would remind the House that last year when cholera was raging along the Mediterranean, Sicily, which, from the filthy habits of the people, was of all places that which cholera was likely to devastate, was guarded by a strict quarantine, and the consequence was that the island was entirely exempt. He had seen in a blue book which had been laid upon the table, that the authorities in that island invariably adopted a system of regulations which would deserve the attention of Her Majesty's Government in case this country were to be visited. He did not know what the Government were doing in this matter, but he hoped some member of it would rise and explain the nature of the precautions which they were going to take.

General Dunne thought that this vote ought to be discussed by the Committee. If the cholera was approaching, much more effectual measures should be taken than this vote would allow. If the whole of the ports of the United Kingdom were left open, with the exception of Rochester and Portsmouth, there was, in point of fact, no quarantine at all. Liverpool and the other great trading ports, not to speak of Ireland, which seemed never to be thought of, were all left open to the disease. There ought to be a Medical officer in every port to inspect vessels coming in. He had seen at Zante four men hanged by Sir Thomas Maitland for breaking the quarantine regulations. He did not wish to see such a stringent exercise of the law in this country; but it was just now of peculiar importance that stringent quarantine regulations should be enforced, if it were true that the cholera had arrived in Holland, and was now coming over here. He hoped, then, the Committee would be informed what precautions were to be taken, and why Portsmouth and Rochester should be sealed while all the other ports were left open.

Mr. Childers said the hulks at Rochester and Portsmouth were, as he had stated, for the reception of persons afflicted with dangerous diseases who might arrive in the Thames or at Southampton, and £200 a-year for Medical attendance at the latter place was money well laid out; for a large number of persons arrived at Southampton, and it was desirable that they should be looked after. As ports were known to be infected, no doubt they would be proclaimed. The Privy Council was armed with very great powers, and when the time should come for their exercise proper precautions would be taken. He was sorry he had no authority to answer the question put by the hon. member for Maldon. His right hon. friend (Mr. Bruce) who had charge of such matters was, unfortunately, absent in consequence of some family affliction.

Mr. Sandford inquired whether Rotterdam had been proclaimed?

Mr. Childers said he was not aware.

Mr. Brady said that the great means of preventing the invasion of cholera was the establishment of a large permanent body, who should have power to carry out a proper system of quarantine in the different ports of the kingdom.

Mr. Bentinck said the Secretary to the Treasury had failed to answer the question he had put—namely, what the officials who had charge of the hulks did when there were no sick persons on board? It was but seldom necessary that persons afflicted with disease should be sent to these hulks.

Mr. Childers admitted that the subject was one which he had not very much studied; but he hoped to be able to answer the hon. and learned gentleman in a few days.

The vote was then agreed to.

The Contagious Diseases Bill was read a third time and passed.

On Tuesday, in the House of Lords,

The Lord Chancellor, in moving the second reading of the Law of Capital Punishment Amendment Bill, stated that the measure had been drawn up in accordance with the recommendations of a majority of the Commissioners who had been appointed to inquire into the subject. A minority of those Commissioners had been in favour of an entire abolition of capital punishment, but he concurred with the majority in thinking that the retention of the highest penalty for crimes of the blackest dye was necessary for the good of society. After dwelling upon the deterrent effect of capital punishment, the Lord Chancellor pointed out that murder was punishable by death in almost all countries, the exceptions being rare and insignificant. The Bill which he now invited the House to sanction divided murders into two classes—murders of the degree, wilful and premeditated, which were to be visited with capital punishment, and murders of the second degree, committed under circumstances of a less heinous character, for which the extreme penalty should not be inflicted. There were some points upon which at a future stage he should desire to propose amendments, but with the recommendation of the Commissioners that executions should in future be inflicted in a less public manner than at present he fully concurred, believing that the deterring influence of the punishment would not be diminished by an avoidance of the shocking scenes which had marked so many executions of late years.

Lord Malmesbury agreed generally with the Commissioners, but took exception to their recommendation of private executions, being convinced that punishments, like rewards, had greater weight when administered in public, and consequently the deterring effect of the penalty would be diminished by substituting private executions. He thought it would be useful if capital sentences were to be executed in the localities where the crimes were committed, instead of always at the county towns.

The Bishop of Oxford spoke, from his experience as chairman of a Committee which had inquired into this subject, of the great advantage which would be derived from conducting executions in a less public manner than at present, and suggested that the awful nature of the punishment might be impressed upon the public mind by a black flag being hoisted or a bell tolled at the time of the execution.

Lord Romilly believed that the balance of evidence and of reason was in favour of the total abolition of the death punishment, as, of the two objects of all punishment—deterring other offenders and reformation of the criminal—neither was attained by taking life. In cases of murder periodical flogging could be added to perpetual imprisonment; and in such cases the ordinarily natural objection to corporal punishment could not be made.

Lord Redesdale objected to the classification of murders, as tending to lead to an inference that crimes of the second degree were more or less excusable, and referred to the increase of infanticides, which he attributed to the undue leniency which had been exhibited in such cases.

Lord de Ross, comparing the English and French systems of military executions, argued that a solemn public proceeding exercised a greater deterrent influence than one conducted in comparative privacy.

The Duke of Argyll did not believe that society could at present safely dispense with capital punishment, and remarked that Lord Romilly had omitted all reference to the retributive element of this as of all other punishments.

Lord Houghton commented upon the lawless and disgusting scenes which presented themselves on the occasion of all public executions, and accepted gladly the change proposed in the Bill until the time should arrive when capital punishment would be unknown to British laws.

After some remarks from Lords Cardigan and Belper,

Lord Shaftesbury approved the Bill, and especially that part which related to private executions.

The Lord Chancellor briefly replied, and the Bill was read a second time.

In the House of Commons,

Mr. Cheetham asked the Secretary of State for the Home Department if the Government would suspend the operation of Part I. of the Cattle Diseases Prevention Act, relating to the slaughtering of animals and compensation for the same after May 10.

Sir G. Grey said these clauses, as originally enacted, were to remain in force only till April 15, but they were continued by Order in Council till May 10. The Privy Council had not yet been called to consider the question of their continuance beyond that period; but from the communications which had reached him from different parts of the country, where great advantage had resulted from the operation of these clauses—in fact, the diminution of the cattle plague was attributed very much to their operation (hear, hear)—he thought he might say an Order in Council would be passed to continue the operation of these clauses beyond May 10.

## THE USES OF THE MEDICINAL SULPHITES AND HYPOSULPHITES IN ZYMOTIC DISEASES.

*(From a Correspondent.)*

The extent and value of Dr. Giovanni Polli's researches, experimental and clinical, as to the uses of the medicinal sulphites and hyposulphites in zymotic diseases have not been duly appreciated in this country. With the cholera impending, and typhus still prevalent, and the cattle plague not yet "stamped out," we shall do good service by calling special attention to the results of Dr. Polli's labours, as stated in his latest papers on the diseases caused by a morbific ferment and their treatment, communicated to the Royal Institute of Lombardy, at Milan(a). His first paper appeared in the eighth volume of the *Memoirs* of the Institute, and described researches into the chemistry of morbific ferments and their treatment by anti-zymotic chemicals. Whatever be the theory as to the cause of the so-called zymosis (and either Liebig's albumenoid, or Pasteur's animalcular, or any other theory may be adopted), the practical facts, according to Polli, are, that there are two morbid elements in the blood in these zymotic diseases; the one is of the nature of a ferment or excitor of change, the other is the material capable of fermentation. When either of these is absent from the blood zymosis is impossible; but when both are present, then such a reaction takes place that zymotic phenomena result. Now, the ferment may be rendered innocuous, although it may not be readily destructible itself, by destroying the fermentable material, or by at least so changing its composition that fermentation is effectually hindered. Anti-zymotic agents are already numerous, the majority of which seem to act both upon the ferment and the fermentable material, and would therefore seem *à priori* to offer all that is needed.

But the very qualities upon which their anti-zymotic powers depend, render them dangerous in practice, because they are for the most part efficacious in proportion as they are destructive to the vital processes themselves. A safe anti-zymotic was, therefore, still needed. After a series of experimental researches Dr. Polli affirms that he has found in the sulphites and hyposulphites of potass, soda, and magnesia, medicinal agents which do not act upon the ferment, nor upon the vital processes, but upon the fermentable something without which the ferment is innocuous; and in this way they constitute safe and efficacious anti-zymotics. In the memoir under review he indicates the diseases in which they may be administered either for prevention or cure—their doses, modes of administration, and in short entire natural history, as therapeutical agents of their class.

The fundamental fact of his researches is this:—He selected a number of dogs; a proportion of these he dosed with the sulphites, while the remainder were left without. He then killed them all, the weather being warm. He found that the urine, the blood, the viscera, and the flesh of the sulphited dead dogs resisted putrefaction for many days, while the same elements of the unsulphited animals were already putrid.(b) The obvious conclusion from so striking a fact is, that as the sulphites prevented putrefactive fermentation in the dead body, they would *à fortiori* prevent it in the living. He accordingly instituted a series of comparative experiments on the living. He selected two or three dogs as nearly equal in size and state of health as possible, and inoculated them with the nasal mucus of a glandered horse. One of the dogs had had previously administered to it from four to five scruples or more of the sulphites of soda or of magnesia daily for some days; another was treated by sulphites as soon as inoculated; a third was left without treatment, either prophylactic or curative. The result was that the third animal suffered much more severely than the other two. The like results followed after injecting pathological ferments into the veins, such as fresh and putrid pus, and putrid blood. Encouraged by these results, Dr. Polli proceeded to test the effects of the sulphites and hyposulphites on men in health and disease. He found in man, as in dogs, that they are not ordinarily decomposed in the stomach, but pass unchanged into the blood, or at least appear in a brief period unchanged in the urine, and only after a while as sulphates; that they may be traced in the organism for from 24 to 36 hours after being taken; that they slightly increase the renal secretion, and are mildly cathartic in large doses.

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(a) "Sulle Malattie da Fermento Morbifico e sul loro Trattamento." Memoria Secunda. (Parte Clinica) 1864.

(b) Memorie del R. Instituto Lombardo, vol. viii., section viii. of Memoir.

The clinical researches extend over a series of local and general forms of zymosis, and have been conducted chiefly by Italian Physicians. That the salts have been extensively used is deducible from the fact that three chemical houses in Milan have sent out more than 1000 kilogrammes (2204 lbs. avoirdupois) of the sulphite of magnesia—a salt which Dr. Polli says can have no other use in the arts and pharmacy in Italy than those he has indicated. We will note the uses in the order Dr. Polli arranges them.

*External Uses.*—In all suppurations, sloughings, and ulcerations the solutions are useful in soothing pain, removing fetid odours, and exciting healthy action. The sulphites of soda and potass are the best; they neither stain nor corrode the linen, as the solutions of metallic oxides, and being without smell are not offensive, like the chlorides, phenic acid, etc. They have the advantage, also, of being highly soluble. In gangrene and sloughing, foul ulcers, and suppurations of all kinds, a more or less concentrated solution of the sulphite of soda is the best. This salt is soluble in four times its weight of water, but it may be advantageously used in the proportion of one part salt to five to ten of water. The solution may be applied as a wash, or lint or a compress wet with it, or it may be injected into sinuses and sloughing cavities. The solution may also be mixed with glycerine, and the powdered salt may be sprinkled on the part affected. The sulphites of lime and magnesia have a somewhat caustic action, and are, therefore, best adapted for indolent ulcers. The immediate effect of the salts is to arrest putrid fermentation. In cases of purulent absorption (pyæmia) and septicæmia the internal use should be combined with the external. Dr. Polli recommends the sulphite of magnesia in thirty-grain doses every two hours.

2. *Pyæmia* and *septicæmia*, and all the class of fevers, with putridity and purulent absorption, such as Hospital fever, puerperal fever, anatomical inoculation, and the like, have been treated by the sulphites with advantage. According to the clinical observations of Professor Burggraeve, of Ghent, it is necessary in those cases to give the sulphite of magnesia, so as to saturate the organism rapidly with it, and cause the fluids, of the body—urine, saliva, sweat—to contain it. Half-drachm doses every one or two hours may be given with this purpose. Reports from twelve Italian Physicians testify to its beneficial effects in ameliorating all the symptoms of 18 cases of purulent infection. Dr. Polli recommends it to be given as a prophylactic in Surgical cases, bad cases of labour, etc. From four to six drachms of the sulphite of magnesia or the hyposulphite of soda may be given during the first 24 hours in divided doses, and from six to nine drachms during the next 24 hours to prepare a patient for an operation or a labour. If, when the patient is attacked, there is excessive diarrhœa and vomiting, these must be relieved, otherwise the system will not be saturated, or else clysters of the solution must be administered. A little caustic magnesia added to the solution of the sulphite of magnesia causes it to remain better on the stomach. For the diarrhœa opium may be combined. After a while the remedy being retained will take effect in relieving the diarrhœa, and the opium may be discontinued.

3. *Endemic* or *miasmatic fevers* are numerously reported on by Dr. Polli's correspondents; in some instances in a tabular form, as to hundreds of cases of quotidians, tertians, and quartans treated by the sulphites. Comparative trials of quinine and sulphites were made by some Physicians both for the prevention and cure of intermittents. The results of these observations are very striking. The sulphites were found to cure a larger number of cases than quinine; to cure more completely and with less tendency to a return of the fevers, and to cure radically cases that were utterly rebellious to quinine. In others of this class the conjoined administration effected a cure when neither cured singly, The sulphites do not, like quinine, cut short the fevers; they gradually diminish the intensity of the symptoms. The sulphite of magnesia is the most efficacious, and may be taken to the extent of an ounce or an ounce and a-half in the twenty-four hours in divided doses, either in a cup of water, or in sugar, or any confection. It may be taken during the accession as well as during the remission. A change for the better, if the remedy is likely to be efficacious, is manifested in from three to five days. All acids and acidulous fluids are incompatible with the sulphites, and should therefore be forbidden. To prevent malaria taking effect, Dr. Polli recommends a solution of the hyposulphite of soda to be taken in any vehicle which serves to mask the bitter taste of the salt. A prophylactic mixture (the "*liquore solfitico antifebrile*") of about a litre or 1¾ imperial pints, containing fifty doses, may be thus made:—Hyposulphite of soda, 7721 grains; water, 9765 grains; tincture of essence of anise, 2316 grains. Two small tablespoonfuls to be taken every morning fasting in a cup of water. It may act on the bowels for the first day or two; but this effect ceases in a while, and the remedy is borne perfectly well, although a good deal of sulphuric acid is formed in the intestine. When the remedy is not effective in a few days, in a case of intermittent, quinine or iron may be combined. Its prophylactic value is increased in anæmic persons in the same way.

4. *The Exanthemata and Typhus Fevers.*—Dr. Polli suggests the use of the sulphites in yellow fever, and prints thirty-seven reports from numerous correspondents of their value in measles, scarlatina, small-pox, erysipelas, and typhus. The general results reported are to the effect that they mitigate the intensity of the febrile exanthem, render the confluent and malignant forms benignant, shorten the course of the milder forms, and in all cases accelerate convalescence. In typhus gravior with fetid dejections and putrid symptoms, they are found useful. Dr. Polli does not venture to assert that they will prove available in the cure of cholera and plague; but he thinks there is reasonable ground for concluding that they will be highly useful as prophylactics in destroying the fermentable material upon which the malignancy and fatality of those pestilences chiefly depend, and thus rendering an inevitable attack mild. They may have no effect on the ferment, but they will deoxidise the fermentable stuff. In all these zymotic diseases the same principle applies.

5. *Syphilitic infection* and constitutional syphilis have been efficiently treated by the sulphites, but facts are not given. Pellagra, too, and tuberculosis, it is thought, may be benefited.

6. *Cattle Plague and Epizootics.*—Dr. A. Colaprete, di Campo di Giove (the Abruzzi), has used it in the cattle-plague, and

cured a third of the animals attacked. (c) And Dr. Polli refers to other instances in which the sulphites have been administered in epizootics, either to prevent or cure, or both, as in the epizootic aphtha of cattle.

6. Finally, Dr. Polli speaks favourably of the uses of the sulphites to anatomists and others. Corpses or viscera can be preserved for many weeks in a solution of sulphite of magnesia or of soda, without change either in colour, or density, or otherwise, and without acting upon the scalpel or other anatomical instruments when dissection is made; in these respects being superior to alcohol, arsenic, corrosive sublimate, or the sulphates and chlorides of iron, zinc, etc.

Some hints as to the administration of the sulphites may be useful to those who may be induced to try them in the various diseases in which Dr. Polli recommends them. They appear in the urine twenty minutes after being taken into the stomach unchanged, but are gradually changed in the system into sulphates. The saliva and sputa contain them. They are not decomposed in the stomach under ordinary circumstances, but when they are, there is a manifest production of sulphurous acid gas. When this is the case a little magnesia must be added to the sulphite to neutralise the acids of the stomach. The sulphites of soda and magnesia are tolerated in large doses if dissolved freely in water. A concentrated solution is apt to lie heavy on the stomach and cause a frontal headache; the more diluted, as a general rule, the better. They are decomposed by all the vegetable acids, however weak. Hence their beneficial influence will be counteracted if the patient takes citric, tartaric, malic, or oxalic acids, or foods or drinks containing them. This is important to remember when administering them in fever, inasmuch as lemonade, imperial, apple tea, and the like, are all incompatible drinks and destroy their efficacy.

The hyposulphite of soda is much more purgative than the sulphites of magnesia and soda, which are commonly more diuretic than cathartic in their action. There are individuals, however, whose intestinal canal is very sensitive to their action, in which cases a carminative and sedative are required to be combined. The purgation is, however, most commonly without pain or discomfort. The stools of those taking the sulphites lose all cadaveric or nauseous fetor. Upon the whole, the best mode of administering the sulphite of magnesia is in the form of powder, because of the large quantity of water it requires for solution, and because in that state it is most easily altered by the air. This sulphite has the least taste, and is the most active of all, and since it undergoes in the dry state the least change, it is to be preferred to all the others for medicinal purposes. From fifteen to thirty grains may be prescribed in powder, to be taken either in water or other vehicle, or it may be covered with gum or dextrine, and sugared and taken as troches or jujubes. The sulphites are better than the hyposulphites when a rapid curative action is required; but the latter may be advantageously substituted for the former when prophylaxis is aimed at. The great aim in administering them curatively is to saturate the system with them; and for this purpose four to five drachms daily must be the minimum quantity for an adult. Three or four times that quantity of sulphite of magnesia has, however, been administered with advantage; and a third or a fourth more (five to seven drachms) of the sulphite of soda will be borne well. Their long-continued use is apt to induce œdema and diseases of debility by their deoxidising qualities; otherwise, they have no influence on the system.

The numerous researches made by Dr. Polli and his correspondents merit careful consideration and trial by the Profession in England. Our experience, so far as we have tried the salts, is in favour of Dr. Polli's statements. It must be carefully remembered, however, that the sulphites cannot be fairly tested without strict attention to the conditions under which they can be reasonably expected to be available, and with such precautions as are required by a consideration of their chemical qualities and medicinal properties.

## REVIEWS.

*Notes on Cholera: its Nature and its Treatment.* By George Johnson, M.D., Lond., etc., etc. London: Longmans. Pp. 112. 1866.

"When, in August, 1854," says Dr. Johnson, "I first publicly stated in the *Medical Times and Gazette* that I was giving castor oil as a *purgative* in cholera the announcement was received with a shout of dismay. Give a purgative to a patient whose blood has already been drained of all its liquid and thus rendered too thick to circulate! Fearful malpractice!" The short but exceedingly elaborate and closely argued work before us is a vindication of that practice of 1854. We proceed to give our readers a short account of it, in doing which we hope we shall bear in mind the terrible responsibility which rests on any one who writes on this subject at present.

Dr. Johnson quotes Buckle to the effect that—"There is no well-attested case on record of any theory having been abandoned because it produced dangerous results." Moreover, the author begins his book by saying that "There are few diseases the treatment of which has been more influenced by pathological theories than that of cholera." A weighty consideration, truly; and one that deserves to be borne in mind in constructing new theories, as well as in demolishing old ones.

It is generally admitted, Dr. Johnson says, that the symptoms of cholera result from a poison which may enter the blood either through the lungs or through the gastro-intestinal canal. Although in the earlier part of his book he assumes the existence of this poison, he afterwards devotes a chapter to an attempt to show that the assumption is a reasonable one. He believes that by vomiting and purging this poison is got rid of. Indeed, he thinks that these symptoms are as much parts of the natural process of cure as the eruption in the skin is of small-pox. No one, he adds, recovers from small-pox without eruption, and no one recovers from cholera without vomiting and purging; although a patient may die of small-pox without eruption, and a cholera patient may die without purging and vomiting. He dies if the poison stays in him; he may recover if it gets out. Again, just as a small-pox patient may die from the injury the skin receives from an abundant eruption, so the cholera patient may die of the exhaustion produced by extreme vomiting and purging. But Dr. Johnson thinks vomiting and purging have been over-estimated as causes of death.

Here lies the practical point of the subject.

The author puts one broad principle of treatment in fair antagonism against another broad principle of treatment, and thus we may collect evidence on the therapeutics of cholera with some precision, if with some narrowness. There is much value in this sort of work; whilst there is no hope at all in mere careless, heedless labour at drugmongering. We thoroughly agree with the author when he says—"I have not the faintest hope or expectation that a specific remedy for such a disease as cholera will ever be discovered." In cholera, the author tells us, the system tries to rid itself of the poison, although the process it adopts is a violent one, and the patient often dies under it, and, as he admits, occasionally *from* it. Are we to assist the "natural curative process" by giving purgatives? Now, in most cases of cholera the system does not at first glance appear to require this kind of help. The cholera "poison" seems to be in itself by no means a gentle aperient. Let us here remark, however, that to say that Dr. Johnson recommends *purgatives* is scarcely to speak of his method precisely. His aim is not to increase the drain from the blood, but to empty the intestinal canal of what is really already outside the system proper. And although he shows that a great variety of purgatives, among others calomel, *have been given* with more or less success, we must bear in mind that the purgative he himself recommends is the simplest one of all—castor oil. His plan is not eliminative in the strict sense, then; but only in the subordinate way of removing materials from the bowels which have been already eliminated from the system.

Now we come to the theory. Let us remark again that, good as this may seem—and we have rarely seen so brilliant a piece of pathology—we must judge the practice founded on it separately. In spite of Buckle, let us collect evidence in particular cases and see what does good and what harm; whether the plan of treatment have a theory in the background or not. Theory will do good by suggesting remedies, but we must be empirics in our use of both suggestions of theory.

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(c) *L'Agricultura* for April 15, 1864.

Admitting that a poison has got into the blood—that it may kill all at once, but that generally the system tries to get rid of it by purging and vomiting, and that the patient often dies during, if not of this process, we have now to see what action Dr. Johnson considers the cholera poison to have on the system that leads the system to adopt such violent, and often suicidal, means for its riddance.

The "one great central fact" on which he founds his theory is, that "during the stage of collapse the passage of blood from the right to the left side of the heart is in a greater or less degree impeded." The particular point at which it stops in this circuit is betwixt the right side of the heart and the lungs. The stoppage occurs before the pulmonary capillaries, since after death during collapse, the lungs are anæmic; and yet it is not in the large branches of the pulmonary artery, as after death these and the right side of the heart are found to be gorged with blood; it is in the smaller branches of this vessel. The cause of the stoppage is contraction of the muscular coat of these branches, and this contraction is brought about by the irritant action of the cholera poison. It is not, then, so much that the poison poisons the general system, as that it picks out muscular tissue in particular. Hence it causes the painful cramp in the limbs, and hence also by cramp of the pulmonary arteries the blood is prevented passing into the lungs. Thus, then, to use the Author's words, "choleraic collapse is a form of asphyxia."

The following quotations from a well-known text-book will show that the facts which Dr. Johnson adduces from the morbid anatomy of cholera, in explanation of the pathology of the disease, are generally admitted. Aitken says, "The most common appearances in the lungs are the presence of blood in the large vessels, chiefly or solely; the collapse and the deficient crepitation, arising from the more or less complete absence of air and blood, and from the approximation of the molecular parts of the pulmonary substance. In other cases there is more blood in the minute structure, a corresponding dark colour of the lung, and a variable amount of frothy serum. The right side of the heart and the pulmonary arteries were generally filled, and in some cases distended with blood. The left side and aorta were generally empty, or contained only a very small quantity of dark blood; the left side had evidently received little or no blood, but had continued to contract, in some cases even violently, on the last drop of blood which had entered it."

Now Dr. Gairdner, Dr. Wilks, and Dr. Ogle all speak of the lungs as being often congested in cholera, but we do not gather from their statements whether they are reporting appearances from patients who died in collapse or in the reaction which follows it. The reader must observe that Dr. Johnson does not say that there is anæmia of the lungs in those who have died of cholera, but in those who have died in choleraic collapse. According to Aitken's description, the lungs contain blood in some instances of death in collapse.

The blood, then, is locked up in the venous system, and the arterial system is comparatively empty.

There is no doubt much ingenuity in the speculation that blood is arrested at one point by spasm of the arteries. The whole theory is coherent, but, of course, this part of it does not admit of demonstration. We need not quarrel with it. The main point is, does the blood stream get stopped here? and the manner of the stoppage may be thus provisionally explained.

This sudden and more or less complete stoppage between the venous and arterial system explains, Dr. Johnson thinks, the shrinking of the body and the choleraic pulse. There are other theories, however, to explain the stoppage. One is, that the blood, after the drain from it by the purging, becomes too thick to pass the pulmonary capillaries. In this theory Dr. Johnson has no belief whatever. He thinks the thickness of the blood is an indirect consequence, rather than a cause of the pulmonary obstruction. Loss of fluid cannot, at all events, be the cause of death in those cases in which the patients have died suddenly. There are, however, we believe, some who hold that sudden death is due to sudden drain of fluid from the blood, although the fluid passes into the intestines only. Dr. Johnson relates experiments by Blake to prove that some poisons—*i.e.*, certain salts—introduced into the veins do kill suddenly, and also that they appear to kill by arresting the circulation at the point where he thinks the cholera poison stops it. Air introduced into the veins, he tells us, kills in a similar way. He next relates the case of a woman suffering from mitral disease of the heart who died suddenly. She became pulseless, blue, cold, gasped for breath, and presented "the shrunken appearance of the features exactly resembling the collapse of cholera." Although she seemed likely to live but a few minutes, she did not die until after forty-eight hours. The cause of her death was fibrinous coagula in the branches of the pulmonary artery. It may seem to some that during the forty-eight hours that the woman lived, there ought, on Dr. Johnson's theory, to have been purging; but in cholera the venous blood behind the obstruction contains a poison which acts as a purgative, and thus tends to eliminate itself.

Now we come to certain other striking symptoms of cholera. When the blood cannot get into the lungs, there is, of course, a stoppage of oxidation, and, of course, an arrest of certain chemical changes. There is loss of heat—and this is one of the most striking symptoms of cholera—a scanty formation of urinary and biliary constituents, and the blood is dark and thick. The last condition, he states, bears no proportion to the loss of fluid. The views he here states are very interesting, and deserve careful consideration. They give a completeness to his theory. As to the suppression of bile, however, there is a difference of opinion. Dr. Gairdner says, "The suppression or retention of bile has been assumed, on account of its apparent absence in the dejections, to be one of the most characteristic features of Asiatic cholera. The assertion that the bile is suppressed, however, is obviously incorrect." The gall bladder generally contains bile. It is generally admitted that the secretion of milk is not interrupted. Dr. Johnson believes that this is because its constituents may, unlike the urinary and biliary constituents, be obtained from the blood without the addition of oxygen. Gairdner, however, says that the urinary secretion is the only one of the more important and constant glandular secretions which is suppressed in any stage of the disease. The secretion of bile, he tells us, is carried on to quite as great an extent as in most diseases in which digestion is totally interrupted, or as in healthy individuals when fasting.

So much for the constructive part of the book—what Dr. Johnson believes; now for the destructive—what he does not believe. In the first place, he is perfectly convinced that the theory that the worst symptoms of cholera are due to a drain of fluid from the blood is a wrong theory, and that the practice founded on it of stopping purging by opiates and astringents, as well as that of trying to restore to the blood the constituents it has lost by purging is an injurious practice. Now, of course, neither he nor any one else denies that there is in most cases of cholera a severe drain of fluids from the system, but he thinks this is not essential, as some patients die of cholera without any purging or vomiting at all. Again, he holds that when these symptoms occur, they are in no proportion to the malignancy and fatality of the disease. In support of this view he quotes Parkes (and Parkes appeals to Scott, Jameson, Orton, Kennedy, and Copland), who believes that "there is absolutely no relation betwixt the purging and vomiting and the symptoms of collapse," and who also says that cases in which there is little vomiting and purging are more malignant and more rapidly fatal than those in which there is much. This is certainly strong testimony. The author goes so far as to maintain that there is evidence of an inverse rather than of a direct ratio between the degree of collapse and the loss of fluid by vomiting and purging.

Then, approaching the same subject from another point, Dr. Johnson thinks the evidence shows that an excessive loss of fluid from the system does not produce the symptoms of cholera. We, however, pass this and much other important matter to speak of the treatment he adopts. We are bound to say, however, that his arguments are well put.

He gives emetics and purgatives to empty the stomach and bowels of fluids excreted into them. His object is not, as we have already said, to increase excretion from the blood. Whether there is an elimination of poison by the stomach and bowels or not, "no one can doubt," he says, "the existence of offensive *morbid secretions* which require to be cast off." He considers the success of the calomel treatment as evidence in favour of elimination by purgatives, and says that before cholera visited Europe Medical Practitioners not only used to give purgative drugs, but dared also to call them purgatives, and that several spoke highly of castor-oil in particular. Purgatives were given by Bell, Orton, Scot, Curtis, Twining, Christie, Rogers, Kennedy, Searle, and Corbyn, on no particular theory.

He tries to disprove the argument that remedies cannot be absorbed in the stage of collapse by reference to some experiments made by Magendie, and, indeed, he says there is undoubted evidence that opium and alcohol become absorbed and produce narcotic effects. However, he holds that the remedies of real use in collapse need not be absorbed, and thinks calomel and castor oil act directly on the inner surface of the bowels, and thus excite sufficient contraction to enable them to expel their contents.

Those who have been long imbued with the old principles—old in this country at least—may almost arrive at a knowledge of Dr. Johnson's practice in collapse by the simple rule, that it is just the reverse of their own. They gave their patients stimulants; he, when the breathing is hurried, recommends bleeding. They give astringents; he gives purgatives and emetics. They give ice or iced water. He denounces ice because of its tendency to stop the vomiting; he persuades the patients to take hot liquids; he makes no attempt to feed the patient. But they must remark that he gives reasons for his practice, and like others appeals to results. He does not bleed to lower the system, but to relieve the distension of the right cavities of the heart of the blood by which its action is encumbered. In one instance he admits an old practice is right, but it is right by chance. He says of Dr Stevens's plan of treatment by salines that the practice is not far from right, although the theory is wrong. The temporary benefit from injection of hot solutions of salines is from the heat, which for a time relaxes the pulmonary spasm, and not from the saline fluid supplied to the blood. Indeed, he says in a contemporary that the use of saline injections with the view of supplying fluid to the blood is founded on a theory which, "by suggesting a mischievous plan of treatment, has in its day been the direct source of greater harm to the human race than any other erroneous pathological theory that ever held sway over Medical practice." Yet, although heat thus gives help for a time at least, heat applied by the bath is rather injurious, because, Dr. Johnson thinks, cutaneous respiration is interfered with. He, however, thinks Dr. Murray's plan of injecting hot fluids into the rectum is worthy of trial, and advises *hot drinks* to warm the blood.

Such is the theory and such an outline of the practice which Dr. Johnson puts forward, and we do not criticise at present. We think that any one who reads his book will come to the conclusion that it may be the best plan to do *nothing* in the stage of collapse, except nurse the patient carefully, and soothe him as much as possible. Be it observed, in conclusion, that the treatment of *diarrhœa*, in an epidemic season, be it called premonitory, or choleraic, or cholerine, is quite a different matter. Little as we can do in blue cholera, the experience of mankind has shown that a great deal can be done in diarrhœa.

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*On the Curability of Certain Forms of Insanity, Epilepsy, Catalepsy, and Hysteria in Females.* By Baker Brown, F.R.C.S., etc. London: Robert Hardwicke, 192, Piccadilly, W. 1866. Pp. 85.

Surely this book is an "anachronism," as the penny-a-liners say of anything that seems not to suit the times. As we rub our eyes in reading it, we are tempted to ask, Are we under Queen Victoria or the Empress Messalina? Are we in the 19th Christian century or in Pagan Rome of the Empire? Surgery, such as is detailed in this book, ought surely to have been celebrated in the 6th of Juvenal! It would have suited the time when chastity was secured by infibulation, and when even eunuchs were not safe guardians of the marriage bed. Had Tiresias been a pupil at Mr. Brown's Hospital, he need not have lost his eyesight. He would never have agreed with Jupiter when he joked with Juno, and is said—

> "Major vestra profecto est
> Quam quæ contingit maribus dixisse voluptas."

Does Mr. Brown believe in the *lex talionis?*

> "Neque enim lex justior ulla
> Quam necis artifices, arte perire sua;"

or, again, as the same poet says :—

> "Qui primus *pueris* genitalia membra recidit
> Vulnera quæ fecit, debuit ipse pati?"

He may thank the gods that he lives when police constables abound, and not in times of "classic antiquity," else, verily, the women would have mobbed him, and served him worse than they did Orpheus.

To come to matter of fact, however, this is a book of which we can only say that we are sorry it ever was published, and that the task of reviewing it has fallen upon us. There is no need to wash dirty linen in public; and if there be an occasional suspicion of a vice amongst women which it is degrading to allude to, men of position and character need not write about it; all that needs be known or done can be managed quietly and delivered by word of mouth without wounding the honour of women, or the self-respect of the Medical Profession. We are sorry to see the author's undoubted energy and cleverness and boldness diverted from genuine Surgery and wasted on a subject so unfruitful of good.

Mr. Brown's book really treats of solitary vice in women. Every reader of a country newspaper knows what is paraded there in the advertisements about the consequences of similar irregularities in the male sex. Heaven grant that we may never see similar advertisements directed to "mothers!"

Mr. Brown gives a list of maladies, or, as he calls them, "stages of the disease," which he asserts may be traced to this malpractice. This list includes—"1. Hysteria, including dyspepsia and menstrual irregularities. 2. Spinal irritation, with reflex action in uterus, ovaries, etc., giving rise to uterine displacements, amaurosis, hemiplegia, paraplegia, etc. 3. Epileptoid fits, or hysterical epilepsy. 4. Cataleptic fits. 5. Epileptic fits. 6. Idiocy. 7. Mania. 8. Death." All these—which include or may be made to include, by the bye, one-half almost of female diseases—he traces as so many steps of "the disease." We give him credit for great ingenuity and delicacy in naming the actual practice in question, which he veils under the terms "peripheral irritation," etc., and likewise for the host of "authorities" whom he quotes, although they really do not support his practice.

Well, "the disease" being given, and a pretty comprehensive one it is, he gives a diagnosis. He describes those visible characters of the organs of women which he believes to be pathognomonic, and in these he includes even a "peculiar, straight, and coarse hirsute growth." His cure is excision of the clitoris.

Repeating what we have said, that it is a great pity that a topic so painful should ever have been written about, we must add that Mr. Brown's book seems to us by no means a safe guide for the Practitioner. The symptoms ascribed to self-irritation include those of every case of hysteria, even arising from mental trouble, mental weakness, or other innocent causes, in which sex has no share. A Practitioner might be led by this book into inquiries most painful to his patient and injurious to himself. We cannot help thinking that many most pure and innocent-minded girls, utterly unconscious of evil, might, if cross-questioned, give answers which might be interpreted into confessions utterly unintended and baseless. A good many fathers and brothers might be apt to resent the Doctor's conduct, if he mooted such points. We take for granted that the cases of hysteria, etc., on which Mr. Brown would operate, are of long standing, and severe, and such as can be traced, as he believes, to unnatural excitation; but we think it an omission that he has not treated of the physical conditions which produce irritation and itching of the external female organs, for surely it were better to relieve these causes than to perform a painful operation. He does not give due weight to measures, local or general, for rendering those parts less sensitive to irritation. To assume that this vice can only be cured by operation, is, we think, a mistake. On this point, we would refer Mr. Brown to a most careful and conscientious writer, who has a right to be listened to on any matter relating to the gravest derangements of the nervous system. "There are other almost incurable propensities," says Dr. Sankey, in his lately published Lectures, "such as . . onanism . . which will require some little exertion of ingenuity, but may be overcome with kindness and persuasion and with watchfulness. The worst case of onanism in a female that I ever met with (and I believe the cases are much rarer than is supposed) was cured by taking cod-liver oil and wine. When she grew fat and strong, the propensity disappeared. Cause and effect are often the reverse of what is at first imagined, and often, in fact, result in each other. Onanism is often supposed to be the cause of the pale and emaciated looks and feeble health of a patient, whereas in some, at least, the irritability and debility have induced to onanism." This is much more like philosophical practice than Mr. Brown's. We believe that a healthy, robust person, of either sex, would scorn the vice in question. Feebleness, nervousness, want of air and exercise, irritability, and the fretfulness of an ill-nourished nervous system—the first steps, in fact, of nervous disease, are the first steps of sexual irregularity. Sickly men and women, too, are far most prone to rash and improvident marriage.

To resume. Mr. Brown assumes that because some hysterical girls may be tempted to these malpractices, that the malpractices made them hysterical, just as because some idiots suck their thumbs, some sages think thumb-sucking a cause of idiocy. Some of his own cases (as case 6) and his own comments, tell directly against the benefits of the operation, which, surely, was a cruel one to perform on a mere hysterical girl, even if it cured her, which it did not. He is quite silent as to occasional ill-consequences of the operation, although these have been brought forward by no less an authority than Dr. West, and surely need notice. Nothing can be more precise than Dr. West's charges on three points (see his "Lectures on the Diseases of Women," third edition, p. 663)—1st. That wrong diagnosis is possible, for he gives the case of a respectable lady, aged 53, whose youngest child was 20 years old, who was operated on, although, as Dr. West asserts, there was not the smallest foundation for it, and she had never been guilty of the vice in question. 2nd. That the operation was performed without the patient's knowledge, a thing contrary to strict rules of Professional conduct. (With regard to this charge, we do not learn that it was Mr. Brown who performed the operation, and we must not make him responsible for the misdoings of persons who imitate him.) 3rd. That the operation was followed by three years of "almost ceaseless anguish." We say again, that with the knowledge of these charges against the operation, Mr. Brown would have done well to have given his readers a salutary caution. It is not every Surgeon who may have the skill in diagnosis requisite to justify the operation, or the self-control to resist the suggestions of the clergyman, if, as the *Church Times* says, these reverend pastors begin to interest themselves in this department of physical morality. Anyhow, we can but fear that great obloquy must fall on the Medical Profession, if the custom of proposing such an operation, so degrading to the subject of it, and of making the preliminary inquiries, should become too common.

## GENERAL CORRESPONDENCE.

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### THE RECENT CASE OF CÆSAREAN SECTION.

Letter from Dr. R. Greenhalgh.

[To the Editor of the Medical Times and Gazette.]

Sir,—I beg to thank you for your flattering comments on my Cæsarean case at page 370 of your valuable journal of April 7, 1866. It may interest you and your readers to learn that the whole of the abdominal wound healed by the first intention, that my patient was able to leave her bed on the 12th day, and that she left town for Essex on the 22nd day after the operation. My patient further volunteered the following statements: that she had never felt so well at the same time after her three previous natural confinements, and that she believed the operation had cured her of the cancerous disease, as she had no pain, no fetid discharge—in short, no symptoms whatever of any internal disease. It is my intention to publish full details of the case as soon as my occupations will permit. I am, &c.,

77, Grosvenor-street, W, April 25. R. Greenhalgh.

### CHOLERA QUARANTINE.

Letter from Dr. James McCraith.

[To the Editor of the Medical Times and Gazette.]

Sir,—If the following observations concerning "Cholera quarantine" seem of sufficient importance or interest at this moment, when a cholera congress or conference is sitting at Constantinople, you will give them a place in your columns.

Cholera is an infectious disease, and the sphere of its infection is more extended than that of most other diseases in the category to which it belongs. Experience has demonstrated the utter inefficiency of quarantine, as at present put in practice, to stop its march. This depends on the sphere of its infection being so extended. The infection may, I conceive, be carried a considerable distance by currents of air, up drains, along corridors, etc., etc. It may also be carried by water, and the dejections being so abundant, the infection from one case may be propagated widely. Such I believe to be the reason why present quarantine is ineffectual against it. I believe in perfect isolation,—that is, "perfect quarantine;" but in Europe, or wherever trade and commerce exist, this quarantine, it is evident, cannot be put in practice. The cure would be worse than the disease; the suffering inflicted thereby worse than any the disease could cause.

The disease, as a rule, though there are many exceptions, attacks a patient only once. This explains why, on a first attack, there are many more attacks and deaths than on any succeeding occasion,—generally as three to one. I believe that every one in a town who has had an attack of diarrhœa, has really passed through cholera, if the disease be prevailing in such town at the time. Like other diseases of like nature (scarlatina, for instance), when epidemic, some have it slightly (scarcely count themselves ill), others severely, and die thereof, but all remain with an immunity against second attacks.

Why, if so infectious, do we find it confined to one quarter of a town; why pass over intervening towns in its march; why, as is asserted, attack all the houses at one side of a street? We do not know, I would answer; the instances are certainly rare where it acts so capriciously; and scarlatina and small-pox do the same. Currents of air blowing steadily in one direction, more especially if the drains flow in the same direction, would in a great degree explain these exceptional circumstances.

Now, all this being premised, there is, I believe, one very effectual way of proceeding in our power to stop cholera, and it is the following:—Establish an efficient sanitary commission, with full powers, at Mecca, and stamp out the disease there. Cholera has invariably come to Europe from Mecca. The disease, from whatever quarter of India (its birthplace) it may have come, passes through Mecca. It first comes there, and there it might, could, and should be met. All the governments of Europe should combine to establish an efficient sanitary police at Mecca. If all the smuggling of exciseable articles took place from thence, and the revenue of the different states suffered severely thereby, as their health and lives do from cholera, they would not be long in devising an effectual Custom-house check to put a stop to such. But the Profession knows well that it is easier to cheat a man out of his life than out of sixpence. The Indian Government should "put its shoulder to the wheel," and strictly enforce a rule "prohibiting all pilgrimages to Mecca from infected localities. Unfortunately, it is at such periods of infection that superstition has most power to stimulate mankind to such acts of "devotion" or "propitiation."

On all the great routes leading to Mecca, at one or two days' distance, more especially at the Indian side, and with regard to pilgrims from India, sanitary stations should be established, where a certain number of days should be passed before entering the holy city. If in Mecca itself any suspicion should arise, all further entrance of pilgrims to be stopped for that year. Fortunately the telegraph will do good service in this way. For that year all pilgrimages should be stopped, and the utmost precaution taken with regard to all leaving Mecca for the West. It would not be a bad plan to make the pilgrims from East to West take their turn of coming on alternate years; all from the East (and more especially India) on one year, and all from the West on the following, and so alternately. At all events, it is perfectly possible, and all civilised nations should insist, that measures be taken to stamp out the disease at Mecca. All should assist. Mahomet Ali stamped out plague at Alexandria (its birthplace). We cannot do as much, perhaps, by cholera in India; but, at all events, as it must pass Mecca, we can lay wait for it there, and destroy it. Nowhere else but at Mecca is this possible. Now, once the disease reaches the Mediterranean, it is useless establishing quarantine. When the disease reaches England or France, do either of those countries put their chief towns in quarantine with each other? Is Dublin or Liverpool ever in quarantine with London? or Toulon or Marseilles with Paris? Yet this is what our wise sanitary authorities have done in Turkey. They have put, and most likely will again put, Smyrna and Alexandria in quarantine with Constantinople. Now, if Liverpool is never put in quarantine with London, why should Paris or Constantinople be put so, especially when all experience demonstrates the futility of such proceeding? The quarantine which may be effectual is quite impossible; then why persist in a quarantine which brings nothing but suffering in its train? Abolish all quarantine in the Mediterranean and in Europe, and direct all your measures and all your energy to Mecca and India, as far as pilgrims to Mecca from thence are concerned, and save all the unnecessary expense, all the hindrance to commerce, all the loss of revenue, all the suffering and loss of life even, which the present system entails. You have all the mischief centreing in Mecca, all the enemy collected there—surely means can be devised for crushing him there. If allowed to escape from Mecca, every day's journey the enemy makes will render his capture or destruction a thousand times more difficult.

The Conference at Constantinople will very likely be made a political tool of. There will be crochetty heads amongst the number—one-idea men—and probably a system will be elaborated most injurious to the interests of Turkey. This may suit in certain regions politically. English trade and commerce will suffer by any other system than the one I have given a sketch of. I speak from experience, having seen many lives sacrificed by such conferences of many nationalities; they end by compromises, than which, in the present case, nothing can be more disastrous.

I am, &c.,
James McCraith, M.D., F.R.C.S.

Smyrna, April 18.

## LANCISI AND THE CATTLE PLAGUE.

### Letter from Dr. W. O. Markham.

[To the Editor of the Medical Times and Gazette.]

Sir,—Permit me to point out a somewhat important historical error which Dr. Farr has made in his reading of Lancisi. Dr. Farr has used, as an illustration of his theory of the natural progress of the Rinderpest epidemic, the supposed fact that in the epidemic at the beginning of the last century, it ran its course in Italy in nine months—arose, spread, and disappeared—and he quotes Lancisi as his authority. Now, Lancisi tells a very different tale; and so far from his history corroborating Dr. Farr's theory, it does precisely the reverse. The cattle plague, Lancisi tells us, first appeared in Italy (in the Po district) in 1709, and continued its ravages there until 1713. It is quite true that the disease was extinguished in the Roman States in nine months, but Lancisi expressly states that Rome and the Campagna were thus freed from the disease solely by reason of the energetic measures adopted by the Sacred College for its suppression; and by way of warning and contrast, he refers to the fact that in other parts of Italy, where no such stringent measures were carried out, the disease raged for four years—until, in fact, it had nearly devastated the country. You will see from this that Dr. Farr's main illustration goes exactly against his doctrine.

I am, &c.,
W. O. Markham.

## THE WORKHOUSE INFIRMARY MOVEMENT.

### Letter from Mr. Berkeley Hill.

[To the Editor of the Medical Times and Gazette.]

Sir,—In your "Editorial" of the 21st April on the Workhouse Infirmary movement you make some grave complaints against the promoters of that movement.

Some words of explanation from one who, interested like yourself, has carefully watched its proceedings, will, I trust, show you that your strictures have been passed in misapprehension. You accuse the Association of "beginning this movement by wounding the feelings of noblemen and gentlemen whose benevolent devotion to the sick and poor of their own parish is unquestionable." The Association, while recognising it, has nothing to do with the benevolence which no doubt actuates many of the guardians in the discharge of their duties, but it has set itself the task of calling public attention to the prevailing condition of Workhouse Infirmaries, which, being incontestably bad, reflects great disgrace on the present administration of the Poor-law. In doing this the Association has carefully avoided imputing blame to individuals, or even to corporate bodies, otherwise than by publishing the faults of their management. And hitherto no Board of Guardians has been able to disprove any single statement of their mismanagement published by the Association. The fact that some few Boards of Guardians are free from blame in the performance of their duties is doubtless true, but that does not exonerate the majority of them.

The "second act of injustice, no doubt an unintentional one," is, you say, an attempt on the part of the Association to lower the public estimation of the Workhouse Doctors, and, moreover, charge them with sparing the supply of drugs to their patients in order to increase their own emoluments. This would be an act of very great injustice towards a most hard-working, much-enduring body of men, but it has not been committed by the Association, which, on the contrary, has spoken with the greatest respect for the Poor-law Medical officers; it has urged most strongly that they shall be more highly paid, their duties much diminished, and that they shall be relieved from the cost of the medicines supplied, a charge which the Association has shown, at the present rate of payment, must in many cases equal, and in all form a large part, of their salaries. If this treatment can be construed into advocating "that the future Medical officers are to be unsalaried, and that general Practitioners who cannot afford unsalaried places are to be shut out," I am unable further to defend the views of the Association on this subject.

The suggestions for better nursing, also, do not meet your approval. You ask if it is "intended that no pauper is to do any of the functions of a nurse?" You suggest that "many infirm or decrepit family servants are still competent to do some of the nursing the sick require." Surely an infirm or decrepit person requires nursing and attendance himself, and has only been admitted into the Workhouse when his services have become valueless; if he is still in the position to perform the toilsome and delicate duties of a nurse, he would seek a more remunerative field for his labours outside the Workhouse. It is insisted by the advocates for reform, and I feel convinced you will on reflection agree with them, that satisfactory nursing can only be procured by employing persons trained to their duties and enjoying bodily health and vigour.

You next imply that the Association has blamed the Guardians because the Workhouses are overcrowded and insufficient space is allotted the inmates.

This is again a misconception; the Association has pointed out how monstrous it is that the sick pauper should be granted less than half the space found necessary for the sick soldier or sick felon, and less than one third that allotted to each bed in all our public Hospitals, but in doing this the blame was thrown upon the system, not on the individuals engaged in working that system.

No one, I apprehend, dreams of imputing the present faulty method of representation of the people in Parliament to the evil conduct of individual members of the House of Commons, but rather to the imperfect means at the command of the nation for representing its opinions and interests. So the Association urges that legislation is necessary to amend the present rules for governing the sick poor. The Guardians may, I think, justly shelter themselves under the rule of the Poor-law Board, which permits this small amount of cubic space to be maintained.

In your concluding paragraph you express an intention of returning to the discussion of the Association's proposals; I hope you will do so, that they may have the benefit of criticism in your columns, and that we may have the advantage of your opinion in reviewing them.

I am, &c.

14, Weymouth-street, April 21. Berkeley Hill.

Royal Institution of Great Britain.—The annual meeting was held on Tuesday, May 1, Sir Henry Holland, Bart, M.D., D.C.L., F.R.S., President, in the chair. The annual report of the Committee of Visitors for the year 1865 was read and adopted. Thanks were voted to the President, Treasurer, and Secretary, to the Committees of Managers and Visitors, and to Professor Faraday, and the other Professors, for their services to the Institution during the past year. The following gentlemen were unanimously elected as officers for the ensuing year:—*President:* Sir Henry Holland, Bart., M.D., D.C.L., F.R.S. *Treasurer:* William Spottiswoode, Esq., M.A., F.R.S. *Secretary:* Henry Bence Jones, M.A., M.D., F.R.S. *Managers:* Warren de la Rue, Esq., Ph.D., F.R.S., Sir George Everest, C.B., F.R.S., John Hall Gladstone, Esq., Ph.D., F.R.S., William Robert Grove, Esq., M.A., Q.C., F.R.S., Cæsar H. Hawkins, Esq., F.R.S., Sir John Lubbock, Bart., F.R.S., Pres. Ent. Soc., John Carrick Moore, Esq., M.A., F.R.S., William Pole, Esq., M.A., F.R.S., William Frederick Pollock, Esq., M.A., Lewis Powell, M.D., F.S.A., Lt.-Gen. E. Sabine, R.A., D.C.L., LL.D., Pres. R.S., Earl Stanhope, D.C.L., F.R.S., Pres. Soc. Antiq., Joseph William Thrupp, Esq., Charles Wheatstone, Esq., D.C.L, F.R.S., Colonel Philip James Yorke, F.R.S.

## REPORTS OF SOCIETIES.

## ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, APRIL 24, 1866.

A paper, by Dr. JOHN HARLEY, was read on

### A CASE OF HYDATID DISEASE OF THE LIVER, AND REMARKS ON THE TREATMENT OF SIMILAR TUMOURS.

Mr. B. G——, aged 29, the subject of an enormous hydatid tumour of the liver, had been under the author's care for more than two years before final proceedings were taken for his relief. In June, 1863, the lower part of the chest and abdomen were greatly distended by a dull, elastic, fluctuating tumour; the lungs and heart were displaced upwards, and the rounder lower border of the tumour could be felt two fingers' breadth above the pubes and Poupart's ligament. The centre of the swelling was at the epigastrium; the hypochondria were enormously distended, and the lower parts of the chest-wall were widely spread outwards. The patient was much deformed by the swelling, and he measured forty inches and a half around the body midway between the ensiform cartilage and the umbilicus, where the tumour was most prominent. During the next two years this measurement gradually increased to forty-two inches and five-eighths, and the tumour descended a little from the chest. On July 17, 1865, the patient was seized with a severe pain in the right iliac region. On the 26th the measurement round the body at the line above indicated was forty-four inches and a half, and, fearing rupture, the author resolved to puncture the tumour, and next day Mr. Bright, of Forest-hill, introduced a medium-sized trocar at a point in the median line midway between the ensiform cartilage and the umbilicus. On withdrawal of the trocar clear fluid like water was ejected with great force, and nineteen and a half pints, containing many minute hydatid cysts, were removed. The last two pints were of a bright yellow colour from admixture with bile. The whole tumour appeared to be in an actively growing condition, and a little of the turbid fluid presented, when examined, vesicles about one-thirtieth of an inch in diameter, with from five to nine scoliers attached to them; very numerous free scoliers, some with retracted, others with everted hooklets; and hundreds of detached hooklets. The patient was greatly relieved by the operation. The subsequent treatment consisted in maintaining permanent communication between the interior of the sac and the surface of the body. The canula was retained for the first forty days, and its place was then supplied by an elastic catheter, and the passage was gradually dilated by the introduction of others until three No. 12 elastic catheters could be introduced within the sac. The catheters were constantly retained six or nine inches within the sac. A free discharge of bilious fluid (about twenty ounces daily) and a few fragments of hydatid membrane continued, with occasional slight obstruction, up to September 16, and the patient progressed without a single bad symptom. On the 16th severe febrile symptoms with slight jaundice arose from retention of the discharge. The evacuation of a large quantity of fetid fluid caused great amelioration, but on the 17th considerable hæmorrhage from the liver occurred, and the sac became distended with blood. Grumous blood and cyst-wall continued to be discharged, and oozing of blood into the sac continued for some days. On September 28, and again on October 11, large thick fragments of dense, blood-stained fibrous tissue—evidently portions of the sac which had been connected with the liver—came away. After the hæmorrhage had been controlled the discharge consisted of diluted bile, and after the sac was washed out, half an ounce of pure ropy bile could for many days be collected as it flowed from the catheter in the course of a few minutes. About this time the discharge averaged sixteen ounces daily. On October 11, after the opening had been dilated so as to admit three No. 12 elastic catheters, the whole of the remaining cyst-wall, which had caused continued obstruction to the discharge, was evacuated in the form of yellowish-green laminated membrane of various thicknesses. Henceforward there was no difficulty in completely washing out the sac. For the first four months the alvine secretions were almost continuously destitute of bile, and they were occasionally very offensive. On November 25 the discharge had decreased to three ounces, and the cyst was contracted into the right hypochondrium and epigastrium. On December 12 the last trace of bile disappeared from the now purulent discharge, and the catheter was finally removed on the 22nd, when the cyst was completely contracted and obliterated. The patient resumed his usual occupation on January 1, 1866, and a few days afterwards the fistulous opening was cicatrised. The patient has improved in health up to the present time. The spleen remains a little enlarged, but the lungs have recovered from their compression, and the heart is restored to its normal position. Throughout the treatment the abdomen continued flaccid and free from pain. Now the liver dulness is normal, and only a thickened cord-like mass can be felt in the epigastrium. The patient is a little stouter than he was before the operation, and the measurement around the same part of the body is now thirty-one and a half, which is thirteen inches less than the measurement on the day of the puncture, and nine inches less than when the patient first came under the author's notice in June, 1863. The main difficulty in the treatment consisted in the evacuation of the membranes of the ruptured hydatids. The utmost attention and perseverance were required to overcome the impediments to the discharge which these membranes continued to offer so long as any portion of them remained within the sac. While endeavouring to secure free discharge of the fluid formed within the sac, the author had two other objects in view—viz. (1), to prevent decomposition of the fluid within the sac; and (2) to excite inflammatory action in its interior. These were attained by the injection of iodine and creasote water; one drachm of the compound tincture of the iodine of the London Pharmacopœia was injected into the cyst three days after it was punctured. This was continued morning and evening for about a week, when the amount was increased to two drachms twice a day. From the 14th to the 23rd of August one ounce of the tincture was injected daily, and the evening injection was then discontinued on account of profuse night-sweats which the injection of so much iodine appeared to produce, and six drachms were injected every morning only until September 17, when it was discontinued altogether. During these seven weeks upwards of thirty ounces of the tincture of iodine, diluted with an equal quantity of creosote water, were thrown into the sac. No pain was ever produced, but when the sac became a little tender a feeling of warmth in the epigastrium followed the injection. When hæmorrhage took place from five to ten grains of nitrate of silver dissolved in a few ounces of water were daily injected for a week, the sac being previously washed out with creosote water. Afterwards the sac was washed out every morning and evening with a solution of sulphate of zinc in creosote water (one drachm to ten ounces). Throughout the treatment the lower part of the chest was supported by a broad laced bandage, and the abdomen was also tightly bandaged, a compress being placed on the right side so as to press the contracting sac towards the right hypochondrium. For a considerable portion of the time during which the patient was under treatment, bile was either altogether absent from the intestine, or it was deficient in quantity. To supply its place twenty grains of inspissated ox-gall were given in the form of a bolus every night at intervals. So long as the discharge continued free the appetite was good, and the bowels acted regularly; and during the greater part of the time the patient took a mixture composed of perchloride or pernitrate of iron and quinine. Having observed this complicated case with much interest, and given it close attention, and subsequently studied the histories of those recorded cases in which cure has been attempted by operative proceedings, the author is convinced of the necessity of observing the following rules in the treatment of hydatid tumours of the liver:—1. They should be punctured above the umbilicus, because the sac, however large, possessing great elasticity, ultimately contracts into the epigastric or hypochondriac regions. 2. As soon as operative measures are determined upon, the sac should at once be punctured with a large trocar, and the canula retained. 3. The canula should be retained until it is loosened by suppurative action and tends to slip out. Its place should then be supplied by two or three elastic catheters, and their size gradually increased until three or four of No. 12 size can be readily introduced. A single catheter or a single very wide silver tube is ineffectual for emptying the sac of its fluid and membranous contents, as the latter form most complete valves for closing the orifice of a single instrument. By using three or more catheters, and advancing the ends of two beyond the others, and causing their eyes to look inwards towards each other, the pliable cyst-wall does not so completely envelope the ends of the instruments, and the fluid runs away through the interstices. 4. To facilitate disintegration of the cyst-wall, and to excite inflammation and adhesion of the sac, iodine should be freely injected until after some time it produces a sensation of a glow of heat within the sac. Then its use should be discontinued. 5. To prevent decomposition of the fluid within the sac, creosote water (thirty minims to thirty-six ounces) should be freely injected morning and evening. Injected down one catheter it is allowed to flow away by the others, and thus the sac may be thoroughly washed out. 6. After all the cyst-wall has been discharged the sac should be washed out in the same manner morning and evening with a solution of sulphate of zinc in creosote water (two drachms of sulphate of zinc to thirty-six ounces of creosote water). If this or other astringent solution be used before the expulsion of the disintegrated hydatid membranes, they may become hardened by the solution, and their expulsion thus retarded. 7. The previously distended parts must be constantly kept tightly bandaged. It must be remembered that the adhesions of a large hydatid tumour are very extensive, and that if the parts distended by its growth be not brought and retained together, the contraction of the sac will be retarded, if not in some cases prevented. The paper was accompanied by a synoptical table of seventy-nine recorded cases of hydatid tumour of the liver treated by various operative measures, or resulting in rupture through the abdominal walls. From an analysis of these cases, the author has endeavoured to show that obstruction to the discharge of re-accumulated fluid within the sac, and its retention and decomposition, are the chief causes of death in the fatal cases, and he strongly advocates the formation and maintenance of a free communication between the interior of the sac and the surface of the body. The tumour in the case above described was of unusual size, and apparently the largest that has been successfully treated, and yet, apart from the hepatic hæmorrhage and diversion of the biliary discharge, no bad symptom ever resulted from opening it, so long as the contents of the sac were freely evacuated. Since, therefore, so large a tumour can be radically cured by the treatment above detailed, much less danger is to be apprehended when the same treatment is applied to smaller ones.

Dr. Cobbold considered that so remarkable a case as the one just described ought not to be passed over without some discussion. Undoubtedly there was no case on record where so large an hydatid tumour had called forth similar operative procedures. Whilst Dr. Harley was to be congratulated on the successful issue of the case, he (Dr. Cobbold) was of opinion that the measures adopted in this case were not necessary in the more common forms of hydatid tumour of the liver. The case was quite exceptional. Nature often effected a cure by herself. It was seldom advisable to make such large openings. Dr. Harley in the course of the paper had alluded to the circumstance of the patient having been accustomed to eat underdone meat. This habit could have nothing whatever to do with the formation of the hydatid in question. The true explanation of the source of the parasite was very different. The patient probably obtained the larva when he drank (stagnant) water obtained from a locality to which dogs had access. In fact, the prevalence or otherwise of hydatids in any country bears an almost strict relation to the number of dogs permitted to go about at large. It explains the great number of echinococcus cases in Iceland, where dogs are, on other grounds, so essential to the peasant. In Denmark the disease seemed more abundant than in our own country. Dr. McGillivray had recently published twenty cases occurring at the Bendigo Hospital. Probably the disease was rather frequent throughout the Australian colonies. It was a very difficult matter to arrive at any correct estimate as to the actual prevalence of hydatid in this country. Dr. Murchison has told us that "out of 2100 post-mortem examinations recorded at the Middlesex Hospital between April 19, 1853, and August 25, 1865, hydatids were found in only 13, or once in 161 cases; and in only 7 of the 13 cases, or once in 300 cases, could they be said to have occasioned the fatal event." The expression "only" conveys the notion that the number of cases and deaths is small. In Dr. Cobbold's opinion, however, it is rather large. If such an estimate could be accepted as a criterion of the prevalence of this disease throughout the civilised world, it would give us upwards of 100,000 deaths annually from hydatid disease alone. To those who had not gone thoroughly into the subject, such an estimate might appear extremely absurd, yet, independently of the special Hospital data afforded by Dr. Murchison he (Dr. Cobbold) had, from other considerations, honestly arrived at the conclusion that the above figures were not very much above the mark. In conclusion, to show the many dangers which Dr. Harley's patient had escaped, Dr. Cobbold related the case of a schoolboy who died from the effects of a blow on the right side. The blow was slight, given during play, yet in a very short space of time the boy ceased to exist. The tumour in this lad's case was comparatively small.

Mr. Hutchinson felt much indebted to the author of the paper for the careful narrative of a very interesting case, and for the valuable tables he had collated. He could not, however, wholly agree with the rules laid down for the treatment of these tumours. He preferred an early puncture and closure of the orifice to the plan of delaying an operation to the last moment, and then endeavouring to establish a fistula and to remove the cysts. The latter plan was, he thought, productive of needless risk to the patient in more than one direction. If the tumour had developed to the size described in the author's case, then he admitted that the treatment adopted was the best; but the question he wished to raise was, whether the tumour ought to have been allowed to increase to such dimensions. He next related the particulars of three cases in which he had adopted the plan by puncture with a very fine trocar and closure of the wound. In the first the patient was a woman, under the care of Dr. James Jones, in the Metropolitan Free Hospital, and the tumour of large size, filling the right side of the abdomen. A washhand-basinful of clear hydatid fluid was drawn off through a very small canula. Some inflammation of the cyst followed, and air was secreted into it, but in the course of a fortnight the air had disappeared and the cyst was contracting. The patient recovered perfectly, the tumour wholly disappearing. When seen some months afterwards the woman was in good health. The second case was that of a patient seen in consultation with Dr. Hughlings Jackson and Mr. Marsh, of St. John-street. This woman was extremely ill, and suffered from constant vomiting. She had a large tumour filling the epigastrium, and bulging below the umbilicus. The diagnosis of an hydatid cyst having been formed, after some persuasion, she consented to a puncture, but not until her state had become very critical. About two pints of clear fluid were drawn off. She made an uninterrupted recovery, her symptoms having been at once relieved by the operation. Two months later she was in excellent health, and had no fulness whatever at the site of the tumour. The third case was that of a woman in the London Hospital, under the care of Dr. Parker. The hydatid cyst occupied the epigastrium, and bulged prominently. It had been diagnosed as such both by Dr. Parker and Dr. Hughlings Jackson before he (Mr. Hutchinson) saw the patient. With a very fine trocar, from one to two pints of clear fluid containing echinococci were drawn off. The cyst refilled during the next fortnight, but never became painful. Afterwards it again diminished, and at the present date—six months after the puncture—she is in excellent health, and there is no fulness whatever to be discovered in connexion with the liver. In all these three cases the simple evacuation of the fluid sufficed to destroy the vitality of the parasites, and was followed by the shrinking up of the cyst. In none of them were any of the secondary cysts removed. Mr. Hutchinson stated that he used an exploring trocar of the size of No. 1 catheter, and allowed as much fluid to escape as would freely do so, but was careful not to make any rough pressure. In withdrawing the canula, he always did so quickly, and with the orifice closed by a finger, so as to prevent the risk of any fluid escaping into the peritoneum. He did not feel to care much whether adhesions existed or not. In two of his cases it was certain that they did not. Mr. Hutchinson added that he thought the estimate of 1 death in 300 as due to hydatids was too high an estimate as regards English practice. He had seen a few cases of death from these tumours, quite sufficient to show in a strong light the importance of Surgical treatment; but still they were very rare. In common with all who make post-mortems, he had met with many instances of collapsed—spontaneously-cured—hydatids in the bodies of those who had died of other diseases. In one case under his own care he had, he believed, witnessed the spontaneous cure of a very large hydatid tumour. The patient was a young Irishman, and the tumour, which almost filled his abdomen, certainly contained from one to two gallons. The operation was repeatedly urged upon him, but he refused to consent. At length he was laid up with an attack of severe pain, which led to apprehensions that the cyst would burst; still he refused to have it punctured. After this the cyst diminished to half its former size, and subsequently the man returned to his work, and Mr. Hutchinson had been assured by the man's sister that the tumour eventually disappeared. He had not, however, had an opportunity for verifying this statement himself. He concluded his remarks by relating the particulars of a case still under his observation, in which a girl of 5 years old had become the subject of an hydatid tumour in the liver. He had watched this patient for two years, during which the parasite had slowly increased. It appeared still, however, to have a thickness of liver-tissue in front of it, and he had deferred the puncture. The great question as to the puncture of these tumours was when should it be done? Since a large number undergo spontaneous cure, the Surgeon ought not hastily to interfere; still, however, he (Mr. Hutchinson) felt confident that an early operation by the method he had recommended was far preferable to the plan of waiting until the patient's life became endangered.

Dr. A. P. **Stewart** regretted that Dr. Greenhow and Dr. Murchison were not present to speak on cases of hydatid disease which had been under their care in the Middlesex Hospital. Dr. Stewart then alluded to cases of hydatid of the liver in which there had been a great diminution in the size of the tumour, and referred to a striking case in illustration. In the instance he related the patient afterwards died of peritonitis, after exposure to cold. A large hydatid cyst was found in the liver at the autopsy. Dr. Stewart then referred to the case of a patient who had been sent in for operation by Dr. Murchison, but in this instance there was a consultation, and the patient being afraid of the suggested application of caustics, left the Hospital the same day. She afterwards went to another Hospital, but soon left it also, and afterwards died at home. There had been, Dr. Stewart said, four cases of operation for hydatid tumour of the liver, and in each case the patient did well after the operation. Dr. Stewart referred to another case now under his care, in which there had been bulging of the chest wall. When this bulging had subsided, the abdomen increased in size, and he intended in this instance to encourage the operation. There did not seem, Dr. Stewart said, to be any material risk in the operation.

Dr. **Hare** had listened with great attention to the paper and to the observations on it. He alluded expressly to the observation on the diminution or disappearance of such swellings. In the instance of a patient under his (Dr. Hare's) care, who had two hydatid tumours, one of them disappeared and the other decreased in size. In this case he had hesitated to operate, because he had not watched the patient long enough, and because the liver tissue over the cyst was too thick. Dr. Hare then remarked that hydatid tumours of the liver were often multiple. It was, he said, very important to know whether we have to deal with one or more. In some cases, when the tumours are of good size, we may determine the question. Dr. Hare here entered into the points by consideration of which a diagnosis might be made, and related a case in which he had declined to recommend an operation, on the ground that there was more than one cyst. At the autopsy, three cysts were found, one of them being enormous. Dr. Hare then spoke of the occasional existence of peritonitis. This he thought ought not to be interfered with by treatment, as the existence of adhesions rendered the operation of tapping more easy.

In answer to the foregoing remarks, Dr. **Harley** stated that the duration of simple puncture advocated by Mr. Hutchinson and Dr. Stewart, and so successfully practised by the former, was fully considered in the analysis of the synoptical tables appended to the paper. It appeared therefrom that radical cure had been effected in several cases by this mode of treatment, but that it was unsuccessful when applied to tumours of greater capacity than one or two pints. Re-accumulation of fluid was a common result of tapping under any circumstances, and might in any case cause sufficient distension of the cyst to rupture it; and since capillary puncture did not appear to be a safer mode of proceeding than any other, to say nothing of the ulterior object of effecting a radical cure, he preferred in any case retaining command over the fluid in the sac by inserting a full-sized trochar, and preserving an open passage. Dr. Harley would not at so late an hour detain the meeting by further observations, but would, in conclusion, direct the attention of the Fellows to the morbid preparations (hydatid cyst wall, fibrinous sloughs, biliary discharge, and specimens of the echinococci) upon the table, and informed them that the subject of the paper was present amongst them, and was quite willing to submit himself to examination if any one wished it.

## THE PATHOLOGICAL SOCIETY.

### Tuesday, March 20.

Dr. Sibson, Vice-President.

A **report**, by Mr. **Hulke** and Mr. **Sibley**, on Mr. Curling's specimen of disease of the testes.

The reporters gave a minute description of the microscopic structure of the disease. The disease was situate betwixt the seminal tubes, which were in a state of degeneration, and were filled with granular matter. The tissue betwixt the tubes was made up chiefly of nuclei, larger than blood corpuscles, with a few cells and a few fusiform fibres. Most of the nuclei contain a single nucleolus. The reporters added, "The disease differed in structure from a typical—*e. g.*, a scirrhous—cancer in the remarkably uniform infiltration of the diseased tissues among the natural structure, and also in the absence of the varied forms of cell structure seen in such cancers. At the same time such an exuberant formation of cell elements, with but little tendency to the development of fibre, and the general dissimilarity of the tissues to the natural structure of the testicles, cannot be regarded without suspicion of malignancy."

Mr. **Curling** said that the disease in this case presented remarkable features, different in some respects from anything he had recognised before. He would particularly call attention to its double character. It was extremely rare to find diseases not originally constitutional—such as carcinoma, enchrondroma, and cystic—attacking both testicles at the same time. He could find only one instance of encephaloid cancer attacking both these organs simultaneously, a case of Professor Denonvilliers, and he knew of no case on record of double cystic disease. Another circumstance of interest was the slow destructive power of the morbid growth. In carcinoma of the testicle the tubular structure sometimes remains intact for a time in consequence of being spread over the surface of the tumour, but when cancerous disease commences in the body of the gland, the tubuli seminiferi are rapidly destroyed, and all distinction between the testicle and the epididymis is soon lost. But in this specimen, though the disease occurred at an early period, both in the testicle and in the epididymis, the distinction between the two parts was well preserved after fifteen months, and the tubules, though degenerated, were largely present, and might be recognised even with the naked eye. The great abundance of cell structure, and the outgrowth in the spermatic cord, indicate a probable recurrence of the disease in the internal parts, and led Mr. Curling to conclude, with Messrs. Sibley and Hulke, that the tumour was likely to prove to be malignant.

Dr. **Dickinson** showed a specimen of

### MALFORMATION OF THE LIVER.

The peculiarity of this liver was that the right and left lobes were quite distinct.

Dr. **Cobbold** remarked on the interest of the case. In the lower vertebrata the liver was often divided into many parts. The specimen tended to resemble the normal condition of the liver in the lower animals.

Dr. **Dickinson** showed specimens of

### DISEASED CARDIAC VALVES FROM CASES OF PYÆMIA.

The specimen was from three cases. The valves seemed to be infiltrated with what looked like pus, and in some of the specimens the valves were nearly broken down in their centres.

Dr. **Cobbold** showed a specimen of

### NEW HUMAN TAPEWORM.

Dr. Cobbold remarked that the existence of this parasite as a new and hitherto undescribed species was founded on a preparation preserved in the museum at the Middlesex Hospital. In the old MS. catalogue it was marked *Tænia solium*. At first he believed it to be an example of Kuchenmeister's ridged variety of tapeworm from the Cape of Good Hope; but he since satisfied himself that this could not be the case. The specimen now exhibited to the Society Dr. Cobbold proposed to name *Tænia lophosoma*; its specific characteristics, so far as the specimen enabled us to judge, standing as follows:—"Strobila of moderate length, probably not exceeding nine feet; average breadth of the segments one-fifth of an inch their greatest thickness being one-thirteenth; final mature proglottides from a half to three-quarters of an inch long; reproductive papillæ very prominent, uniserially disposed at the left margin throughout the entire chain, imparting to most of the segments a pentangular figure; average diameter of the eggs about 1-850th of an inch." The head and neck were wanting. If it was thought that this was only a variety of either the beef or pork tapeworm, Dr. Cobbold objected to that view from the circumstance that in all the monstrous forms of *T. solium* and *T. mediocanellata*, hitherto met with, the position of the reproductive papillæ had irregularly alternated. Dr. Weinland, of Frankfort, had already described one small species of human tapeworm with the papillæ uniserially disposed. The present species, however, cannot be identical with Weinland's *Tænia flavopuncta*. In Weinland's opinion, we ought to elevate such forms into a new genus. (See his "Beschreibung Zweier Neuer Tænioiden aus dem Menschen." Jena. 1861.)

Dr. CAYLEY showed a specimen of

### OBSTRUCTION OF THE THORACIC DUCT.

A young man, nineteen years of age, had been ill five or six days. He died of peritonitis, which had been caused by extravasation from rupture of the receptaculum chyli. The duct was much dilated, and the obstruction was found to be at its point of entry into the subclavian.

Dr. QUAIN, for Mr. Williams, brought forward a specimen of

### RUPTURE OF AN ANEURISMAL DILATATION OF ONE OF THE BRANCHES OF THE PULMONARY ARTERY.

Mr. Williams gave the history and described the specimen. A man, thirty years of age, had had a cough five months. He had been ill nine months, and was much emaciated. He had not brought up blood before his admission. He died suddenly of hæmoptysis, although the quantity of blood expectorated only amounted to two or three ounces. At the autopsy, there were several cavities found in the lung full of blood, the source of which was a rupture of a dilatation of a branch of the pulmonary artery. A similar dilatation was found on another branch.

(To be continued.)

## MEDICAL NEWS.

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ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The lowing gentlemen having undergone the necessary Examinations for the Diploma were admitted Members of the College at a meeting of the Court of Examiners on the 26th ult., viz.:—

Messrs. Barnabas Walter Lamb, Stourport, Worcestershire; James Brierley Hughes, Congleton, Cheshire; William James Tattersall, Bacup, Lancashire; Henry Beaumont Pattinson, Heavitree, near Exeter; and Isaac Coalbank, Old Dalby, Leicestershire, students of St. Bartholomew's Hospital. Clement Samuel Blythman, Swinton, Yorkshire: William Monckton, Brenchley, Kent; Frederic William Parsons, Bayswater; and Charles Kelly, Market Deeping, of King's College. William John, Haverfordwest; and William Joseph Richards, Redruth, Cornwall, of Guy's Hospital. Moses Taylor, Walsall, Staffordshire; and James Lawson Cooke, Market Drayton, of the Birmingham School. Henry Child Buckley, Llanelly, Carmarthen, of St. George's Hospital. Thomas Edward Bowkett, Poplar, of the London Hospital. Arthur Hill, L.S.A., Pimlico, of the Westminster Hospital. Edward Malins, Liverpool, of the Edinburgh School, and Alexander Riddoch Gray, M.A. and M.B. Univ. Aber., Aberdeen.

At the same meeting of the Court, Mr. David Bowen Thomas, of Greenwich Hospital, passed his Examination for Naval Surgeon. This gentleman had previously been admitted a Member of the College, his diploma bearing date April 11, 1861.

The following gentlemen were admitted Members on the 27th ult, viz.:—

Messrs. Samuel Key Watson, Jersey; George Rolph Raine, Billericay, Essex; Joseph Riley, Barnes, Surrey; William French Thurston, Notting-hill: and William Nathaniel Hiron, Chipping Camden, students of Guy's Hospital. Joseph Smith, Weaverham, Cheshire; Richard Walter Owen Withers, Shrewsbury: and Robert Temple Wright, Norwich, of King's College. Edmund Exell, Yeovil, Somerset; Arthur Walter Read, Coventry; and Martin Luther Heelas, Wokingham, Berkshire, of St. Bartholomew's Hospital. Henry Albert Richardson Thomson, Spencer-square; and George Arthur Kenyon, Doncaster, of St. George's Hospital. George Airey, Bayswater; and James Augustus Hayden, High Wycombe, of Charing Cross Hospital. Joseph Oakman, Wimbledon, of the Westminster Hospital. George Chapman, Brierley Hill, Staffordshire, of the Birmingham School. William Davies, Llanpumpsaint, Carmarthen; James John Ilott, L.S.A., Bromley, Kent, of the London Hospital. Augustus Constable Maybury, Frimley, Surrey, of St. Thomas's Hospital. George Newman Dunn, Dublin; and William Carter, M.D. Edin., Mid Calder, near Edinburgh.

It is stated that 12 out of the 98 candidates who offered themselves for Examination failed to acquit themselves to the satisfaction of the Court, and were consequently referred back to their Hospital studies for six months.

The following gentlemen passed their Primary Examinations in Anatomy and Physiology at a meeting of the Court of Examiners on the 1st inst., and when eligible will be admitted to the Pass Examination:—

Messrs. George Vaudrey, William Turner, E. Sainthill Pearse, Alfred C. Taylor, Rawland E. Daniel. John G. Hurford, John Guy and J. Aylwin Bean, students of Guy's Hospital. W. Bezley Thorne, Frederick H. Waylen, Thomas E. Scobell, Frederic E. Aldrich, Edward R. Johnson, and Charles H. Newstead, of St. Bartholomew's Hospital. Peter A. Young, A. Dunbar Walker, and Robert W. Foss, of Edinburgh. A. Justus Baker and Herbert N. Chilcote, of the Westminster Hospital. Alexander P. Fiddian, of King's College. Richard Minors, of St. Mary's Hospital. Henry G. Hall, of Dublin. Robert Pollock, of University College. George Moore, of Birmingham, and J. Bills Southam, of Manchester.

The following gentlemen passed on the 2nd inst.:—

Messrs. Essex T. Williams, Richard A. Rouse, Baron A. Rugg, Dean Longrigg, and William J. Scott, students of University College. Edward E. Rastrick, Robert Harris, L. C. Achille Carre, and H. Eccles Walker, of Guy's Hospital. Edward T. Pearce, William E. Phillips, James E. Peirce, and Frederick H. Moses, of St. Bartholomew's Hospital. Washington Lee, Charles F. Bedford, and Saltern G. Littlejohn, of St. Thomas's Hospital. M. Welldon Rice and H. Johnstone Pritchard, of St. George's Hospital. E. Buchanan Baxter, of King's College. Alfred Steward, of Manchester. Henry Cox, of Birmingham. Horace Chaldecott, of the Middlesex Hospital. Charles H. Furnivall, of the Westminster Hospital. Aaron Atkins, of the London Hospital. William MacDonald, of Edinburgh. Gordon Archdall, of Dublin, and William Henderson, of Glasgow.

The following gentlemen passed on the 3rd inst.:—

George W. Brumwell, John Carr, George R. Munn, Arthur H. Morrill, F. Viney Cardozo, and Charles R. Brown, students of Guy's Hospital; Arthur F. Greenhill and Francis C. Brett, of St. George's Hospital; E. Hawley Woodward and Cecil A. Bindley, of Birmingham; J. L. W. Forder, of University College; Edward Landwell, of Charing-cross Hospital; David E. Morris, of St. Bartholomew's Hospital; G. F. J. Schott, of Gottingen; A. Perry Newman, of Dublin; and Henry Godson, of Manchester.

It is stated that 32 out of the 100 candidates who offered themselves for examination failed to acquit themselves to the satisfaction of the Court, and were consequently referred to their studies for three months.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, April 26, 1866:—

George Bown Millett, Penzance, Cornwall; James Haslam, Church-road, Islington; John Hilton, Croston, near Preston; Archer Farr, Dunstable, Bedfordshire; John Chamberlin Eaton, 5, Fitzroy-square; William Square, Plymouth; William Greenwood Sutcliffe, Ashville-place, Battersea-park; Edward Butler Ruttledge, Ingatestone, Essex.

Of the seventy-one candidates who presented themselves at the Preliminary Examination in Arts on April 27 and 28, 1866, the following gentlemen passed and received Certificates of Proficiency on General Education, viz.:—

G. P. Applin, Jas. Wm. Ayres, John James Barnes, Robt. Holme Betts, John Hanbury Bonser, Henry Bradford, Henry Brimacombe, Joseph Brice Bunny, John E. B. Burroughs, J. H. Chapman, Frederick Cheesman Clark, A. C. Collinson, Thos. Arthur Crockle, John Ellis Edwards, Joseph William Ekens, George Ellis, Thomas Evans, Edward Fayrer, Thorpe William Fowke, Richard Galpin, Alfred Haines, Napoleon A. R. Harrison, Edward John Hutchings, John Ingham, Hildreth Kay, John Lang, Willoughby George Levy, William Livesay, Isidor I. Lyons, Charles Martin, Thomas May, W. A. Maybury, E. R. Morgan, Malcolm Morris, W. J. Newbury, Frederick Stephen Palmer, Arthur Daniel Parsons, Sydney Parsons, Frederick George Passmore, Edgar J. Pugh, Charles Sayer, Thomas Snaith, Vincent Stone, P. F. B. Stoney, John Sutcliffe, Roland F. Tuckett, Frank Wacher, John Barnley Walker, Thomas Law Webb, James Sealy Whitaker, Herbert Workman.

### APPOINTMENTS.

⁂ The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

AIREY, G., M.R.C.S.E., has been appointed House-Surgeon to the Charing-cross Hospital.

EAGER, R., M.R.C.S.E., has been appointed an Honorary Medical Officer to the Surrey County Hospital, Guildford.

GLEESON, M. A., has been appointed Assistant to the Resident Medical Officer of the Holloway and North Islington Dispensary.

HARRISON, S. N., L.R.C.P. Edin., has been appointed Surgeon-Accoucheur to the Kilham Lying-in Dispensary.

KEMPTHORNE, H. L., M.D. Lond., has been elected Assistant Medical Officer to Bethlem Royal Hospital.

NORRIS, HUGH, L.R.C.P. Edin., has been appointed Resident Medical Officer to the Wiveliscombe Dispensary.

TAYLOR, H. S., F.R.C.S.E., has been appointed an Honorary Medical Officer to the Surrey County Hospital, Guildford.

### BIRTHS.

BALFOUR.—On April 24, at 18, Lynedoch-place, Edinburgh, the wife of G. W. Balfour, M.D., of a son.

BLACKMORE.—On April 26, at 21, Douglas-road, Canonbury, the wife of J. T. Blackmore, L.R.C.P. Edin., of a daughter.

COTTER.—On April 19, at Stocks-hill, Holbeck, the wife of A. H. Cotter, L.R.C.P., of a son.

FOLKER.—On April 18, at Hanley, Staffs, the wife of W. H. Folker, M.R.C.S.E., of a daughter.

**Garrington.**—On April 25, at 22, St. George's-square, Portsmouth, the wife of A. M. Garrington, M.D., of a daughter.

**Knaggs.**—On April 29, at Osborne-place, Manchester, the wife of H. Knaggs, Staff Assistant-Surgeon, of a daughter.

**McConville.**—On April 26, at 99, Douglas-street, Glasgow, the wife of John McConville, M D., of a daughter.

**Monckton.**—On April 26, at Alrewas, Staffs, the wife of W. Monckton, M.R.C.S., of a daughter.

**Whitling.**—On April 24, at Croydon, the wife of H. T. Whitling, M.R.C.S., of a daughter.

**Wyman.**—On April 26, at the Grove, Highgate, the wife of W. S. Wyman, M.D., of Hatfield Broad Oak, of a son.

## MARRIAGES.

**Brew—Lency.**—On April 21, at Bray, H. M. Brew, M.D., to Henrietta, daughter of John Lency, M.D.

**Hill—Chinery.**—On April 26, at St. Thomas's, Lymington, W. R. Hill, M D., to Mary Elizabeth, eldest daughter of E. Chinery, Esq.

**Robinson—Bright.**—On April 23, Dr. Craven Robinson to Sophia, youngest daughter of the late M. Bright, of Sheffield.

## DEATHS.

**Giftens, Joshua Mayers**, M.D., at Barbadoes, West Indies, on April 3, aged 53.

**Grape, W. P.**, M.R.C.S., at Bromyard, on April 16, aged 86.

**Harrison, John**, M.D., at Highgate, on April 26, aged 33.

**Hoden, Henry**, M.S.C.S., at Sedgley, near Dudley, on March 14, aged 58.

**Rees, N.**, M.R.C.S.E., of Llandilo, Carmarthenshire, on April 11, aged 78.

## POOR-LAW MEDICAL SERVICE.

⁂ The area of each district is stated in acres. The population is computed according to the last census.

### RESIGNATIONS.

*Dewsbury Union.*—The Workhouse is vacant. Salary £40 per annum.

*Leigh Union.*—Mr. James Craston has resigned the Atherton District; area 7599; population 14,045; salary £45 per annum.

### APPOINTMENTS.

*Alcester Union.*—Joseph Morris, M R.C.S. Eng., L S.A., L.R.C.P. Edin., to the Inkberrow District. John W. Leacroft, B.M. Marischal Coll., Aberdeen, L.S.A., to the Feckenham District.

*Chard Union.*—Frank H. Browne, M.R.C.S.E., L.S.A., to the First Ilminster District.

*Droitwich Union.*—John W. Leacroft, L.R.C.P. Edin., L.S.A., to the Stock and Bradley District.

*Hartley Wintney Union.*—Thomas J. Biddle, M.R.C.S.E., L S.A., to the Heckfield District.

*Stoke-upon-Trent Parish.*—John Allen, M.D. St. And., M.R.C.S.E., L.M., L.S.A., to the Longton District.

*Tonbridge Union.*—Charles F. Buchan, M.B. Aberd., M.C. Aberd., to the Third and Fifth Districts and the Workhouse.

*Weardale Union.*—George Hood, M D. Edin., to the Thornley District.

*Wem Union.*—Samuel B. Gwynn, L.S.A., M.R.C.S.E., to the Wem District and Workhouse.

*Witney Union.*—Thomas Smallhorn, L.R.C.P. Edin., M.R.C S.E., L M. Edin., to the Ensham District. George B. Prickett, M.R.C.S.E., to the Bampton District.

*Wrexham Union.*—Alfred Eyton, L.R.C.P. Edin., L.F.P. and S. Glasg., L.M., to the Fourth District.

**The Levée.**—At the Levée held on Wednesday, by H.R.H. the Prince of Wales, on behalf of Her Majesty, the following presentations took place:—Assistant-Surgeon John Brake, by the Secretary of State for India; Dr. Stanley Haynes, by his father, Mr. Joseph Haynes; Dr. J. Picthall, Surgeon, Bengal Army, by the Secretary of State for India. The Levée was attended by Doctors Lyon Playfair, C.B., Priestley, Edward Meryon, Francis Hawkins, Scot Alison, and Professor Owen.

**University of London.**—The successful candidates will be admitted to Degrees at a meeting to be held at Burlington House on Wednesday, May 9, at 2 p.m.

**University College.**—The distribution of prizes in the Faculty of Medicine will take place on Monday, May 7, at 4 o'clock p.m. precisely. The Hon. G. Denman, Q.C., M.P., will preside.

**Royal College of Surgeons in Ireland.**—At a meeting of the Council, held on Tuesday, May 1, the following gentlemen were elected examiners for the ensuing year—viz., to examine candidates for Letters Testimonial and Fellowship—Christopher Fleming, M. Harry Stapleton, Benjamin W. Richardson, Edward A. Stoker, George H. Porter, Jolliffe J. Tufnell, and John Barker, Esqrs. To examine candidates in Midwifery: Edward J. Quinan, James Isdell, and John Cronyn, Esqrs. To examine candidates in general education: Thomas Byrne, John Murray, and George F. Shaw, Esq.

**Cambridge.**—The friends of the Rev. W. Clark, M.D., who lately resigned the Professorship of Anatomy, have determined to offer to the University a marble bust of that gentleman, with a view to its being placed in the Museum of Comparative Anatomy, which they hope the University will agree to call the Clarkian Museum, in honour of Dr. Clark, to whose exertions and liberality the existence of the Museum is in great measure due.

**Count Bismarck's Physician.**—The King of Prussia has bestowed the Order of the Red Eagle on the Physician who attended Count Bismarck in his recent indisposition.

**Hydrophobia.**—A fatal case is reported at Middleton-on-Bow, near Darlington. The sufferer, the parish clerk, had been bitten by a dog six weeks previously.

**The Explosion at Aspinwall.**—In the list of those killed by the explosion of nitro-glycerine on board the steamer *European*, at Aspinwall, on the 3rd ult., we regret to find that the name of Dr. Burrows, the Surgeon of the ship, occurs.

**New Medical Society in the West of England.**—At a general meeting of the Medical Practitioners of Plymouth and Devonport, held on April 27, it was determined that a society should be formed under the name of the South Devon and East Cornwall Medico-Chirurgical Society, to meet at some central room once a fortnight for the purpose of reading and discussing papers on subjects connected with Medicine, Surgery, Midwifery, etc., and for the exhibition of Pathological Specimens. The officers elected for the ensuing year were Mr. Square, President; Mr. W. Swain, Vice-President; Dr. Prance and Mr. R. Rendle, Committee of Management; Dr. C. A. Hingston, Secretary.

**Royal Medical Benevolent College.**—On Thursday, April 26, the anniversary festival of this institution was held at Willis's Rooms, King-street, St. James's. Sir Wm. Fergusson presided, and was supported by the presence of many of the most eminent Medical men in London; indeed, a list of those entitled by distinction to mention would read like a page from the *Medical Directory*. The meeting was a pleasant one, and Sir W. Fergusson made an admirable chairman. There are at present resident in the College at Epsom 24 pensioners, each of whom is provided with three comfortably furnished rooms, an ample annual allowance of coals, and 21*l*. a year in money. The full complement of 200 boys are now in the school, and in addition to these there are many day scholars, who receive all the advantages of a first-class education on payment, but who are not necessarily the sons of Medical men. The Council are, however, earnestly desirous of increasing the number of foundation scholars and of placing their maintenance and that of the pensioners upon a footing independent of the somewhat precarious support of annual subscriptions. To this end they appeal to the public on behalf of a class of Professional men from whom the country derives so much advantage at so little regard to aggrandisement, and under so heavy a load of responsibility and actual danger to themselves and their families, do so much good almost unknown and almost unrequited. Sir William Fergusson brought these points of the report briefly but strongly before the guests. The best proof of the success of his appeal is to be found in the fact that between 600*l*. and 700*l*. was at once subscribed in the room towards the maintenance of the charity.

**Society for Relief of Widows and Orphans of Medical Men.**—The annual general meeting of the members of this Society was held at 53, Berners-street, W., on the 26th ultimo. The balance-sheet of the year 1865 was read, from which it appeared that some sixty-five widows and orphan children of deceased members of the Society had received during the year ordinary relief to the extent of £2150, besides other grants. The following officers and directors of the Society were elected for the following year:—*President.*—Martin Ware, Esq. *Vice-Presidents.*—Everard A. Brande, Esq.; Peter M. Latham, M.D.; John Bacot, Esq.; D. Henry Walne, Esq.; A. J. Sutherland, M.D., F.R.S.; Geo. Burrows, M.D., F.R.S.; John Miles, Esq.; C. H. Hawkins, Esq., F.R.S.; James Paget, Esq., F.R.S.; Charles Hawkins, Esq.; Thomas Hammerton, Esq.; Sir Charles Locock, Bart., M.D. *Treasurers.*—James Thomas Ware, Esq.; Geo. Hamilton Roe, M.D (acting); Richard S. Eyles, Esq. *Directors.*—Henry Sterry, Esq.; Henry Jeaffreson, M.D.; H. S. Illingworth, Esq.; Francis Hawkins, M.D.; T. B. Curling, Esq.; Jno. Hilton, Esq.; Jno. Love, Esq.; Henry A. Pitman, M.D.; John Adams, Esq.; Robert Druitt, M.R.C.P.L.; J. C. Forster, Esq.; Edward Tegart, Esq.; John Scott, Esq.; Henry Lee, Esq.; C. Collambell, Esq.; Richard Quain, M.D.; Geo. Johnson, M.D.; C. F. Du Pasquier, Esq.; E. N. Berry, Esq.; Samuel Solly, Esq.; John Morgan, Esq.; Richard Barnes, M.D.; George Budd, M.D.; William Bowman, Esq. The annual dinner is appointed to be held on the

16th instant, for particulars of which, and the district within which Medical men must live to become members of the Society, we refer to the advertisement in our present number. We hope that many of our readers will join this most useful Society.

**The Cholera on Board the "England."**—The following letter has been addressed to the Editor of the *Times* by Mr. Hamilton, of Liverpool:—

"Sir,—The outbreak of cholera in its most virulent form on board the steamship *England*, a few days after leaving this port for New York, fuller particulars of which have now come to hand, is a warning to us of such vital importance that we shall be most culpable if we do not take heed to it.

"Without recapitulating the facts already published regarding this outbreak, I would draw attention to two or three points. It is clearly established that the cholera appeared first among the German passengers, and that it spread rapidly among them—satisfactory proofs that they brought the disease on board, as the *England* is quite a new vessel, this being her first voyage. Now, where did these Germans come from? From the very country where we learn by the latest intelligence that cholera has made its appearance—namely, Holland. They were East Frieslanders, and have been described to me as of the lowest class, stunted in growth, filthy in habits, dressed in linsey-woollen clothing, and, in preference to the wholesome food provided for them, subsisting almost entirely on their *saur-kraut*, an abominable mess, of itself sufficient to disorder an Englishman's stomach. I mention these particulars, as, with over-crowding superadded, what happened only confirms an hygienic axiom that if such conditions exist such results are pretty sure to follow.

"The next question is, how did they come to this country? And that is what we have to do with, for it concerns us most nearly. They came *viâ* Rotterdam to Hull, and from there, by special arrangements with the East Lancashire Railway, to Liverpool, where they remained two or three days before sailing. Within the last few months this has become a much frequented route, offering in its cheapness and its directness great facilities to emigrants for America from the north of Europe.

"The cholera has broken out in two or three different places in Holland. It is therefore advisable that stringent measures should be at once taken to prevent these emigrants, either on their arrival at Hull or in their transit in the railway from Hull to Liverpool, or while remaining at the latter place, leaving, as it were, the germs of the disease among us, as these latter would only need the hot months of summer to burst forth.

"We have had an escape in that the cholera did not break out among these poor Germans before they left our shores, and so spread to ourselves. Let us profit by the warning that the poison may exist and be carried about long before it developes into the disease, and that it can even remain innocuous if deprived of all favouring conditions.

"The extreme importance of the subject must be my apology for asking a short space in your valuable columns for this letter.

"I am Sir, yours, &c.,

"Robert Hamilton, F.R.C.S."

**The Conveyance of Fever Patients in Public Cabs.**—Dr. Horace Jeaffreson's letter on London fevers and London cabs, which appeared in the *Times* of March 5, has been reprinted for the benefit of the Hospital Carriage Fund. Dr. Jeaffreson states, on his personal knowledge, that from 700 to 800 cabs are annually used for the purpose of conveying fever and variolous patients to Hospital. Should we have this year an epidemic of cholera, how many more will be employed for a similar purpose? The Hospital Carriage Fund have now in process of construction two ambulances—one for the Fever and one for the Small-pox Hospital. We hope that liberal subscriptions to their funds will enable the Society to provide a similar carriage for every London Hospital where cases of contagious disease are admitted.

"If the amateur friends of the destitute and needy really want to do some good to their involuntary clients, why do they not take municipal and parochial offices? Instead of dwelling solely on the sensational and dramatic aspect of destitution, why do they not turn to its business and practical aspect? Let them become guardians and overseers, and act as assessors to the relieving officers and masters of workhouses. But this would be so dull and uninteresting. There would be nothing picturesque or dramatic or flashily heroic in fighting over accounts with sordid and narrow-minded shopkeepers, or in remonstrating with parochial churls. There would be no appalling stories of misery and horror to relate to admiring friends at dinner, with the narrator playing the part of delivering angel. It would give no colouring to transcendental speculations about the destiny of man and the mysteries of life. Such attempts on the part of the well-to-do people, with leisure, to rescue the poor from those who are only a shade less poor than themselves, would be unspeakably useful. But it would require a genuine sacrifice, and this would spoil all the pleasure of the pursuit. What is wanted is, humanity made easy."—*Saturday Review*, March 3.

**Cause of Goitre.**—M. Maumené is led from his observations and experiments to believe that the cause of goître is the presence in drinking water of fluorides. These, he asserts, are peculiarly abundant in the water of goîtrous districts. M. Maumené gave for a period of five months fluoride of potassium to a dog, at the end of which time a swelling similar to goître appeared in the neck; the dog then made his escape, but three years afterwards was again discovered with a swelling which appeared to M. Maumené to have all the characters of goître.

**Preservation of Leeches.**—Among the various means for the preservation of this useful animal, M. Stanislas Martin states that there is nothing so good as the deposit of a bed of silex, formed of pieces of various forms, but not exceeding a nut in size. The leech delights in remaining in the cavities formed by these, and while penetrating into them rubs its body against their asperities, thus effectually cleansing its surface from the filamentous mucus which adheres to it, and if not removed leads to the destruction of the animal.—*Bull. de Thér.*, *April* 15.

The following are the last week's Cattle Plague Returns.

| Census Divisions. | 1. Attacked. | | | 2. Result of reported Cases from the Commencement of the disease. | | | | |
|---|---|---|---|---|---|---|---|---|
| | Week ending April 21. | Week ending April 14. | Week ending April 7. | Attacked. | Killed. | Died. | Recovered. | Unaccounted for. |
| 1. Metropolitan Police District . . | 26 | 23 | 63 | 8027 | 3544 | 3533 | 350 | 600 |
| 2. South Eastern Co. . | .. | 4 | 6 | 5060 | 1618 | 2786 | 446 | 210 |
| 3. South Midland Co. | 347 | 344 | 396 | 18620 | 6803 | 9091 | 1548 | 368 |
| 4. Eastern Counties . | 120 | 127 | 126 | 10754 | 4816 | 4772 | 767 | 399 |
| 5. South Western Co. | 3 | 2 | 18 | 1663 | 591 | 796 | 207 | 69 |
| 6. West Midland Co. . | 360 | 132 | 444 | 12637 | 4211 | 6245 | 1396 | 785 |
| 7. North Midland Co. | 540 | 510 | 511 | 15430 | 7582 | 6062 | 1068 | 688 |
| 8. North Western Co. | 684 | 921 | 899 | 57918 | 12696 | 34067 | 6280 | 4875 |
| 9. Yorkshire . . | 304 | 324 | 338 | 33390 | 6517 | 18279 | 5836 | 2758 |
| 10. Northern Counties. | 163 | 34 | 280 | 7756 | 4198 | 2497 | 941 | 120 |
| 11. Monmouthshire & Wales . . | 172 | 101 | 126 | 8137 | 747 | 5991 | 1091 | 308 |
| 12. Scotland . . | 104 | 60 | 154 | 46409 | 6087 | 27104 | 10704 | 2514 |
| | 2823 | 2582 | 3361 | 225801 | 59410 | 122033 | 30664 | 13694 |

*Note.*—28 Inspectors who reported cases last week have not reported in time for this return—viz., for the county of Cambridge, 1; Chester, 3; Derby, 1; Hampshire, 1; Lincoln, 1; Denbigh, 1; Flint, 4; and Scotland, 16. These Inspectors returned 330 cases last week.

## NOTES, QUERIES, AND REPLIES.

◆

He that questioneth much shall learn much.—*Bacon.*

The treatment of choleraic diarrhœa and cholera, according both to theory and practice, will be treated of in our next.

We are sorry that our space will only allow us to publish the deaths of Medical Practitioners—not of their families.

The writer of a review in the *Church Times* of Mr. Baker Brown's book on the Cure of Epilepsy, etc., calls our attention to a letter by Dr. Rogers in the *Medical Times and Gazette* of April 7. The writer in the *Church Times* says that he did not desire the clergy to make prurient inquiries, but that he wished them to "bring under the notice of Medical men" the treatment recommended by Mr. Brown. "They (the clergy) are to suggest to Medical men the remedy, and not to suggest that remedy to their poorer parishioners." We would only remark that we think the clergy had better mind their own business.

*E.*—Dr. Wilbraham Falconer has published a very useful blank form for registering temperature in disease. Write to him at Bath.

*A Member, Poplar.*—*No* oration was delivered at the College this year. It is a biennial affair. Mr. Hilton will deliver the next.

*Dr. H.*—Blisters were introduced in Italy during the year 1576. Taliacotius died in 1553. Consult the Roll of the Royal College of Physicians by Dr. Munk.

*An Old Reader of the "Medical Times and Gazette."*—Any man may practise Medicine if he use no Medical title; but any one practising and charging for attendance and Medicine is liable to prosecution under the Apothecaries' Act. It were better to wait, but if there be a *bonâ fide* intention of completing the examination at College and Hall, and if that be carried out, no great harm can follow.

COMMUNICATIONS have been received from—

St. Mary's Hospital School; Dr. J. E. Smyth; Apothecaries' Hall; Westminster Hospital School; Dr. Yull; Mr. Berkeley Hill; Dr. McCraith; Society for the Relief of Widows and Orphans of Medical Men; Dr. Markham; A. E. Wilmot; Dr. C. Hingston; Dr. Greenhalgh; J. N. Villier; Royal Institution; Mr. R. B. Carter; Dr. Bowen; Mr. David Davies; Mr. E. Bellamy; Dr. George Johnson; Dr. Hughlings Jackson; Mr. Spencer Wells; Dr. Ogle; Dr. Handfield Jones; Mr. J. Hutchinson; Dr. Lionel Beale; Mr. J. Chatto.

BOOKS RECEIVED—

Sankey's Lectures on Mental Diseases.—Grimshaw's Thermometric Observations in Fever.—Foster, On the Use of the Sphygmograph in the Investigation of Disease.—Fox, On the Action of Fungi in the Production of Disease.—Ophthalmic Hospital Reports. Vol V. Part 2.—Ellis, On the Safe Abolition of Pain.—The Mystery of Pain.—James, A Visit to Vichy.—De Hovell, On Medicine and Physiology.

NEWSPAPERS RECEIVED—

The Sunday Gazette—The Morning Journal (Jamaica)—The Indian Medical Gazette.

## COMPOSITION AND QUALITY OF THE METROPOLITAN WATERS IN APRIL, 1866.

The following are the Returns of the Metropolitan Association of Medical Officers of Health:—

| | Total Solid Matter per Gallon. | Loss by Ignition.(a) | Oxydisable Organic Matter.(b) | Hardness. | |
|---|---|---|---|---|---|
| | | | | Before Boiling. | After Boiling. |
| *Thames Water Companies.* | Grains. | Grains. | Grains. | Degs. | Degs. |
| Grand Junction . . | 20·43 | 1·31 | 0·34 | 15·5 | 4·5 |
| West Middlesex . . | 19·41 | 0·90 | 0·40 | 14·0 | 3·0 |
| Southwark and Vauxhall. | 20·40 | 0·80 | 0·36 | 15·0 | 4·0 |
| Chelsea . . . . | 20·39 | 0·95 | 0·30 | 15·0 | 4·5 |
| Lambeth . . . . | 20·00 | 1·25 | 0·38 | 14·0 | 3·5 |
| *Other Companies.* | | | | | |
| Kent . . . . . | 27·62 | 0·72 | 0 02 | 20·0 | 7·5 |
| New River . . . | 19 00 | 1·10 | 0·18 | 13·5 | 4·5 |
| East London . . . | 21·60 | 1·42 | 0·37 | 15·5 | 4·0 |

(a) The loss by ignition represents a variety of volatile matters as well as organic matter, as ammoniacal salts, moisture, and the volatile constituents of nitrates and nitrites.

(b) The oxydisable organic matter is determined by a standard solution of permanganate of potash, the available oxygen of which is to the organic matter as 1 is to 8; and the results are controlled by the examination of the colour of the water when seen through a glass tube two feet in length and two inches in diameter.

## VITAL STATISTICS OF LONDON.

*Week ending Saturday, April 28, 1866.*

### BIRTHS.

Births of Boys, 1080; Girls, 1107; Total, 2187.
Average of 10 corresponding weeks, 1856-65, 1874·5.

### DEATHS.

| | Males. | Females. | Total. |
|---|---|---|---|
| Deaths during the week .. .. .. | 764 | 728 | 1492 |
| Average of the ten years 1856-65 .. .. | 628·2 | 603·9 | 1232·1 |
| Average corrected to increased population.. | .. | .. | 1355 |
| Deaths of people above 90 .. .. .. | .. | .. | .. |

### DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

| | Population, 1861. | Small pox. | Measles. | Scarlatina. | Diphtheria. | Whooping-cough. | Typhus. | Diarrhœa. |
|---|---|---|---|---|---|---|---|---|
| West .. | 463,388 | 1 | 8 | 5 | — | 11 | 12 | 1 |
| North .. | 618,210 | 6 | 13 | 5 | 3 | 23 | 19 | 1 |
| Central .. | 378,058 | — | 6 | 1 | — | 14 | 7 | 2 |
| East .. | 571,158 | 10 | 19 | 4 | 2 | 19 | 8 | 4 |
| South .. | 773,175 | 4 | 19 | 2 | 3 | 30 | 17 | 8 |
| Total .. | 2,803,989 | 21 | 60 | 17 | 8 | 97 | 63 | 16 |

### METEOROLOGY.

*From Observations at the Greenwich Observatory.*

| | |
|---|---|
| Mean height of barometer .. .. .. .. .. .. .. | 29·877 in. |
| Mean temperature .. .. .. .. .. .. .. .. | 52·6 |
| Highest point of thermometer .. .. .. .. .. .. | 79 0 |
| Lowest point of thermometer .. .. .. .. .. .. | 38·4 |
| Mean dew-point temperature .. .. .. .. .. .. | 43·8 |
| General direction of wind .. .. .. .. .. .. | E., E.S.E., &Calm |
| Whole amount of rain in the week .. .. .. .. .. | 0·58 |

## BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, April 28, 1866, in the following large Towns:—

| Boroughs, etc. | Estimated Population in middle of the Year 1866. | Persons to an Acre. (1866.) | Births Registered during the week ending April 28. | Deaths. | | Temperature of Air (Fahr.) | | | Rain Fall. | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Corrected Average Weekly Number.* | Registered during the week ending April 28. | Highest during the Week. | Lowest during the Week. | Weekly Mean of the Mean Daily Values. | In Inches. | In Tons per Acre. |
| London (Metropolis) | 3067536 | 39·3 | 2187 | 1400 | 1492 | 79 0 | 38·4 | 52·6 | 0·58 | 59 |
| Bristol (City) . . | 163680 | 34·9 | 93 | 73 | ‡183 | 74·4 | 38 9 | 54·2 | 1·02 | 103 |
| Birmingham (Boro') | 335798 | 42·9 | 285 | 163 | 178 | 75·2 | 36·0 | 53·2 | 0·05 | 5 |
| Liverpool (Borough) | 484337 | 94·8 | 371 | 281 | 354 | 70·6 | 39·9 | 54·5 | 0·02 | 2 |
| Manchester (City) . | 358855 | 80·0 | 254 | 203 | ‡222 | 79·5 | 35·0 | 53·1 | 0·08 | 8 |
| Salford (Borough) . | 112904 | 21·8 | 92 | 57 | 78 | 77·3 | 34·5 | 52·6 | 0·05 | 5 |
| Sheffield (Borough) . | 218257 | 9·6 | 181 | 115 | 117 | 72·1 | 34·4 | 49·6 | 0·04 | 4 |
| Leeds (Borough) . | 228187 | 10·6 | 167 | 116 | 146 | 72·5 | 30·0 | 48·5 | 0·05 | 5 |
| Hull (Borough) . | 105233 | 29·5 | 86 | 49 | 53 | .. | .. | .. | .. | .. |
| Nwcastl-on-Tyne, do. | 122277 | 22·9 | 98 | 65 | 70 | 64·0 | 32·0 | 45·8 | 0·73 | 74 |
| Edinburgh (City) . | 175128 | 39·6 | 116 | 84 | 92 | 59·7 | 35·0 | 45·4 | 0·00 | 0 |
| Glasgow (City). . | 432265 | 85·4 | 428 | 252 | 304 | 64·2 | 35·9 | 48·0 | 0·00 | 0 |
| Dublin (City and some suburbs) . | 318437 | 32·7 | 212 | †156 | 160 | 66·4 | 38·0 | 52·1 | 0·75 | 76 |
| Total of 13 large Towns . . . | 6122894 | 34·4 | 4570 | 3014 | 3349 | 79·5 | 30·0 | 50 8 | 0·28 | 29 |
| | | | | | Week ending April 21. | Week ending | | § | April 21. | |
| Vienna (City) . . | (1863)<br>560000 | .. | .. | .. | .. | .. | .. | .. | .. | .. |

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·877 in. The barometrical reading decreased from 30·29 in. on Sunday to 29·29 in. on Saturday.

The general direction of the wind was E., E.S.E., and calm.

* The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.

† Registration did not commence in Ireland till January 1, 1864; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in the city were the same as the averages of the rates in the other towns.

‡ The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

§ The mean temperature at Greenwich during the same week was 50·8°.

## APPOINTMENTS FOR THE WEEK.

### May 5. *Saturday (this day).*

*Operations* at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free Hospital, 1½ p.m.

Royal Institution, 3 p.m. Professor Huxley, "On the Methods and Results of Ethnology."

### 7. *Monday.*

*Operations* at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.

Odontological Society, 8 p.m. Meeting.

Royal Institution, 2 p.m. General Monthly Meeting.

Western Medical and Surgical Society, 8 p.m. Nomination of Officers. Dr. Marcet, "On the Therapeutical Properties of Mineral Waters."

### 8. *Tuesday.*

*Operations* at Guy's, 1 p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; St. Peter's Hospital for Stone, 3 p.m.

Ethnological Society of London, 8 p.m. John Crawfurd, Esq., "On the Migration of Cultivated Plants in Reference to Ethnology." Dr. John Shortt, "On the Fishermen of Southern India."

Royal Medical and Chirurgical Society, 8½ p.m. Mr. Toynbee, "On Disconnection of the Incus and the Stapes." Mr. Durham, "On a New Operation for the Radical Cure of Hernia."

Royal Institution, 3 p.m. Professor Ansted, F.R.S., "On the Application of Physical Geography and Geology to the Fine Arts."

### 9. *Wednesday.*

*Operations* at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.

Microscopical Society, 8 p.m. Meeting.

### 10. *Thursday.*

*Operations* at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.

Royal Institution, 3 p.m. Professor Huxley, "On Ethnology."

### 11. *Friday.*

*Operations*, Westminster Ophthalmic, 1½ p.m.

Royal Institution, 8 p.m. Professor Ansted, "On the Mud Volcanos of the Crimea."

# ORIGINAL LECTURES.

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ON

## MECHANICAL DISEASES AND THE SECONDARY CHEMICAL DISEASES THEY PRODUCE.

By H. BENCE JONES, M.D., F.R.S.

### Part V.—Lecture XII.

(Concluded from page 438.)

The number of mechanical accidents which fall under the care of the Physician is far greater than at first sight you would suppose. Some of them closely approximate to Surgical accidents; for example, how slight is the difference between intussusception and inguinal hernia. How closely do different diseases of obstruction resemble Surgical accidents. I might give you a long course of lectures on different obstructions, and on the secondary chemical diseases to which they gave rise. Then there are mechanical diseases of internal ruptures, as of the semilunar valves of the heart, or of healthy or diseased vessels constituting the large class of hæmorrhages. Then there are more chronic mechanical diseases, as emphysema of the lungs, dilatation of the bladder in some rare cases, varicose veins continually. I might almost include in mechanical Medical accidents the large class of embolic diseases, but these arise from a slight antecedent chemical wrong, and are therefore like calculi, primarily chemical, secondarily mechanical, and tertiary chemical diseases again; and as I have already said, these tertiary chemical diseases are far more dangerous than the primary chemical causes of these complaints.

Of these Medical accidents I will take one a quick and the other a slow mechanical disease, to show you again how mechanical wrongs set up chemical complaints.

I will read you a few short notes of a case of mechanical rupture of the aortic valves, which I saw in St. George's Hospital. It is recorded in Dr. Latham's work, On the Diseases of the Heart, vol. ii., p. 193.

A stableman at Anderson's, twenty-eight years of age, was admitted into St. George's Hospital. He was suffering, and had suffered for twelve months, severe palpitation of the heart, and was able to mark distinctly the moment of its commencement. It was one day just after running a horse down the yard to show off his paces to a purchaser. He had never had acute rheumatism. His lips were blue, his breath short, and his left side painful. He had a dry cough. His bowels were confined and his urine free. It was ten weeks before his admission that his cough and dyspnœa had begun to be particularly distressing. Auscultation found dulness in the præcordial region, over an extent of four inches square. The heart's impulse increased, and its first sound prolonged, with a low blowing endocardial murmur over the aortic valves, and its second sound indistinct. He was bled three times under the urgency of his cough and dyspnœa. These, however, continued to increase. Five weeks after his admission his legs became œdematous, and in two weeks more he died.

On examination after death three pints of fluid were found in the right pleura, and the heart was enormously large. In length it reached from the second to the eighth rib, and across the base of the ventricles it measured six inches. The left ventricle was moderately hypertrophied, and very largely dilated. The mitral valve was healthy, and the aorta was slightly thickened, and moreover had suffered rupture of a peculiar kind; one of its septa was torn away from its attachments, and thus two of its pouches were reduced to a single irregular one. The right ventricle was dilated, but both the auricles preserved their natural states. In the ascending aorta and in its arch there were atheromatous deposits. The liver was very large, and the spleen and the kidneys were healthy."

How, then, did this Medical accident set up this chemical disease?

The aortic valves bear the pressure of the whole column of the blood, and resist the tension of the arterial textures. So that the highest pressure of each ventricle-full of blood that comes into the arteries is exerted on these valves. As soon as they are broken the pressure falls on the interior of the ventricle, and this being much less resisting than the structure of the valves, dilates; and hence throughout the whole arterial system a state of lessened tension of blood, and consequently of lessened pressure of the arteries on the blood, is produced; and if the left ventricle were as feeble as the auricle, the blood would hardly move in the small arteries, and passive congestion of the capillaries and then of the veins would soon follow from the rupture of the aortic valves.

But the heart reacts on the increased pressure. Quicker and stronger the muscular structure endeavours to drive the blood through the system. This increased action causes a greater supply of blood to the muscular structure of the heart itself through the coronary arteries, which, contrary to other arteries, receive blood freest and easiest when the heart is most dilated during the diastole. This increased supply of blood and increased function give rise to hypertrophy, and when it is established this hypertrophy increases the force with which the blood circulates through the vessels, whilst the dilatation increases the quantity of blood sent forward at each systole of the heart. Thus, the tension in the small arteries again may reach the amount that prevents congestion of the blood in the capillaries and in the veins.

Before this compensation can be reached, the diminished tension in the small arteries allows the blood to stagnate in the capillaries and in the veins; as the tension in them increases the watery part of the blood, or even this with fibrin diffuse; from the increased pressure into the textures, and a more or less resisting œdema of the cellular tissue is thus produced. This œdema may exist in all the textures, and the obstructed circulation may give rise to diminished chemical actions of oxidation and nutrition; this alteration is most apparent when the obstruction takes place in any of the secreting organs. When in any secreting organ diminished pressure arises in the small arteries, increased tension is caused by the stoppage in the veins. The capillaries from which the secretion takes place become distended, the supply of oxygen and of substances from which the secretion is formed becomes insufficient for the formation of healthy secretion; altered and less oxidised products form; constituents of the blood unchanged may escape on the free surface of the gland, and generally quantitative and qualitative chemical errors in the products of the glands occur. Thus, for example, in the kidneys the congestion from heart disease may cause slightly albuminous urine or even fibrinous liquor sanguinis to pass into the urine; or with extreme pressure, even blood-globules may be forced through.

Thus the whole chemistry of oxidation, nutrition, and secretion may be entirely changed by the pressure produced by a mechanical accident—so changed that even mortification may in extreme cases occur. Such was not the course of events in the patient with ruptured aortic valves. The heart did its best to enlarge and to strengthen itself, but the tension in the veins and the stoppage in the capillaries was too great a weight for it to overcome. Effusion of fluid in the extremities and in the pleura came on, and the mechanical obstruction and the chemical want of action soon put an end to his sufferings.

In the *Transactions* of the Pathological Society, vol. 10, p. 92, you will find another case reported by Dr. Peacock. "The left angle of the posterior segment of the aortic valves was torn from its attachment so as to allow the edge of the valve to be retroverted and free regurgitation to take place from the aorta into the ventricle. The heart was large, weighing twenty-three ounces avoirdupois. The cavity of the left ventricle especially was considerably increased in size, and its walls were thicker than natural. He died three months and a-half after the accident which ruptured the valve, of extreme dyspnœa. The lungs were found congested, œdematous, and very sparingly crepitant throughout.

The slow mechanical disease which will furnish me with a good illustration of the production of secondary chemical disease is vesicular emphysema of the lung. This is caused by the mechanical dilatation, perforation, and obliteration of the pulmonary membrane of the air cells by the jerking force of coughing which presses at the same time equally downwards as well as upwards.

As the emphysematous cavity enlarges the air cells that were broken up to form it disappear, and hence the amount of membranous surface is lessened through which the process of oxygenation and decarbonisation of the blood and textures is carried on. A great diminution of the amount of capillary vessels in the lungs is thus produced, and the quantity of blood that comes to be aërated is thus diminished, and the resistance to the circulation in the pulmonary artery is increased.

This resistance acts immediately on the right side of the heart, and tends to, and ultimately produces, dilatation of the right side of the heart. The slightest impediment in the right side of the heart acts immediately on the systemic venous system, causing first increased tension of the veins, then obstruction, and finally dropsical effusion.

In health the air cells are distended with elastic gases, and the pulmonary membrane is pressed inwardly by the direct weight of the atmosphere, and outwardly indirectly by the pressure on the ribs and abdomen. The elasticity of the lungs is equal to a column of mercury about one-fourth of an inch high; this elasticity, with the weight of the air on the abdomen and ribs, gives a slight pressure resisting the dilatation of the air cells. Cough consists in the sudden more or less violent pressure on the air in the tubes and cells by the contraction of the diaphragm and muscles of the chest and the muscles of the bronchial tubes and trachea, the larynx being closed. This sudden contraction increases the pressure of the air on all parts of the vesicular structure of the lungs and by long continued, often repeated mechanical pressure, the elasticity of the cells is lost where there is least resistance, and the pressure of the air in the vesicles more or less rapidly causes dilatation and perforation and ultimate obliteration of the pulmonary membrane; for each mechanical cough whilst forcing part of the air out acts with an equal and opposite force upon the inelastic air cells.

The dilatation and destruction of the cells necessarily occasions the destruction also of the capillaries on each side of the pulmonary membrane, and as the amount of obliteration increases, a mechanical obstruction to the passage of blood through the lungs is produced, and from this the chemical process of the aëration of the blood is impeded. In consequence of the mechanical injury, the absorption of oxygen and the escape of carbonic acid may ultimately be reduced to such an extent that the whole blood may become more venous than arterial, and general loss of power from imperfect oxidation and general loss of substance and alteration in chemical composition from imperfect chemistry of nutrition may result.

Moreover, the mechanical impediment to the passage of the blood through the lungs increases the tension of the blood in the veins, and congestion, dilatation, and effusion may be caused throughout the venous system. Dropsical effusion in the textures occurs, not because the left side of the heart fails to send the blood through the veins as in insufficiency of the aortic valves and in dilatation of the left side of the heart, but because the right side of the heart cannot empty itself, even though sometimes by its increased action it ruptures the blood-vessels of the lungs in its endeavour to overcome the obstruction. General suboxidation and subtrophic action are not the only chemical errors caused by vesicular emphysema of the lungs. The general venous congestion affects the chemical actions in the secreting glands. The passage of the sluggish blood through the liver is made more slow, and chemical derangements in the secretion of the bile result. The capillaries of the kidney become congested, and the secretion of urine is diminished and its composition changed; ultimately fatty liver and jaundice, and albuminous urine and fatty degeneration of the kidney and uræmia may result from the primary mechanical injury by which the vesicular emphysema of the lung was produced.

Whilst speaking of Medical accidents, I must for a moment here allude to another large class which, as they are in their commencement chemical and not mechanical, therefore belong to the first part of this course of lectures. The vast subject of poisons may be comprised in this class of accidents. Poisons, according to their quantity and quality, suddenly or slowly act chemically on the body, and thus give rise to chemical and mechanical changes which sometimes cause the instantaneous stoppage of all action—that is, death; and sometimes produce the most protracted increased or diminished chemical and mechanical actions—that is, more or less acute or chronic disease. Almost every vegetable and mineral medicine which we use, when taken in sufficiently large doses, acts as a poison. Hence you will at once see how the full knowledge of these in Medical accidents may give you clear ideas regarding the effect of medicines in promoting or retarding the action of the mechanical, chemical, muscular, and nervous forces that cause disease. But I must now leave this vast subject, of which I will endeavour to draw a most unfinished sketch in an appendix to this course of lectures.

And here, before I conclude, I must add one word of apology for so exclusively dwelling throughout this course of lectures on the chemical and mechanical actions of disease. I have done so because I could thereby obtain a degree of clearness and a connection of ideas which is very far beyond that which the present theory and practice of Medicine, with its "vitality," "degeneration," and "phlogistic action," can offer. Moreover, even now the knowledge of the chemical and mechanical actions in the body is still in its infancy; but it daily grows, and will grow, stronger, broader, and deeper until it will carry away our present theories of Medicine, and bring us new materials for the construction of a perfect building, of which I have tried in this course of lectures to trace the outline.

The present wide-spread disbelief among Medical men regarding the existing theories of disease and the mode of action of remedies, and the utter disagreement which so frequently exists between those who ought from the same therapeutical knowledge to adopt almost identical practice, and the complete wreck of all authority in Physic, proves that the theory and the practice of Medicine are now in a transition state; that the ground is being cleared for a new building based on the theory of the conservation of energy. The science and practice of Medicine will quickly advance to perfection as soon as the progress of the physical sciences enables us to obtain clear ideas of the action of each force, and of the relation of all the forces that exist in every substance within us and around us. As soon as we possess and can use this knowledge our Profession will regain that union, that power, and that position which must of necessity be ours when we are able to advise with certainty upon the separate and conjoint action in the body of all the forces that bring good and harm to mankind.

## ORIGINAL COMMUNICATIONS.

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# OBSERVATIONS ON THE MEDICINAL SPRINGS OF HARROGATE.

By GEORGE KENNION, M.D., F.R.C.P.

There are two reasons which induce me to offer to your readers a short account of Harrogate and its Medicinal springs. One reason is that so little is generally known about the place, and the vast resources which it presents to invalids; the other, that, to the large and valuable *répertoire* which Nature has already so bountifully given us, we have lately had a very important addition in the discovery, by Professor Sheridan Muspratt, of the existence of proto-chloride of iron in considerable quantity in one of our springs—thus constituting it a chalybeate water of, in all probability, very great therapeutic value, and one which, in respect of this constituent, is without a prototype.

Harrogate is commonly divided into two parts, which are respectively named High and Low Harrogate. The greater part of what is called High Harrogate is built upon a high table land, which is elevated 420 feet above the level of the sea, and commands a magnificent and extensive view, while Low Harrogate is situated in a basin, which is bounded on the east and south sides by the high ground on which High Harrogate is built, and on the west by "Harlow-hill." The upper stratum of the soil is sandstone, below this is a bed of shale in some parts, of clay in others, and below this again is carboniferous limestone. The air of Harrogate is peculiarly pure and bracing, and, as is commonly remarked, possesses more of the freshness and elasticity of the sea air than almost any other inland place. The position of Harrogate being such as I have described it, gives us the advantage of two distinct climates: the air of Low Harrogate being comparatively warm even while a strong and cold wind may be blowing over the "Stray" or common which extends throughout High Harrogate, and around which many of the best hotels and houses are built. The sandy nature of the soil allows of the paths being immediately dried up, after even the heaviest rains; and, whatever may be the cause, the fact remains that while cholera, in different epidemics, has been raging all round, not a single case has ever occurred in Harrogate. Rinderpest so far, I am thankful to say, is unknown in the place, and fevers, brought here by visitors, never spread. The country around Harrogate is, for the most part, well cultivated, the scenery picturesque, and the objects of interest for excursions are very numerous. Such is a brief topographical description of Harrogate. I proceed now to describe that which especially has conduced to the reputation of the place, viz., its Medicinal springs:—

It has long been a general opinion, and one which is shared in by very many, even in the Medical Profession, that the only, or at all events the principal, mineral water in Harrogate is the well-known sulphur water—"the Harrogate Water" *par excellence*, and further, that the chief class of complaints for which this "Harrogate water" is a remedy, is the large and troublesome class of cutaneous diseases. I will enumerate the different kinds of water which are found here:—

1. Strong sulphureous waters, rich in chlorides.
2. Mild sulphureous waters, containing alkaline salts.
3. Saline chalybeate waters.
4. Pure chalybeate waters.(a)

This statement of the distinct varieties of waters which are found here will show how mistaken the former opinion is—viz., as to the existence of only one kind of water, and I will point out as I proceed, that there are many kinds of cutaneous diseases which are much more satisfactorily treated by some of the saline chalybeate waters, and which are indeed aggravated by the sulphur waters. As regards the variety of waters here, I believe that I am correct in asserting that in no place, either in this country or in Europe, is there so great a choice of mineral springs, all of them valuable as therapeutic agents, and all in constant use in the large variety of cases which present themselves here for treatment.

The sulphureous waters are used externally as well as internally. The important difference between the two classes of sulphur water which I have above named, consists not only in the relative amount of sulphuretted hydrogen which they contain,(b) but also in the quantity, as well as the quality of their saline ingredients. The stronger waters contain, according to Dr. Hoffman's analysis, about gr. 15 of sulphide of sodium (representing about c.i. 26 of sulphuretted hydrogen gas) in each gallon, and nearly gr. 1100 of saline matter, of which about gr. 780 consists of chloride of sodium, the remaining salts consisting chiefly of the chlorides of calcium, magnesium, and potassium. The milder sulphureous waters contain very much less of sulphide of sodium, (on an average—for there are at least four of these springs—they contain about gr. 2 in each gallon), and about a fourth part of the amount of saline matter which exists in the stronger waters; and whereas in these the most active saline ingredient is chloride of sodium, in those the comparatively predominant salts are alkaline carbonates. I need hardly advert to the great advantage which we possess in having this variety in the constitution of the sulphureous springs.

The physiological effects of sulphuretted hydrogen in moderate doses appear to be chiefly exerted on the great nervous centres, on the mucous membranes, and upon the skin. On the nervous system it acts at first as a stimulant, but if its use be too long continued, or if it is taken in too large a quantity, it acts powerfully as a sedative, or even as a narcotic poison. On the skin and upon the mucous membranes it has a directly stimulating effect, and peculiarly is this the case as regards the bronchial mucous membrane, for which it would seem to have a remarkable affinity. M. Claude Bernard, M. Demarquay, and others have clearly shown that when sulphuretted hydrogen is injected into the blood, it is immediately (*i.e.*, within twenty-five seconds) eliminated from the lungs. Böcker believes that under its continued use carbonic acid is more largely exhaled from the lungs, and uric acid excreted in larger quantities from the kidneys. I think that my own observations tend to confirm the latter opinion; but it appears to me probable that both these effects, the former directly and the latter indirectly, are only the natural result of the quickened passage of blood through the lungs.

From this brief account of the physiological effects of sulphuretted hydrogen, we can readily understand how important is the part which it must play, when its energies are rightly directed against disease of those organs or tissues upon which its influences are chiefly exerted; and, when we find its action associated, as it is in these waters, with that of the salts which they contain, we need not wonder at the reputation which the waters of Harrogate have obtained, nor that the number of diseases to which they are applicable is so large.

On the physiological and therapeutic effects of these saline matters I need not dwell for a moment, and I therefore proceed to mention some of the chief classes of disease which are amenable to the action of these waters, and in doing so I will commence with cutaneous diseases.

In the frequent cases of lepra, psoriasis, and pityriasis, these waters are peculiarly beneficial in their external as well as their internal use. There are few of these cases which are not more or less connected with a gouty predisposition, and the stronger sulphureous waters, acting as they do very powerfully upon the liver, the portal system, and the kidneys, by removing congestion and increasing secretion, have in this their eliminative action a directly curative effect upon these diseases. The external use of these waters has, probably, something more of a specific effect in these diseases, particularly if the opinion of Hebra is correct that sulphur, in the form of alkaline sulphurets, induces a hyperæmic state of the affected integuments, stimulating the growth of epidermis, and thus accelerating the metamorphosis of tissue. In pustular diseases of the skin, of which we may take impetigo as a type, these waters are almost invariably useful, both in their internal and external use. In all these cases there is probably some morbid condition of the blood (allied, as I am disposed to think, to that hyperfibrinous state which exists very often where there is a tendency to boils), to get rid of which Nature establishes this discharge, and we help her in this effort by so administering the waters as to produce their eliminative action through the different emunctories of the system.

In vesicular diseases of the skin, as a general rule, I do not think the internal use of the sulphureous waters so beneficial as in the squamous and pustular diseases. My usual practice in these cases is to combine the external use of the sulphur water (which I consider invaluable in these diseases, either in the stronger or the milder variety, according to the nature of the case) with the internal administration of one or other of the saline chalybeate waters. The results of observation lead me generally to use the same mode of treatment in most of the papular diseases of the skin, such as lichen and prurigo, in which, while the inflammatory condition of the skin is of an asthenic character, there is a want of healthy tone of the general system.

In the pustular diseases which attack the face—acne, sycosis, and mentagra—connected as they almost always are with a thickened unhealthy condition of the blood, I find the external use of the sulphur waters very beneficial; but I find the internal administration of the saline chalybeate waters produce the greatest amount of benefit to the general health. Thus we see that sulphur waters are not necessarily a cure for cutaneous diseases, and that their salutary influence is chiefly felt by their power of removing those morbid states of the general health which are the parents of these diseases. It seems, indeed, almost an absurdity to press this truism; but the daily experience of this place, and of the preconceived views of the subject with which many invalids come here, shows that it is not unnecessary to do so.

Of what are commonly called "blood diseases," I may mention cases of secondary and tertiary syphilis as being very much benefited by the use of sulphureous waters and sulphur baths. The same remark applies to a very large proportion of scrofulous cases. The observations of M. Grimand, Andrien, and others go far to prove the value of sulphurous waters in cases where there is actual deposit of tubercle in the lungs.(c) To a certain degree this effect may be due to the generally improved condition of health in which such cases are placed by the use of mineral waters of this class, and by the pure air which they breathe here; (d) but the remarkable circumstance already alluded to, and first ascertained by M. Claude Bernard, of the pulmonary mucous membrane being the chosen point of elimination from the system of sulphuretted hydrogen, cannot fail of engendering the belief that as upon the skin in some cases, so in others upon this membrane sulphuretted hydrogen may produce a specific effect, increasing the local circulation, stimulating the growth of epithelium, and accelerating the metamorphosis of tissue. It is probably due to some such cause that cases of chronic bronchitis are so often benefited here, and that the peculiar follicular disease of the throat, known as "clergyman's sore-throat," not unfrequently yields to this mode of treatment.

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(a) In mentioning these four varieties I must be understood as merely indicating them as varieties; there are, I believe, no less than fifty different springs.

(b) Strictly speaking, as many of my readers are aware, sulphuretted hydrogen does not exist, as such, in these waters as they arise from the spring in this their pure state; the chemical condition in which sulphur exists is in combination with sodium, as sulphide of sodium. Exposed, however, for a short time to the air, this combination is destroyed, and free sulphuretted hydrogen and soda are the results.

(c) I am aware, indeed, that my friend, Dr. Edwin Lee (*vide* "Watering Places of England"), is disposed to break a lance with me on this subject, chiefly on the ground that the quantity of saline matter in the sulphur water so rapidly excites the alimentary mucous membrane, that it does not give time for the sulphuretted hydrogen to be absorbed into the blood. In these cases, however, where the desideratum is to produce a constitutional, and not a purgative effect, it is very easy so to regulate the dose, as well as to choose the particular spring, as to allow of the system being thoroughly impregnated with sulphur. It is true, as Dr. Edwin Lee suggests, that I have not seen any such cases *cured* by this mode of treatment; but I can testify to the great improvement in the general health, and strength, and nutrition, which many cases of this kind do experience here. Beyond this I certainly cannot go; but is not this in itself a great point gained?

(d) Dr. Thorowgood's remarks upon this subject are very valuable ("Change of Air in the Treatment of Phthisis," second edition).

In gout and rheumatism, with all their widely-spread ramifications, these waters are remarkably beneficial, acting powerfully upon the secretions and excretions, purifying the blood, as they thus do, from so much that contaminates it, renovating the powers of the digestive organs by removing those local congestions which interfere with the healthy discharge of their functions, we should naturally expect, what we actually find, that their efficacy in these cases is immense; and when we bear in mind how large a proportion of chronic functional disorders have, as their basis, a foundation of gout, we cannot fail to remark how wide a field of successful practice is here opened to us. In one form, indeed, both of gout and of rheumatism, viz., where the effusions round or within the joints have become hard and concrete, we must, I fear, in all fairness, concede the palm to Buxton. I do not mean to imply that such cases are not cured here (the contrary, indeed, is the case), but I must frankly admit that Buxton does more good in these cases than Harrogate can effect. I believe, however, that much benefit accrues even to such cases as these, if they come here and drink the sulphur water before they go to Buxton. The reverse plan is often tried, but with much less advantage to the patient. I am happy in being corroborated in this opinion by my friend, Dr. Robertson, of Buxton, whose ample experience in all that relates to that important place is so well known. In reference to this class of cases I have been in the habit of observing that while Buxton deals with the past, Harrogate deals with the present and the future. Connected as such cases are with a gouty diathesis, I may here remark upon the great relief which patients experience here who are afflicted with "gravel." The thorough washing through which the tubes of the kidneys undergo during a course of these waters mechanically clears away any sandy deposit which may have lodged in them. If this deposit has gone on to the extent of forming a small calculus, their effect is to dislodge it before it is too large to pass through the ureters; while the increased flow of urine helps to carry it through the bladder. The mild alkaline sulphureous spring, which is largely resorted to for this purpose, has a solvent effect upon these deposits almost as powerful as some of the springs at Vichy; indeed, patients who have been at Vichy have told me, not infrequently, that they have derived more advantage from drinking this particular spring than from the use of any of those at Vichy. Another form of blood disease which is almost invariably removed by the action of these waters is that of lead-poisoning—I do not remember to have seen a case which was not greatly relieved, if not cured, by their use.

There is another class of cases which are most frequently benefited by the use of the stronger sulphureous waters—viz., those of uterine congestion, either active or passive: cases where we find menorrhagia on the one hand, and on the other hand dysmenorrhœa, or even amenorrhœa.

As a general rule I do not advise the internal administration of these waters in organic affections of the nervous system. There are some cases, however, of paralysis of old standing in which the external use of the strong sulphur water is beneficial; and in that peculiar and, until lately, little understood disease known as *progressive locomotor ataxie*, Dr. Althaus and others have found much benefit from the use of sulphureous baths. Dr. Brown-Séquard also recommends a trial of these baths in some cases of reflex paralysis.

In the large majority of the diseases to which I have adverted as being remediable by the action of these waters, there exists, or has existed, a disordered condition of some portion of the digestive organs, and there can be no doubt that in a very large proportion of these cases, the organ which is chiefly in fault in the first instance is the liver. Passive congestion of the liver, vascular as well as biliary, with all its long train of consequences—congestion of the portal system, thickened bile, constipation, indigestion. I cannot describe these cases in more graphic words than those of Dr. Chambers (Lectures, Chiefly Clinical, p. 524). "In these cases," he says, "there is a dinginess and darkness of complexion, and the stools are scanty. The skin gets greasy and opaque, the countenance puffy and bloated, sometimes thin and pale, the lower eyelid especially, sallow and discoloured. The sebaceous follicles on the alæ nasi are stopped up with black matter. There is seldom" (at first) "any decided emaciation, nor is there always even loss of muscular power, but there is great sluggishness of body and apathy of mind, and there is a miserable want of decision and energy." "The natural end of this state of things, if left unchecked, is gradual progress from bad to worse. The decrease of destructive assimilation loads the tissues with effete matter, useless for the purposes of life, and a constant source of general discomfort. This impedes the constructive assimilation of food; growth is arrested; the blood is not renewed; and hence progressive anæmia, weakness, want of nervous and muscular power, and probably, in the end, the degeneration of one or more of the viscera, and death."

I know of no treatment by which cases of this description are so much benefited as by the use of these (the sulphureous) *or*, according to the circumstances of each individual case, *the saline chalybeate waters;* and hence it is that so very large a number of these cases are completely cured by the treatment which they undergo here.

It has been frequently made a question as to how far the benefits which patients derive from the use of mineral waters is dependent upon the actual imbibition and immersion to which they are subjected, while they are "using a course of waters," or upon the change of air and scene, and the complete release from the ordinary duties of their position in life, be that position what it may. Now, it has always appeared to me, that at a place like Harrogate, where we have so great a variety of waters, we have a fair opportunity of testing this point: indeed, I may say, it is frequently tested *for* us. It is a matter of every-day occurrence, that people come here for the purpose of drinking "the water" and bathing, who are either directed by their Medical advisers at a distance (who, naturally, cannot be conversant with the different waters which there are here, and their very different effects), or, acting on their own judgment, or the advice of those whom they meet with here (all invalids think that what has cured them will cure their friends!) as to the particular waters and baths which they should use, after being here perhaps for two, three, or four weeks, find that they are not deriving the benefit which they had expected, or perhaps that they are "getting worse" every day, and then they apply for Medical advice upon the spot. It is found, perhaps, that they have been drinking "the wrong waters," or too much water, or too little, or that in some way the waters have disagreed with them. They are then put upon a fresh plan of treatment, which results in a relief, or a cure of their symptoms. Now these patients have had from the first all the advantages which change of air and relaxation could bring them, but instead of improving in health, they have lost ground every day; then beginning a new and a better regulated plan as regards the use of the waters, they gradually regain their health, and at length go away more or less cured. Cases of this kind, I say, always appear to me a very conclusive test as to how much of the benefit which patients derive here is due to these adjuvantia, (adjuvantia undoubtedly they are, and of a very high order), and how much is really due to the waters.

A very few words will suffice to bring under the notice of your readers the important chalybeate springs with which Harrogate abounds; indeed, a bare enumeration of them is all which is required, for it would be almost an impertinence to occupy your columns, or the time of your readers, with any description of the cases which call for their use.

There are two principal springs from which the saline chalybeate waters are obtained: the one is popularly called the Kissengen spring, from a certain resemblance in its composition and its effects to the Ragozzi spring at Kissengen; the other is that alluded to in the early part of this paper as containing protochloride of iron in considerable quantity. The former spring has been extensively used for several years, and is exceedingly valuable as a remedial agent in those very frequent cases—cases of every day's experience—where we require the combined action of an aperient, a diuretic, and a chalybeate. To some of these cases I have already adverted; others will at once present themselves to the recollection of my readers.

Of the effects of the new spring alluded to as containing the protochloride of iron, I am unable as yet to write very confidently; but so far as we have tried it during the few months which have elapsed since Dr. Muspratt first discovered the existence of this salt in the water, my own observation and that of the other Medical gentlemen in the place concur in leading us to form a very high opinion of its therapeutic value.

Theoretically, from its composition (e), we should expect it to be very useful; practically, I think we shall find that in this spring we possess one of the most valuable, perhaps *the most valuable chalybeate water in Europe*.

In addition to these two very important springs, there are two powerful pure chalybeate springs, where the iron is found in the normal form of a bicarbonate.

P.S.—The lapse of two months since the above remarks were written has afforded me opportunities of using this newly-discovered spring somewhat extensively, and the result has been to confirm very amply the expectations which were raised of its great therapeutic value. Amongst other obvious cases where it may be used with advantage, I am now able to write with confidence as to its efficacy in cases of fatty degeneration of the heart.

Harrogate, April.

## RAPID AND EXTENSIVE EMBOLISM OF THE HEART IN A PHTHISICAL SUBJECT —SPEEDY DEATH.

By J. E. GROSS, Medical Officer, Gibraltar Prison.

J. D., a delicate lad, aged 21, was brought to Hospital at 6 a.m., March 11; moribund, with small rapid pulse, skin moist; unconscious, face pale, lips livid, breath cold, and breathing rapidly and with the utmost difficulty. A large sinapism was applied over the front of the chest, and brandy and water was freely administered. His pulse improved in volume for a short time, but rapidly fell, and he died in two hours.

*History.*—He had been at Gibraltar about sixteen months, and had suffered all the time from chronic phthisis, but had always kept at his work, which on the day before his death was cleaning bricks, close to the prison. The weather had been unusually cold for the past week, with a sharp northerly wind blowing. He had complained to his fellow-prisoners of feeling this cold much, and of his cough being more troublesome at night. On the evening of March 10, his cough was very troublesome and his breathing much hurried, but not sufficiently so to induce him to apply for admission into Hospital. Nothing unusual was noticed by his fellow-prisoners during the night, but in the morning, when he did not get up, they spoke to him, and he then requested to be sent to Hospital immediately, as he said he was dying.

*Autopsy twenty-six hours after death.*—No symptom of decomposition. Rigidity well marked everywhere. Features much more swollen than during life. The jugular veins and the minute ramifications of the veins over the sides of neck, upper surface of shoulders and arms down to the finger ends were full of blood. This condition of the upper surface of the body, coupled with the suddenness of the symptoms, led at once to the opinion that embolism of the heart would be found. Thorax:—Lungs universally adherent by old firm adhesions to walls of chest. Much tubercle in masses and various stages scattered throughout both lungs. Right lung.—Three cavities, lined, each the size of a pigeon's egg and communicating in the upper lobe. Great and recent congestion of lower lobe. Left lung pale, hollowed out, and pressed close to ribs by enlarged pericardium, which contained six ounces of clear serum, but no lymph. Heart very much distended, more particularly the right cavities, the walls of which were very thin, pale, and not exceeding two lines and a half in thickness. On laying open the right ventricle, the whole of the cavity was occupied by a firm white, almost glistening, clot entangled amongst the chordæ tendineæ. It extended upwards into the right auricle, which it completely filled, and also into both branches of pulmonary artery, wholly blocking it up. There was also a small quantity of blood-stained serum in the ventricle. The left ventricle also contained a smaller, but equally white clot, which extended up into the auricle, just over the mitral valves, being blood-stained on the one side where the current passed over it.

*Remarks.*—I think this case of embolism worthy of recording for these several reasons. Its occurrence in a case of phthisis which presented no features out of the common, and in which the subject of it was still engaged at his usual work. Its short duration, rapidity of formation, great extent, and apparently small exciting cause. The thin fatty heart here was probably unequal to the small amount of extra work thrown on it by the engorged lung, and from its inability to empty itself became the primary cause of the subsequent changes.

## REPORTS OF HOSPITAL PRACTICE
IN
## MEDICINE AND SURGERY.

◆

## LEICESTER INFIRMARY.

### TWO SUCCESSFUL CASES OF OVARIOTOMY.

(Under the care of Dr. C. H. MARRIOTT, Surgeon to the Infirmary.)

*Case* 1.—L. P., sent to me by my friends, Mr. Whitchurch and Mr. Barwis, of Melton Mowbray, was admitted into the Leicester Infirmary December 1, 1863. Aged 39; single; household servant; parents living, healthy; no special disease on either side of the family. She reports that about five years ago she suffered from prolapsus uteri, followed in a year after by hardness and enlargement of the bowels. The swelling was uniform over whole abdomen, and gradually increased to its present size. Has had no pain till last two months, and then it has been in leg and thigh. Both legs have occasionally been very much swollen. Catamenia till two months ago.

*Present Condition.*—Rather below the average height, of nervous temperament; face pale and anxious, with pallid complexion; extremely emaciated; papular eruption, more or less over whole body; moves with difficulty; respiration considerably affected; heart and lungs normal; abdomen enormously distended, measuring at umbilicus forty-one and a-half inches; fluctuation; perfect dulness over whole front of intestinal walls, and flanks; both legs and thighs œdematous, right more than left, great pain in the leg and foot; uterus pushed down to entrance of vagina; os uteri size of pinhole.

December 19.—Tapped an inch and a half below umbilicus, thirty and a-half pints of pale greenish limpid fluid drawn off, containing a large quantity of albumen, sp. gr. 1010. Examined microscopically it showed blood-corpuscles, granules, and some spherical granular cells not containing nuclei.

21st.—No substance to be felt in abdominal cavity; uterus in its normal position.

26th.—Sent to her home in the country for two months.

February 23, 1864.—Re-admitted; looks much better, has gained flesh considerably, and is able to walk about with ease; appetite very good, and in excellent spirits. Pulse 96. Measures at umbilicus thirty-three inches; abdominal parieties can be moved over the tumour, except close to the point where she was tapped; percussion at the upper edge of the tumour is dull, and is not affected by full inspiration. The uterus is forced downwards and backwards nearly to the entrance of the vagina; percussion on the tumour over the abdomen is felt by the finger in the vagina; catamenia appeared three months ago, natural in time and quantity; urine contains lithates; no trace of albumen or sugar. Owing to a troublesome cough, the operation was deferred.

*Operation.*—March 21, 12.30.—The room was heated to 75° Fahr. Chloroform being administered, an incision four and a-half inches long was made from a point two inches below the umbilicus to an inch and a half above symphisis pubis. By a little careful dissecting the abdominal cavity was opened, and the cyst showed plainly of a whitish colour. The hand was now passed through the wound, and easily broke through some adhesions over the left front, between the parietal peritoneum and the cyst; no further adhesions could be felt. A large trocar was plunged into the cyst, and after about two pints of fluid had escaped the trocar slipped out; but as the cyst had been partially withdrawn, none of the fluid found its way into the abdominal cavity, and the instrument was instantly replaced. The cyst was easily

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(e) I subjoin the analysis of this water as made by Professor Sheridan Muspratt, and Professor Miller, of King's College:—

*Analysis of Chloride of Iron Spring.*

| | gr. in one gall. |
|---|---|
| Oxide of manganese | A trace |
| Chloride of calcium | 138·43 |
| Chloride of magnesium | 84·39 |
| Chloride of sodium | 205·92 |
| Chloride of potassium | 3·84 |
| Chloride of barium | 6·78 |
| Protochloride of iron | 14·49 |
| Protocarbonate of iron | 11·62 |
| | cub. in. in one gall. |
| Carbonic acid | 26·28 |
| Nitrogen | 8·08 |

drawn through the incision. The pedicle was short and two inches wide. A double ligature was passed through it, and the cyst cut off about an inch and a-half above it. The stump was drawn outside the abdominal cavity. Three deep silk sutures were passed from within out through the peritoneum, and through the whole thickness of the parietes; and four superficial ones were added. A small clamp was then fixed on the pedicle. The intestines were just seen once or twice, but were easily kept from protruding. 5.30 p.m. (four hours and a-half after operation).—Has been slightly sick once; has taken no food. Inclination to pass water; catheter used; seven ounces drawn off. To have a little brandy and arrowroot. Pulse 80. 9 p.m—Feels sick; has not slept. To take morph. acet., gr. ¼; acid hydrocyan. dil., ♏ii.; aquæ, ℥ss.

22nd, 9.30 a.m.—Pulse, 72; she slept well; sick once in night; no flatus has passed *per anum;* urine drawn off three times a-day. To have a little iced brandy-and-water occasionally, and to suck ice *ad libitum*. 9 p.m.—Pulse 76; at 7.30 p.m. vomited more than a pint of green bilious fluid, after feeling sharp pain in the stomach for an hour before. Ordered beef tea, ℥iv.; brandy, ʒvi., to be injected every three hours, and opium to be added while the pain is severe.

23rd, 9.30 a.m.—Pulse 80; has had a comfortable night; face pinched and drawn; had severe griping pain at 6 a.m., followed at 7 a.m. by bilious vomiting, slight hiccough; abdomen tympanitic; bears moderate pressure without pain; wound healthy. 2 p.m.—Pulse 92, small; vomited again at 11·30 a.m., and at the same time a moderate quantity of sero-sanguinolent fluid was discharged through the centre of the wound. Ordered creasot., ♏i., in a pill every two hours. 9 p.m.—Pulse 96; was sick after the creasote, and was ordered tr. opii., ♏iii., in a teaspoonful of brandy and a teaspoonful of water every two hours; vomited again at 7·30 p.m.; hiccough less violent; tympanitis increased since morning.

24th, 10 a.m.—Pulse 100; fuller and less compressible; vomited at 1.30 a.m.; at 4.30 a.m. (sixty-four hours from the operation) passed a large quantity of flatus *per anum* for the first time, soon followed by two small liquid motions; hiccough has ceased; abdomen notably less tympanitic; countenance more natural. 9.30 p.m.—Pulse 92; vomited green bilious fluid at 11.30 a.m.; bowels acted again 12.30; catamenia came on freely in the afternoon. Increased brandy to ʒi. in each injection.

25th.—Pulse 100; has passed a comfortable night; four upper sutures, two deep and two superficial, removed; strip of plaster put across; wound healthy. To have injection and medicine every four hours, and a tablespoonful of beef-tea by the mouth.

26th.—Pulse 96; slept well; bowels open twice; complains of pain at the clamp; slight blush and swelling around and below it; two other sutures removed.

27th.—Pulse 96; passed a large fæculent motion yesterday; considerable discharge of pus from under the clamp. Injections cause pain; to be given every eight hours.

28th.—Pulse 92. Discontinue the injections. Clamp removed (seven days); skin red and swollen, and excoriated from the pressure, which, owing to the great distension of the abdomen, had been very considerable.

29th.—Pulse 92; appetite good. To have boiled sole for dinner. From this date she improved rapidly.

April 2.—Ligature on the pedicle being removed (twelve days), the lowest of the deep sutures was also taken away. It had been so drawn inwards as to be entirely out of sight before; it had cut its way out of the right margin of the wound, but was still deeply imbedded in the left; scarcely any irritation was caused by it.

17th.—Wound healed. Allowed to get up (twenty-seven days).

29th.—Catamenia appeared on the 26th, naturally; ceased to-day.

May 10.—Has taken regular walking exercise for last three weeks; now feels quite well and strong. Discharged cured.

This patient called on me a month ago (one year and seven months after the operation, looking remarkably well, and stated that she had for some time past been living in London, in active service as housekeeper, and that her health had never been so good for many years.

*Case* 2.—F. S., aged 52; single; native of Leicester; admitted December 3, 1864. Parents had been healthy, but were now dead; no special disease on either side of the family; one sister died of general dropsy, but the bowels were scarcely, if at all, swollen; patient has had no illness except those of infancy, and variola at 3 years of age, of which she now bears the marks. Five years ago noticed a uniform swelling of the abdomen, not more on one side than the other. At this time her urine diminished in quantity, and the catamenia, which had been regular up to this time, ceased and have never returned. Her general health was good, and she suffered no pain.

In April, 1864, I first saw her, and tapped her. One large cyst was emptied, and about three gallons were drawn off. Some solid growths were now felt, and seemed to be immoveably fixed in the left iliac fossa.

September 2.—Tapped again; twenty-eight pints drawn off, and the solid growths were then noted as follows:—Solid growths slightly enlarged, but decidedly not adherent; diagnosis—intracystic growths.

December 23.—Tapped a third time; twenty-six pints drawn off; also a small cyst about the size of a cricket-ball; growths not large, and perfectly free to be moved in all directions; fluid highly albuminous.

27th.—Feels comfortable, and improved in general health. Made out-patient.

January 17, 1865.—Re-admitted. Feeble in strength, and face pallid. Ordered generous diet and ferri citr. three times daily.

24th.—Pulse 84, small. Measures at umbilicus 38½ inches; skin moveable over tumour. On a full breath being taken, the hand, laid on the abdomen, can feel a grating as the cyst moves against the abdomen parietes. Percussion, dull at the upper limit of the tumour, becomes of an intestinal note when a deep inspiration is taken.

*Operation*.—Urine drawn off; chloroform administered; an incision of five inches long was made, beginning about one and a-half inches below umbilicus; the peritoneal cavity was soon opened, and the cyst showed plainly of a dead opaque white colour; several ounces of ascitic fluid now escaped. In the vicinity of the wound it was free from adhesions, but owing to great distension of the cyst, I could not pass my hand around it. Feeling pretty sure it was free to be removed, I at once tapped it, without further enlarging the incision. From the great distension, the fluid was forced by the side of the trocar, and flowed over the pubes and legs, but I doubt if any got actually within the pelvic cavity, as a sponge was instantly placed below the canula. After the greater part of the fluid had flowed out, the cyst was entirely withdrawn, but many smaller ones showed unemptied, and two in particular sprang from the very bottom of the pedicle; these two were tapped. The pedicle was now seen to be made up of the left broad ligament, with the Fallopian tube lying right across it, and the uterus continuous with its right border. The pedicle, as may be imagined, was extremely short, so much so, that there was great difficulty in fixing the clamp, there being only just room to apply it between the Fallopian tube and the uterus; when this was done, it dragged so that the fimbriated end of the Fallopian tube protruded out of the wound, and the lower end of the clamp rested with great force on the symphisis pubis. Four deep silk sutures were put in, as in the first case, and one superficial one, near the top of the wound. In spite of these, the fimbriated end of the Fallopian tube passed through at the extreme lower limit of the wound, and lay on the abdomen. To obviate this, it was pushed back into the pelvis, and held there with a director, whilst another suture was applied as low down as possible. During the operation, which lasted about thirty minutes, she vomited several times and became very faint; afterwards she was placed in bed on her back with pillows under the knees and hot bottles to her feet. Ordered teaspoonful of brandy occasionally and a grain of opium as a suppository, if pain should come on. Pulse 72, very small. The cyst, when opened, showed thousands of small cysts—some single, but many clustered one within another, so as to make a solid tumour. When cut through, greyish glairy fluid exuded. Between the cysts was a considerable solid growth, so as to give a close resemblance to a honeycomb. After the cysts were emptied, it weighed altogether exactly two pounds avoirdupois. 6 p.m.—Pulse 84; has vomited once; suffers great pain at bottom of wound. Pil. opii. gr. iij. directly, as suppository. 9 p.m.—Has vomited about a pint of watery fluid, with brown flakes in it; still in great pain at clamp; does not like the brandy; to have a tablespoonful of tea occasionally, which she is very anxious for, but nothing else by the mouth. To have the following injection every three hours:—

Strong beef tea, 2 oz.; brandy, ʒij.; and liq. opii. sed. ♏x. to be added whenever she suffers much pain.

January 27, 10 a.m.—Pulse 88; has slept well, and had three injections with the liq. opii in them during the night; feels little pain; no tympanitis, but some tenderness in left groin; urine cannot be passed naturally; to be drawn off three times in 24 hours. 9 p.m.—Pulse 96; feels comfortable.

28th, 10 a.m.—Pulse 100; slept well; at 7 p.m. felt pain at lower part of wound; considerable tympanitis; no flatus passed *per anum;* no sickness; wound united by first intention in its greater part; three sutures removed, and strips of plaster applied; increase the beef-tea to ʒiv., and brandy to ℥ss.; injections every three hours. 10 p.m.—Pulse 112 to 116; feels less pain; increase brandy to ʒvj.

29th.—Pulse 112; slept well; bowels acted slightly, and some flatus passed at the same time; tympanitis not increased; clamp lies lengthwise on the incision.

30th.—Pulse 100; clamp lifted slightly, and found to press a little to the right of the line of incision; patient has taken a few grapes.

31st.—Pulse 88; bowels acted again yesterday afternoon, and twice in the night; has passed a little urine naturally twice in the night; has taken a little beef-tea, and about ℥j. of brandy.

February 1.—Pulse 104; allowed a teaspoonful of port wine occasionally; bowels open three times.

2nd.—Pulse 104; has eaten a small piece of fish to-day; clamp removed, and likewise the remaining sutures (seven days); stump of pedicle, greyish in colour, with a bright spot of granulation in its centre; wound united deeply, but granulating healthily at the skin level; tympanitis still very considerable, especially at upper part of abdomen; to have injections every four hours.

3rd.—Pulse 100; vomited at 6.30 p.m. yesterday, and was much collapsed after it, for which she was ordered brandy ʒj., and beef-tea ʒiij. every three hours as injection.

4th.—Pulse 92; tympanitis greatly decreased; injection every four hours.

5th.—Pulse 88; has passed a true fæculent motion, for the first time since the operation, all the others looking more like beef-tea than real fæces; abdomen normal in size; to have injections every six hours.

6th.—Pulse 92.

7th.—Pulse 88; to have chicken to-morrow, and to discontinue the injections.

March 9.—In good spirits; appetite excellent; wound healed, except one spot of granulation where the pedicle was; allowed to get up and walk about.

23rd.—Wound thoroughly healed.

I saw this patient about a month ago, and she is perfectly well and strong.

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**Veterinary Surgeons.**—The Bill laid before Parliament by Mr. Holland imposes a penalty upon any one who, not being a member of the Royal College of Veterinary Surgeons, shall assume the title of Veterinary Surgeon; but the Bill is not to affect persons who have assumed the title six months before the passing of the Bill.

**Claim by a Chiropodist.**—At the County Court yesterday, before J. K. Blair, Esq., judge, Mr. Siemms, a chiropodist, of this town, claimed from a person named M'Ginn two guineas on an I O U, which he had received from him under the following circumstances, as appeared from the plaintiff's case:—In the course of his business he was visited by the defendant, who sought his assistance with respect to some corns from which he was suffering. Defendant, after having his feet examined, handed plaintiff one guinea, and gave him an I O U for two guineas, plaintiff's fee being three guineas. —Plaintiff was cross-examined, but he denied that he had promised to perform a cure.—The defence was that the plaintiff was not entitled to recover, inasmuch as he was not a registered Surgeon and the evidence of the defendant was to the effect that he gave the I O U upon the understanding that he had been completely cured, but instead of this he subsequently suffered to the same extent as he had done previously.—The judge, without deciding upon the merits of the case, expressed his opinion that the legal objection was a fatal one to the case of the plaintiff. The duty of the chiropodist constituted an operation within the meaning of the Medical Act, under which the plaintiff was not registered.—Judgment for the defendant.—*Liverpool Mercury,* May 4.

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MEDICAL TIMES AND GAZETTE.

SATURDAY, MAY 12.

## THE CATTLE PLAGUE REPORT.

The long promised Report of the Secretary to the Veterinary Department of the Privy Council on the "Origin, Propagation, Nature, and Treatment of the Cattle Plague" from information received at the office from June, 1865, to March 20, 1866, has at last made its appearance. It is not, by any means, so voluminous as we might have anticipated, seeing the time during which it has been in the incubative stage; but of this we ought not to complain, because of the less difficulty we shall have in laying before our readers a brief analysis of the conclusions at which Dr. Williams has arrived. With a commendable desire to avoid controversy, he expressly states that he gives no opinions of his own, but simply "the hypothesis which is most fully borne out by the evidence" in his possession; and, therefore, it seems to us we cannot do better than summarise the different sections of the Report without interpolating any remarks or criticisms of our own, which we can hereafter more satisfactorily offer in a succinct form. It should be distinctly remembered that the Report deals exclusively with the progress of the disease from its commencement to the end of last year only, and takes no cognisance of what has happened since.

1. The origin of the cattle plague in this country is not determined by any evidence of a satisfactory and conclusive character. As to whether it is of spontaneous origin or whether it was imported from abroad, an extensive correspondence has only resulted in conflicting statements. Medical men possess more scientific knowledge of epidemics than Veterinary Surgeons have acquired regarding epizootics; but it appears that the general verdict places the cattle plague amongst the *exanthemata,* and on this assumption the probability of its spontaneous origin would be certainly set aside by modern pathologists. Indeed, it seems that experience has to a great degree settled this question, for of the comparatively few cases reported as self-originating, subsequent inquiry has either inferentially or directly decided against the supposition.

"It may, however, be said that, although throughout the country districts of England there is no evidence of the propagation of the disease except by contagion, yet in the London dairies it may have arisen spontaneously. If, however, it be admitted that epidemics and epizootics are to a great extent due to the same causes and governed by the same laws, and that our theories with regard to epidemics embrace the whole of the knowledge which has been collected upon the subject, it must be conceded that it is *more probable* that an epizootic disease, having a constant habitation only in the Russian Steppes, and which has not prevailed to any large extent, if at all, in this country for the last century, was introduced by direct contagion than that such disease should have acquired a new centre of spontaneous origin in a country where it had existed and died out on several previous occasions. I do not consider that the after-spread of the disease in this country is incompatible with the hypothesis of its importation. Reasoning by analogy, we know that to propagate an epidemic, we must not only have the germ of the disease, but also the soil and climate, so to speak, necessary for its cultivation. And thus, though animals infected with this disease may have been introduced at various times and in various places into this country, yet the germ may only in June, 1865, have found in the overcrowded London dairies the surrounding circumstances necessary for its reproduction; for it has been observed in our epidemics, that although they require to be first nurtured under circumstances only to be found among the lower classes, yet when once they have become naturalised they do not require these circumstances for their rapid after-propagation."

2. Whatever may be the origin of the disease, there is no doubt that it is highly contagious, and that its "propagation" depends upon contagion, either direct or indirect; but the difficulty of tracing the source whence the germ of disease was derived, leaves the exact mode of propagation an open question. The terms *contagion* and *infection* are used indiscriminately, but as "the germ must by some means or other have been brought in contact with the living tissues in which it has produced the disease," there would seem to be no need for the use of the term *infection*. The progress of the disease has varied greatly in the different counties of England, and many attempts have been made to account for this variation. Amongst others the geological formation of certain localities has been held to account for their comparative immunity from the disease, and a table is given showing out of 2989 isolated outbreaks the numbers occurring on the different formations. 952 occurred on the tertiary and post-tertiary formations, of which two-thirds were on the clay; 783 on the new red sandstone; 402 on the coal measures; 400 on the chalk formation; 268 on the oolite formation; 102 on the lias; and the remaining few on the silurian and igneous rocks. The practical commentary on these results supplies a highly interesting piece of information:—"On analysing these figures, however, it will be found that, as a rule, *those formations having the largest amount of outbreaks have also the largest amount of pasture land.*" The relation existing between the progress of epidemics and *elevation* is well known to exist, and in cholera especially its effect is most marked. This connexion appears also to be satisfactorily established in the epizootic now under consideration, and with the view of testing the theory as completely as time and other circumstances would allow, Dr. Williams selected one county and worked out the subject therein. Yorkshire, as the largest county, and offering a wide range of external physical features, was judiciously chosen; and from the investigation it appears that "the higher we ascend, the less are the ravages of the Cattle Plague, and that when we attain an elevation of 1000 feet the Cattle Plague disappears." Further and more extended inquiry may possibly modify this statement, but we have no reason to believe that it will be materially affected. The only other local circumstance as affecting the progress of the disease which Dr. Williams notices (we shall take the liberty by-and-by of pointing out one or two important elements which ought, we think, to have been referred to) is the size of the farms. "The smaller the farms the more rapid the progress of the disease, unless modified by other circumstances;" a close proximity between the centres of infection would no doubt aid in spreading the disease, and there would be greater difficulty in thoroughly isolating diseased animals where the communication between farm and farm is frequent. The effect of slaughter in checking the spread of the disease will of course be differently valued by the advocates and opponents of the system. Dr. Williams, whilst admitting that other circumstances occasionally counteract the beneficial effects of early slaughter, asserts that "in the greater number of instances it has been attended with marked results in reducing the ratio of increase," and he endeavours to show that the operation of the Order in Council (August 26th) permitting inspectors to slaughter had the effect of diminishing the increase of outbreaks in the ratio of 10 to 3. Into this point we do not now enter, as we shall discuss it at a future opportunity; we only desire to warn our readers against accepting Dr. Williams's conclusion without first verifying it for themselves.

3. The "nature" of the disease was at first doubtful, but now it is almost universally held to be "similar to, if not identical with, the Rinderpest of the Russian Steppes."

"It has been called by different observers typhoid or enteric fever, typhus fever, malignant fever, and various other names. It has been said to be identical with small-pox and other known eruptive fevers, and the wildest notions of its character and origin have been entertained and forwarded to this office. But none of these hypotheses will bear the test of investigation. The Cattle Plague appears to be a disease *sui generis*, belonging probably to the class 'exanthemata,' or eruptive fevers. It is highly contagious; has a period of incubation; rarely occurs more than once in the same animal, and is attended with an eruption."

The period of incubation ranges from six to twenty-one days; and the duration of the disease is variously stated from twenty-four hours, or even less, to ten or twelve days. The disease has varied in its character not only in different districts, but at different times; and it is a matter of congratulation to find Dr. Williams admitting that "*the returns appear to indicate that the disease gradually acquires a milder form as it continues its course.*"

4. The results of a special inquiry into the different systems of "treatment" adopted are thus classified:—

| | Number treated. | Recovered. |
|---|---|---|
| Antiphlogistic . . . | 1389 | 27·5 per cent. |
| Tonic and stimulant . | 3842 | 25·9 " |
| Antiseptic . . . . | 2970 | 26·4 " |
| Special . . . . . | 1507 | 25·8 " |
| Total . . . . | 9708 | 26·3 " |

The above percentage of recovery on all the cases (26·3) is far in excess of "the experience of independent authorities who have investigated the results of treatment, both in cases under their own care, and also under the care of the appointed inspectors." This anomaly is ascribed to the natural tendency to exaggerate, even unconsciously, the effects of a favourite system of treatment, although this argument would seem to us as applicable to one set of reporters as to another. Reviewing the results of treatment generally, Dr. Williams speaks very despondingly, and rests all his hopes for the future on preventive measures, and the "gradual dying out of the disease which has been observed to take place after a time in human epidemics of a similar character." Yet he admits that the percentage of recoveries has been increasing week by week, and we see no reason to expect otherwise in the future, for if the virulence of the poison is subsiding, if the disease is dying out, it is natural, and according to all experience, that medicine will gradually regain its power. So we counsel Dr. Williams to be of good cheer, and look forward to the day when the occupation of the Veterinary Department, so far as Rinderpest is concerned, will, like that of a celebrated Shakespearian character, be "gone."

But what will be said to the following sentence anent the much lauded Aberdeen system of "stamping out?"—

"So far as an isolated district in an infected country is concerned, this process appears to have had a fair trial in Aberdeenshire, and the result arrived at does not appear so thoroughly successful as could be wished, there having been up to the present time eight outbreaks of disease in this county, and nearly 500 animals slaughtered."

It may be true that the adoption of stringent measures on the first appearance of the disease would under some circumstances be attended with success; but such measures are more easily carried out in countries where the will of the ruler is the inflexible law of the land, than in England, where individual rights and privileges have so wide an influence.

The statistics of Dr. Williams's Report are hardly of much interest now that they are three months behindhand, and the deductions drawn from them require modification by the light of present experience. But he appends a series of shaded maps which illustrate the progress of the disease from its commencement in June, month by month up to the end of the year, and these are really valuable. If their production has been the cause of the delay in bringing out the Report, we are disposed to condone the fault for the sake of the increased interest afforded.

## WORKHOUSE INFIRMARIES.

It is probable that great good will result, directly or indirectly, from the movement made by the Association for Improving the Condition of the Metropolitan Workhouses; but whether by introducing an entirely new organisation or by improving the old it were premature to speculate. It is said that Dr. E. Smith's investigations will confirm the allegations made against some of the older Workhouses as being incurably bad; others, again, may be expected to be found good; and others capable of great improvement. Everywhere we hear of improved ventilation, of attempts at better nursing, and in some cases of an increase of the Medical officers' salaries. The only wonder is, that all this was not known to and recommended by the Inspector of the Poor-law Board long ago. It may be taken for granted that a considerable amount of reconstruction and enlargement will be considered essential; and then the question will arise, whether it be better to do this in or near the old sites (supposing such a thing possible), or on new sites to be acquired for the purpose; and if the latter, whether the new buildings shall be under the existing organisation and government; or whether under a new and independent system. Other collateral questions will then unavoidably come to the surface respecting the ordinary "Voluntary Hospitals;" for if an enthusiastic feeling is to be excited in favour of sending the Workhouse Hospitals into the country, it will be difficult to show why the Voluntary Hospitals should not follow them. Questions will further be put as to the number of pauper cases that really require Hospital organisation; and whether at present a large number of poor, aged, broken-down creatures are not put on the sick list and sent to the Workhouse Infirmary merely because of the better diet which is obtainable thereby; and consequently whether, when we hear of one Medical attendant to a large number of sick, it is not the fact that three-fourths of these are sick only in so far as they are old and incurably infirm, and require not so much Medical treatment as good food, comfortable warm lodgment, and religious consolation. When the number and nature of the cases for which a regular Hospital organisation to be carried on in new buildings is precisely fixed upon, then will come the question whether these shall, as heretofore universally in England, be governed by the *local authority*, or whether some new Board should be created, with powers and functions entirely new; and it may be questioned how far such a proposition would be favourably received by the House of Commons, even if Government should be willing to take it on its shoulders. The general opinion seems to be that in England, whether as regards gaols, workhouses, or lunatic asylums, the details must be left to the local functionaries, be they magistrates or guardians, who represent the pockets of the contributors; whilst, as a check, there should be independent inspectors, to represent the conscience of the nation and the interests of the poor creatures who are inmates of the institutions. Just as in the case of passenger steam-boats, the Government sends an officer to certify to the soundness of the engines, the number of boats, and the competency to carry a given number of passengers, so in the case of Workhouse Infirmaries, Government should certify to the adequate capacity and ventilation of the building; should require a certain staff and appliances, and then must leave the details to the local functionaries. After all the case resolves itself into one of *Medical inspection.* We want a responsible functionary who shall be able to report publicly on the accommodation, the air, the food, the drugs, the nursing, and the Medical management; and let us say that it would be a happy thing if the inspection were extended to the voluntary Hospitals likewise. Then the reports of the Medical inspectors would be a means of creating a generous rivalry amongst the governing bodies of all such institutions as to which should be foremost in the art of doing good.

## BATHS.

Perhaps we owe an apology to our readers for bringing to their notice matters apparently so trivial as those of which we are about to treat. We trust that their importance and the fact that such subjects are but little understood by the younger members of our Profession may be accepted as a sufficient excuse.

We propose to treat, first, of baths, their various methods of application, their action, and their uses.

Baths, as is well known, are of various kinds. The water composing them may be hot, cold, or tepid. They may be used generally or locally. To the water various substances are sometimes added.

It may be accepted as proved that none of the constituents of baths are absorbed by the skin. Many experiments have been made to ascertain the truth of this statement. None of the ingredients that were added to the bath could be found either in the urine or in the other excreta. Nay, it is highly probable that even the water itself is not absorbed by the skin. Thus the effects they produce on the system must be due to their action on the skin in virtue of either their moisture, their temperature, or of the ingredients that the water may contain.

We shall first speak of the general cold bath—baths composed either of simple or of sea water, and whose temperature varies from 40° to 75° Fahr. These baths produce their effects by virtue of either their moisture or their low temperature. This latter property may act either by its influence on the cutaneous nerves, thus producing shock, or by abstracting heat from the body. It is probable that they produce their effects by means of all these properties. By their moisture they cleanse the surface of the body, and thus promote the proper functions of the skin.

But cold baths are given for other effects than these. If properly used, the cold bath becomes one of the most powerful tonics we possess. If improperly applied, it may inflict serious mischief on the person using them.

The remarks we are now about to make apply to both cold simple and cold sea baths, but especially to the latter. We shall subsequently point out in what way these two kinds of baths differ.

On entering a cold bath a feeling of depression is first experienced. The pulse is greatly quickened, but loses much in force. The respirations are hurried and irregular. There is a feeling of chilliness with great diminution of the temperature of the surface of the body. This condition, however, quickly changes. The surface of the body glows; the pulse gains in force. There is a sense of increased vigour both of mind and body, the spirits are greatly exhilarated. This continues for a variable period, and is then again followed by a feeling of depression, accompanied by chilliness and a feeling of languor and exhaustion.

Baths, as we have stated, are given for their tonic effects. To secure these it is necessary that the patient should leave the bath during the second stage. If left at this time the condition of that period remains during the rest of the day. Thus given, the appetite is increased and digestion and assimilation improved. There is increased vigour of the body, with a desire for exercise. The patient is cheerful, the spirits more buoyant.

If, however, the bath be remained in, the depression of the last stage becomes permanent. The patient remains languid, fretful, irritable. The appetite is lessened. Much chilliness may be felt during the day. He is disinclined to exertion, and often experiences a sinking at the epigastrium. These results are to be most carefully avoided.

How long should persons remain in the water in order to obtain the greatest tonic effects? To answer this question in an individual case two points must be kept in mind—namely, the strength of the bather and the coldness of the water. With persons whose health has been impaired by excesses of any kind, by over-work, bad air, or who are convalescent from an acute disease, the first two stages pass quickly by, and they speedily pass into the stage of depression, which becomes permanent for many hours afterwards, and often for the rest of the day. Hence the time the patient be ordered to stay in the bath must be regulated to the vigour of his system. It is also most important to recollect that if the shock be very great, no second stage may occur, but the patient passes at once into the third stage and remains languid and depressed, with an impaired appetite during the remainder of the day. Thus it is important to regulate the shock to the strength of the patient. The amount of shock is dependent on the coldness of the water. Water, moreover, in motion, as is the case with the shower bath, produces much more shock than water at rest.

These principles teach us how to administer baths to persons in different degrees of health, and will explain the directions we are about to lay before our readers. These rules, however, are not merely deduced by the principles just stated, but they are the conclusions arrived at by those who have enjoyed a wide experience of baths.

Persons unaccustomed to bathing, if in health, should only stay in the water ten to fifteen minutes. Should they prolong their stay in the water, the bath is liable to produce much depression, and consequently fails to produce the desired tonic effect. By habit, however, the system becomes accustomed to bathing, and thus after their frequent use persons can often remain in the water half an hour or longer with good result. The length of time that the bath should be used depends on the temperature of its water. The colder the water, the shorter the duration of the bath, as we have seen that the amount of shock is in proportion to temperature of the water and time it is used. With weak people the duration of the bath must be considerably shortened. The time must be strictly regulated to their condition of health. The weaker the patient the shorter the time, as we have seen that in such persons the second stage lasts but a short time, and is quickly lost. Such persons can seldom remain in the water more than five minutes without suffering harm. If the patient's health be much depressed, he should be directed merely to dip into the water and allow a billow to wash over him, and then immediately to leave the water.

In determining the temperature of the water we must have regard to the strength and condition of the patient, for if the shock be too great we obtain only depression, and thus if the patient be very weak the water must not be very cold.

Persons of plethoric habit must bathe with much caution, for the excitement produced in such people may be too great, and thus headache, giddiness, congestion of the brain may follow the use of the bath.

Children under two years of age should not have cold sea or fresh-water baths given them. At this early period of life they are easily influenced, and may be seriously injured. Warm sea bathing for such is preferable, or the cold bath may be administered in the following way:—The child must be placed (or, if too young to stand, held) with its feet in warm water, and before a good fire, and cold water should be poured over the body for one to two minutes. The water should not be applied to the head. When administered in this way, very young children may have cold baths given them with the very best result. The same method should also be adopted with older children if they be weak, or if the weather be very cold, or the water may be slightly warmed in addition.

May pregnant women bathe? If they have had previous abortions, if they be nervous and irritable, baths had better be abstained from. Under other circumstances, both the mother and child will be much benefited by sea bathing. It is also unadvisable to commence a course of bathing at the time of menstruation, and at first bathing should be discontinued at these periods.

Patients who are very weak should not at once commence to bathe in the cold sea; with such the system may be so weak that only depression will result from the use of the bath. In such people cold bathing is apt to cause shiverings, trembling, a feeling of excessive fatigue, and with loss of appetite and other symptoms, and these results continue for the rest of the day, and often much longer. If such symptoms occur, or if the patient be considered too weak for cold bathing, tepid baths should be used, and the temperature of these should be daily lowered until the temperature of the sea is reached. It has been stated that water in motion produces a greater shock than water at rest, and we have seen that the amount of shock must be regulated to the condition of the patient; consequently, weak people should bathe in a calm sea. Persons of stronger health may choose a rough sea; for the action of the billows on the body is pleasurable and exhilarating to the spirits, and in such persons produce great tonic effects.

Too much exercise in the water should be avoided by weak people, as such are liable to be easily fatigued, and then depression follows. Patients should have directions given to them in respect of the time of day and season of the year at which they will profit from sea bathing.

At what time of the day can patients bathe with the best results? At that time when they are least liable to be depressed. Early in the morning, when the system is fasting, such a result is very liable to occur. Invalids, therefore, should be prevented from bathing before breakfast. But due time must be allowed for the digestion of the meal, as any strong impression on the mind or body is liable to arrest or destroy digestion. Therefore two hours should elapse after breakfast, and three after dinner, before the bath be taken. At this time also the water is warmer. It is preferable to take the bath after breakfast than later in the day. Even strong persons unaccustomed to bathing are liable to be much depressed by a bath taken before breakfast. Children should never bathe before ten or eleven. The patient must be directed to plunge at once into the water, and not to stand shivering for some time until the surface of the body is cooled. He should dip down and allow each wave to pass completely over him. It is the temperature of the sea to which we must have regard when we give direction to patients at what time of the year they may bathe with advantage. If the patient is not much debilitated, the months of May and September are good, and they should choose a shore on which the billows are rough. If, on the other hand, the patient be weak and depressed, the summer months are preferable, and a calm sea should be chosen.

The hair often falls off greatly at the commencement of bathing. This causes much alarm to the patient. Their fears may be quieted by the assurance that it will grow again more luxuriantly than ever.

If the patient be very weak, he must not indulge in much physical or mental exertion after the bath, as such exercise is apt to cause over-fatigue. Thus patients should have careful directions given them in this respect. Horse exercise is often good, as this does not require much exertion; but if the patient be very weak, carriage exercise is to be preferred. It is stated that persons who have commenced a course of sea-bathing are easily influenced by wine.

Various irregularities of the various functions of the body are apt to occur at the commencement of a course of bathing. Thus constipation is not infrequent. This must be remedied by purgatives, diet, or exercise. It need not hinder the bathing. If dyspepsia or diarrhœa occur, it is better to suspend the baths for a short time. Irregularities of the menses need not cause the patient to desist from use of baths. Restlessness at night sometimes occurs at their commencement. If this be not very great, the baths may be continued. The diet of the patient should be carefully regulated. Stimulants should mostly be abstained from previous to the time of going to bed. Before entering the bath care should be taken that the body be not overheated by exercise; on the other hand, the patient should not be cold and chilly. Thus it is often desirable that slight exercise should be taken previous to their use.

All strong emotions should be avoided before bathing, and if they occur, especially if of a depressing kind, the bath should be omitted. It follows that children who dread the water should not be compelled to enter the sea, but should be coaxed in. If timid children be violently plunged into the water, they may be made very ill for several days. On leaving the bath a short walk should be taken. Two baths a-day can seldom be indulged in.

## THE WEEK.

### THE PREVAILING EPIDEMIC.

INFLUENZA is very prevalent in London at present, and is one of many other signs that forbode a probable invasion of cholera. The symptoms we have noticed are shivering and malaise, followed by dry heat of skin (but in one or two cases in which the thermometer was used it did not indicate any abnormal rise of temperature), great sneezing and defluxion, tickling cough, and muscular pains. Children seem to be greater sufferers than adults. The old-fashioned stimulating diaphoretic, composed of Liq. am. acet. and nitrous ether, with conium for the cough and plenty of nourishment, seem to have been successful remedies, and the epidemic has been extensive rather than severe.

### THE CHOLERA AT LIVERPOOL.

Two or three portentous facts stand out in the history of the cholera which has broken out on board the German emigrant ships. One is the existence of an European population so filthy, debased, and brutalised, as is described in the letters of our Liverpool correspondents. More serious still is the length of time between their departure from the Continent, and the outbreak of the cholera; for it is thus shown that passengers apparently healthy may carry cholera in their persons, clothes, or baggage. As to the dirty habits of the emigrants, they are described in the following terms by the highest sanitary authority in Liverpool:—

"I have asked the Medical inspector of emigrants, and one of the chief managers of the National Navigation Steam Company, about the condition of the passengers on board the *England* when she left this port. Both these gentlemen concur in saying that there was no appearance of sickness or of debility among them; but the manager states that the emigrants by the *England* were the dirtiest of the whole lot which have been passed this year. If he be correct, the statement is important, for the Dutch and Germans on board the *Helvetia* are the dirtiest people in their habits whom I have ever seen. The Surgeons assure me that not unfrequently they rinse out with water the pan used for the reception of the excrement and urine of their children, and then employ it as a cup for drinking and for their dinner mess; and no power or persuasion will prevent them leaving their dejections on the floors, the bedding, or the clothes. The water of the *England*, and, indeed, of all the ships sailing from this port, is supplied from the same source as the town itself. One of the chief passenger brokers of the people conveyed by the *England* says that the greater number of them came from South Germany and Switzerland, and merely passed through Rotterdam and Antwerp. The whole system by which these unfortunates are picked up, or rather trepanned, in Germany, and, for a fixed sum of money, hurried through to the ocean steamers for America, is very blameable, and should be placed by the several Governments under regulations and restrictions."

The latest report from Liverpool states that cholera has appeared amongst the Germans or Dutch who have been removed from the *Helvetia* to the depôt at Birkenhead. The father of the child who died last week is stated to be ill of cholera in the workhouse; and five deaths from the disease have occurred on board the Hospital ship *Jesse Munn*. Seven more cases were under treatment on board the same ship. The town is flooded with Dutch and German immigrants. All the lodging houses are full, and 200 had to be accommodated by the parish authorities on Tuesday last. These people mostly arrive at Hull from Hamburgh and Rotterdam, and it seems clear that if quarantine measures are to be of service, it is at Hull they must be put in force. It is proved that a mere Medical examination is no safeguard. Detention of the apparently healthy may seem a harsh measure, but it is the only one which can be relied on, and the facts of the present importation seem amply to justify it.

### THE ARMY AND NAVAL MEDICAL SERVICES.

WE would direct the attention of our readers to the extremely unsatisfactory reply of the Marquis of Hartington to the question of Colonel North.

It is notorious that the publication of the recommendations of the late Committee attracted a better class of candidates at the last examination for the Army Medical Service. This was all that was required for the purposes of the Government, of course. We have long held the opinion that little or nothing would be done so long as the authorities could obtain candidates, and the statement made by the War Minister on Tuesday last goes a long way to confirm it.

The remedy is in the hands of the Profession. Young Medical men should not be tempted by a delusive bait, but they should clearly abstain from entering the public services until the authorities have made up their minds as to what is the future pay, position, and prospects held out to Medical officers.

As to the Navy, the candidates for that service have been so few of late that it may be almost said there have ceased to be any.

### RUDMAN *v.* ARMSTRONG AND ANOTHER.

THE practice of Medicine had need have its special rewards, for certainly it has its special dangers. The following case illustrates very forcibly one species of the latter. A Medical man, even the unpaid officer to a public charity, is never safe from vexatious and vindictive law proceedings if he should be unlucky enough to treat a patient who is prompted by greed or malice, or even the dictates of insanity or hysteria, to bring an action for malpraxis against him. Dr. Armstrong and his son obtained a righteous verdict truly, but this does not repay them all the annoyance they must have suffered, and all the legal expenses in which they have been mulcted. The case was tried last week in the Court of Exchequer before Mr. Baron Channell and a special jury:—

"The defendants were Dr. John Armstrong, who has practised for thirty-three years at Gravesend, and his son, Mr. John C. Armstrong, who is in partnership with his father; and the plaintiff, Sophia Emily Rudman, was between 18 and 19 years of age, and the daughter of Thomas Rudman, a boot and shoe maker, in a humble way, living in the neighbourhood of Hackney. The case for the plaintiff was briefly as follows:—In 1864 her father kept a shop in Gravesend, and lived in lodgings in Edwin-street, in that town. She had always resided with her parents, had been employed in shoe-binding, and was represented to have invariably enjoyed good health. On a Sunday in November in that year, while walking across the room, she fell down, according to her own account, with-any apparent cause, and hurt her knee. The limb swelled and grew rapidly worse, and she became an out-patient of the Gravesend Dispensary, of which the defendants are two of the honorary Surgeons. She attended regularly about once a week, and was seen by one or the other of the defendants, who gave her advice and prescribed medicines, which were made up at another branch of the institution upon the payment of a fee of a penny on each occasion. She ceased going to the Dispensary by the beginning of June, at which time she was said to be in a weaker state of health. Afterwards the plaintiff's father engaged Dr. Armstrong to Professionally attend her at her own home, and continued to do so until 1865. Notwithstanding his treatment she grew worse, and showed all the symptoms of excessive salivation by mercury. Her mouth became so sore and her teeth so loose that she could only eat with difficulty, her nails were affected and some came off, while sores broke out on her hands and feet. It was also stated that her hands and feet were contracted by the action of the mercury, which it was alleged had been improperly administered. When the plaintiff's solicitor wrote to the defendants threatening an action, they denied that the girl had been improperly treated, and expressed their readiness to contest the point, sending their claim for Professional services, which amounted to £8 18s., for that purpose.

"The plaintiff, who was carried into court in an apparently helpless state, was briefly examined. Afterwards, on the suggestion of the learned judge, she was taken into his private room, and examined in private by four Medical men, two representing each side.

"Mr. Bonny was then examined, who said he was a Surgeon. He had formerly lived at Greenhithe, and happened to call at the plaintiff's father's while she was under treatment at the Dispensary, and he was shown the girl's knee, and the piece of flannel on which the ointment was applied. The plaintiff appeared to him to be in a state of salivation. Her mouth was sore, her gums spongy, teeth loose, and other signs of extensive salivation.

"On cross-examination, he stated he called about some boots the plaintiff's father was making for him, and did not attend the plaintiff Professionally, but acted as a friend. He was a duly qualified Medical man, and had been registered two years. The plaintiff was now under his care. He was now in practice at Horsleydown.

"The witness underwent a long cross-examination as to the effects of mercury in producing salivation and generally as to the state of the plaintiff, during which he behaved in so flippant a manner as to call forth a severe rebuke from the learned counsel.

"Mr. J. Vinall, a Medical Practitioner at Hackney, deposed that he was applied to last October to attend the plaintiff, and examined her, and found she was of a weakly constitution and out of health. He declined to attend her unless some arrangement was made as to payment, and the mother told him that they had got a law suit against the Doctor who had been attending the plaintiff, and that he should be paid out of the money they would get. He declined to look to any such source for payment, and ceased to attend her.

"Upon cross-examination he stated that when he examined her he saw no traces of salivation, or the effects of it, and considered the plaintiff chiefly required tonics, fresh air, and proper living.

"In the course of the trial a box of ointment, which the plaintiff's mother said had been prescribed by the defendants, was produced. The contents were to be applied twice a day to the knee, and she deposed that whenever that was used by the plaintiff it produced suffering, and made her worse. The composition was proved to be ordinary mercurial ointment.

"The defence was that the defendants treated the plaintiff according to the best of their knowledge, skill, and judgment as Medical men, but that she was of a weakly constitution, and the nature of her occupation and the circumstances under which she lived, the whole family residing in two rooms, and probably not having a sufficient quantity of nourishing food for one in her condition, retarded her recovery. It was also said that if mercury was used it was only after all other remedies had failed, and then only in the proper manner and in the right quantity. They stated they heard no complaints from the girl or her parents as to the mode in which they had been treating her until they received the lawyer's letter; and there was a suggestion that the action was only a solicitor's one to recover costs.

"Mr. J. C. Armstrong said he saw so many patients at the Dispensary that he could not recollect the particular nature of the prescriptions he wrote, but he gave the plaintiff nothing to produce undue salivation. He rarely used mercury in his practice, and, as a rule, he was opposed to its use. He had no knowledge of the box of ointment, and was inclined to think he had never prescribed it.

"Dr. Armstrong, the father, said that, after having tried fairly and honestly the effect of medicine on the plaintiff without making a cure, he came to the conclusion that the impediment to her cure was the want of proper food, fresh air, and exercise. He added that the atmosphere of the room in which he always saw her was very impure and offensive, and that no person suffering from any complaint who lived in it was likely to get better. He seldom resorted to mercury, and his son used less. The witness said the whole of his prescriptions for the plaintiff were in court.

"Mr. Solly, of St. Thomas's Hospital, who had examined the plaintiff, deposed that he could not discover the slightest possible trace of salivation by mercury upon her. He also expressed a positive opinion that her knee was free from disease, and that she had the perfect use of it. He thought she could walk from the court into the hall, but with this qualification—that owing to her weak state from long confinement she might perhaps require a little assistance. With regard to the use of mercury in cases of disease of the joint, he said it was often employed with effect when iodine had failed. Sometimes the appearances of salivation presented themselves without the use of mercury, particularly when iodine had been taken. He was quite certain the plaintiff could walk into the hall, or else his experience of forty years went for nothing.

"The trial occupied nearly the whole of two days, and the jury, after consulting together, intimated that they were already agreed that their verdict should be for the defendants.

"Mr. Serjeant Robinson, the counsel for the defendants, said that there were in attendance several very eminent Medical men, who would have given similar evidence to that given by Mr. Solly, namely—Mr. Le Gros Clark, one of the Council of the College of Surgeons, and Surgeon at St. Thomas's Hospital; Mr. Cooper Forster, Surgeon at Guy's Hospital; and Dr. Braxton Hicks, Physician at Guy's Hospital.

"Mr. Baron Channell said he was now at liberty to express his opinion on the case, which he could not do until the jury had expressed theirs. He had thought at one period of the case that he ought to stop the case and nonsuit the plaintiff; but considering it to be of such vast importance to the defendants that such a charge as that of ignorance or negligence in their Professional conduct should be fully inquired into, he came to the conclusion that it was better it should go on. He must say he entirely concurred in the verdict of the jury, and he thought he might go further, and say that there had not been the slightest evidence of want of skill or care on the part of either of the defendants.

"On the conclusion of the case, Messrs. Armstrong were warmly congratulated by their friends and Medical brethren."

We congratulate Dr. Armstrong and we congratulate the Profession on the result of this trial; but our action ought not to end here. For months upon months this woman has been holding the threat of trial over the head of Dr. Armstrong. At any time he could have stopped the whole matter by a few pounds, but he determined that the case should go on without compromise—his own honour, the honour of the Infirmary, the honour of the Profession lay involved in that step. He has taken the step and won the day, but at what a sacrifice of time, health, and money! The question is, shall we allow him to sustain this without a word of sympathy and support? We are glad to say not. We understand that Dr. Richardson has already taken steps to form a provisional committee to organise a movement for expressing in a substantial way the thanks of the Profession to the Messrs. Armstrong, and we feel assured that the effort will be as successful as it will be energetic and to the point.

### FROM ABROAD.—MIALHE ON SECRETION AND DIABETES.

M. Mialhe communicated last week a paper to the Académie de Médecine upon the influence of the nervous system on glandular secretion, with a new theory of diabetes. He regards the action of the nerves on the glands as completely analogous to the chemical action which the current of the pile exerts upon them, as various other physiologists have, indeed, already done. It is an error, therefore, to believe that secretion is solely or principally a work of elimination, the gland finding in the blood which surrounds or traverses it all the materials for the composition of the secretion it gives forth. In all the secretions, the secreted liquid differs chemically from that whence it is derived, the difference not being alike marked in all cases. Thus, the minimum of chemical difference is found in the excrementitious secretory apparatus, properly so called—as the kidneys, the secretory apparatus of which derives ready formed from the blood the principal constituents of the urine. Still, even here the secretion of urine will not be found to consist solely in the direct passage of the principles of the blood through the renal glands. True chemical reactions take place during this passage, and it is thus that in the carnivora the uric acid of the urates contained in the blood is set free, and that alkaline and earthy phosphates, when neutral or even basic, pass into the condition of acid phosphates, etc.—an alkaline liquid, under the intervention of the nervous system, giving rise to an acid excretion. In secretions, properly so called, or recrementitial secretions, as that of the liver, the chemical difference between the secreted fluid and that whence it is derived is far greater; and besides the chemical phenomena of the nature just alluded to, there are others of a purely physiological character, which are developed under the influence of certain ferments so entirely resembling the digestive ferments that, in fact, the elaborating functions which the glands exert upon the organic matters of the blood, in order to render them apt to fulfil the physiological action which has devolved on them, are really special digestive metamorphoses.

These views have led M. Mialhe to the formation of a new theory of diabetes. Until recently he had believed that glycosuria was solely due to an insufficient alkalinity of the blood, which rendered the complete destruction of the glycose in the animal economy impossible. At present, still retaining the opinion that it is solely through the intervention of the alkalies of the blood that glycose and its congeners are decomposed, oxidised, and burnt, becoming true calorific elements, he thinks that the primary cause of glycosuria does not solely reside in the abnormal composition of the blood, but rather is an essentially nervous affection—a nervous affection, not limited, as supposed by M. Claude Bernard, to the pneumogastric nerve, but consisting in a general neurosis.

"Diabetes is, in fact, a chronic neuropathy affecting all the nerves which regulate the secretions. It is now twenty years since, founding our view on our researches concerning diabetes, we laid down the position that this affection must be of much more frequent occurrence than was then supposed, and clinical observation has only too well justified the conclusion. But our opinion was supported by an observation the bearing of which we exaggerated, supposing, in fact, that the defective alkalinity of the economy was solely due to a too animalised regimen, the result of which was to give rise to the production of acids, and thus lessen the alkalescence of our humours. At the present time it is evident to us that this latter phenomenon is dependent upon nervous disturbance depending upon the same causes as those which render mental affections daily more prevalent."

### PARLIAMENTARY.—THE CHOLERA AT QUEENSTOWN AND LIVERPOOL—THE SLAUGHTER OF CATTLE—HOSPITAL SHIPS—THE COMMONS (METROPOLIS) BILL—PROPOSED REPRESENTATION OF THE LONDON UNIVERSITY, THE SCOTTISH UNIVERSITIES, AND THE QUEEN'S UNIVERSITY (IRELAND)—REDUCED DUTIES ON WINES IMPORTED IN BOTTLE — THE INCOME TAX — THE LABOURING CLASSES DWELLINGS BILL—DEFEAT OF THE IMPERIAL GAS COMPANY'S ATTEMPT TO ERECT GAS FACTORIES NEAR VICTORIA-PARK—THE REPORT OF THE COMMITTEE ON THE ARMY AND NAVY MEDICAL SERVICES—THE MEDICAL OFFICERS OF THE GUARDS—METROPOLITAN WATER SUPPLY—THE VETERINARY SURGEONS BILL.

IN the House of Commons on Thursday, May 3,

Mr. Maguire stated that the authorities of the city of Cork had been in communication with the Irish Government as to placing an old man of war in that harbour as a floating Hospital, and he had just received a telegram from the Mayor of Cork to the effect that cholera had appeared on board an emigrant ship which had arrived in the harbour. Two deaths had occurred, and as there were no means of quarantine the Mayor had ordered the vessel back to Liverpool. He appealed to the Government to take prompt measures for meeting the emergency. In 1833 application was made to the Government, and they placed at the disposal of the authorities in Cork an old man-of-war, the *Inconstant*, which proved to be of great service in preventing the spread of the disease.

Sir G. Grey wished that the Mayor of Cork had telegraphed to Her Majesty's Government as well as to the hon. gentleman. The Government had heard nothing from Cork; but about an hour before they had received a telegram from the Mayor of Liverpool, stating that a ship on its way to that port had touched at Queenstown with cholera on board. On receipt of the telegram he at once communicated with the Vice-President of the Privy Council, and directions would be given forthwith for the adoption of such precautions at Liverpool as might be advisable. He had no doubt that since it was now known to the Government that a vessel with cholera on board had touched at Queenstown, the Privy Council would give such directions as might be desirable in the case of that port also.

Mr. Read asked the Home Secretary whether it was the intention of the Government to continue, by Order of Council, the slaughtering clauses of the Cattle Diseases Act of 1866 after May 12, and whether any special exemptions from slaughter of diseased animals would be made for the purpose of testing the effect of any supposed curative treatment.

Sir G. Grey said it was the intention of the Government to issue an Order in Council extending the period during which those clauses were to remain in force beyond May 12. With regard to the hon. gentleman's second question, the decision of the Privy Council must await the report of the Cattle Plague Commission.

On Friday, May 4,

In answer to a question by Mr. Maguire, in reference to the recent appearance of cholera in Cork Harbour, asking whether the Government intended sending a hulk to that port, to be used as a Hospital-ship in case of neeessity,

Sir G. Grey said he quite agreed that what was done as a means of precaution against cholera should be done immediately, and the Government had certainly acted in that spirit; for so long ago as July, 1865, when cholera was reported to be at Alexandria, they thought it right to address a circular to the municipal authorities of all the ports in Great Britain, calling their attention to the necessity of taking precautions against its introduction, and directing then, in case, unfortunately, of its introduction, that proper Hospital accommodation should be provided for the reception of the patients. He really did not know what steps had been taken by the municipal authorities in consequence of those warnings, except that at Liverpool there is a Hospital specially prepared for the reception of cholera patients. It was very doubtful whether a ship was the best kind of Hospital for cholera patients, and whether it would not be much better that provision should be made for them on shore; but the hon. gentleman was probably aware that for six years a sick ship was kept at Queenstown, but was never used, except on one occasion for a few days. It was therefore thought desirable to discontinue it and save expense. At present it was impossible for the Admiralty to provide ships for cholera Hospitals at the different ports; bnt if there was any urgent necessity at Cork the Admiralty would be prepared, if there was any difficulty in providing the necessary accommodation on shore, to place a ship at the disposal of the municipal authorities as a temporary expedient, those authorities undertaking the general charge and superintendence. He only spoke for his own department; but he should say that in such a case the municipal authorities ought to apply to the Admiralty, stating the circumstances which induced them to think such an arrangement desirable. With regard to any general system of quarantine, he could only say that in consequence of information from Liverpool received by telegram, and since confirmed by letter, the Privy Council had met, and were considering the terms of an order which would give municipal authorities additional powers to deal with ships that might arrive with cholera patients on board.

Mr. Liddell inquired whether the expense occasioned by the Hospital accommodation provided at the various ports to meet the great danger of cholera would be borne by the municipal authorities or by Government subsidies.

Sir G. Grey believed that under the present law that expense fell on the local funds administered by the municipal authorities.

On Monday, May 7,

In answer to a question by Sir W. Jolliffe,

Mr. Cowper said that in the event of the Commons (Metropolis) Bill being read a second time he should be prepared to refer it to a select committee.

The Chancellor of the Exchequer in the course of his speech on the Redistribution of Seats Bill stated that the Government proposed to give one seat to the constituency of the University of London, and another seat to the Scottish universities. In introducing the Reform Bill for Ireland, Mr. C. Fortescue said that the Government proposed to throw open the Queen's University to all students applying for degrees, irrespective of their place of education. For that purpose it would be necessary to grant the Queen's University a supplemental charter. The Government intended to put the Queen's University on the same Parliamentary footing as the London University, and to give it the right of returning a member to that House.

In Committee on Ways and Means the House agreed to the reduced scale of duties on wines in bottle. One shilling duty is to be charged on wines containing less than 26 degrees of proof spirit verified by Sykes's hydrometer, and 2s. 6d. on wines containing less than 42 degrees.

On a resolution for the renewal of the income-tax, Mr. Hubbard, Mr. Alderman Lawrence, and Mr. Whalley protested against its inequalities and injustice.

The Chancellor of the Exchequer declined to discuss the question at that time.

On Tuesday, May 8, in the House of Lords, the Labouring Classes Dwellings Bill was read a second time.

In the House of Commons the Imperial Gas Company Bill was disposed of after a short debate. Mr. Tite moved its rejection, and the House turning a deaf ear to the undertaking of Mr. Staniland (who had charge of it) to strike out all the clauses relating to the erection of gasworks near Victoria Park, he ultimately withdrew it.

Colonel North asked the Secretary of State for War whether it was the intention of Her Majesty's Government to carry out the recommendations as regards increased pay, etc., of the Committee which was appointed to inquire into and report upon the grievances of the Medical officers of the army and navy, and if there was any objection to lay the report upon the table of the House?

The Marquis of Hartington said that the recommendation of the Committee involved not only a considerable increase of pay to Medical officers of both services, but questions of the expediency of placing the Medical officers of the two services on a different footing. The recommendations of the Committee were receiving due attention, and as soon as a definite decision was arrived at he would communicate the result to the hon. member. He did not, however, think that it would be expedient to lay the report asked for upon the table just now.

Sir R. Anstruther, in calling the attention of the House to the proposed alteration in the system of promotion among the Medical officers of the Brigade of Guards, and in moving for an address for copies of the warrant or order of 1860, under which a change in the system of promotion among the Medical officers of the Brigade of Guards is to be made, and of any communication from the War Office or the Horse Guards to the officers commanding the three regiments of Guards, intimating the proposed change of system to the officers affected by it, said he believed that the motion affected the whole of the Medical department in her Majesty's service, and, through that department, the whole Medical Profession throughout the country. It could scarcely be expected that first-class men of the Medical Profession would enter her Majesty's service unless they could be certain of the rules under which their promotion was to be regulated. It was supposed by some that this motion went further, and affected the authority of the Crown over its own army. He should be the last man to wish to see the power of the Crown over the army controlled in any way, and he should regard it as a great misfortune were that House to take the control of the army into its own hands; but they had a right to expect that the recommendations which were given to her Majesty by her advisers should be made with a due regard to existing and ancient interests, and that any innovation upon the ordinary rules should be preceded by ample notice to the parties likely to be affected by such changes. The promotion to the position of Surgeon in the Guards had hitherto been regulated by seniority, and he had heard of no reason why a system which had endured for so many years should be altered. It appeared that in 1858 a royal warrant was issued, founded upon the recommendations of the Royal Commission of 1857, which ordered that the Assistant-Surgeons should as a general rule be promoted to the rank of Surgeon in the order of their seniority of service, unless exceptional circumstances should prevent them being so promoted. The Medical officers in the Guards did not imagine that that warrant affected them, as it had hitherto been supposed that when the Guards were not especially mentioned in a warrant they were not affected by it. The warrant in question contained no special mention of that particular branch of the service, and, therefore, the Medical officers in it were justified in believing that they were not affected by it. Either they were or they were not affected by it—if they were not, then his argument held good; if they were, then there was no necessity for any subsequent warrant. It now turned out, however, that, in 1860, a special warrant was drawn up, which decided that the promotion to the rank of Surgeon in the Guards should go by seniority in the brigade of Guards. He was not there to dispute that warrant, but he thought that the gentlemen affected by it should have been informed of its existence. The noble lord the Secretary of State for War had, on the 9th April, admitted that that warrant had been neither seen nor promulgated. Doubtless the noble lord in his reply would state that, although the warrant had not been promulgated, the Medical officers in the Guards were fully acquainted with its tendency; but he found, upon inquiry, that they were entirely in ignorance of its import. In the face of the warrant, however, Assistant-Surgeon Kerin was appointed, in 1863, over the heads of the Assistant-Surgeons of brigades, and Surgeon Wylde was promoted in a similar manner. He thought it extremely hard that an officer entering the Service before the warrant was signed should suddenly find his prospects destroyed without the slightest warning. At the time the warrant was signed, many officers, he was informed, would, if it had been promulgated, have resigned and sought advancement in other walks of life; but now they found that all the time they had spent in the Profession had simply been of no advantage to them. The discontent which existed among the members of the Medical branch of the army was not, he thought, surprising, when it was found that the Professional prospects of those officers would be so suddenly destroyed. On the contrary, indeed, he thought it was but natural that such discontent and distrust should exist. In addition to all the objections which might fairly be urged against the warrant itself, the time of its promulgation was about the worst that could possibly have been chosen. He had, he ventured to think, brought the matter forward in the interest of the Service itself, as well as in the interest of the Medical men. The Assistant-Surgeons of the brigade of Guards did not ask that the warrant should be repealed. They did not say that it was a bad warrant, and they would even admit that it might possibly be a good one. What they asked, however, was that it might not have retrospective action. The hon. member concluded by moving an address for copies of the Warrant or Order of 1860, under which a change in the system of promotion among the Medical officers of the brigade of Guards was to be made, and of any communications from the War Office or Horse Guards to the officers commanding the three regiments of Guards, intimating the proposed change of system to the officers affected by it.

The motion was supported by Lord H. Percy, Mr. Corry, and Mr. Ingham.

The Marquis of Hartington: Although I am unable to admit that the papers for which the hon. Baronet has moved are documents which the House has any right to claim, still, as I shall have to refer to them in the course of my reply to his questions, it will only be in accordance with the rule of the House if I lay them upon the table. I therefore make no opposition to his motion. I have, however, to make one or two observations with respect to his remarks and the request which he has made, and I hope I shall succeed in placing the matter before the House in a somewhat different light from what it is in now. It is quite true, as was stated by my hon. and gallant friend, that up to the year 1850, and I think I may say 1860, the rule of promotion from the rank of Assistant-Surgeon to Surgeon in the brigade of Guards was by seniority in the regiment. However, in 1858, as has already been stated, a warrant was published altering in almost every particular the *status* of the Army Medical officers—altering their position with regard to pay, relative rank, allowances, promotion, and pensions. The rule of promotion from the rank of Assistant-Surgeon to Surgeon was, save in some exceptional cases which were specified, to be by seniority in the service. Now, it has been stated that, the Guards not being specially mentioned in that Warrant, there was nothing to show that its provisions affected them. Does my hon. and gallant friend, however, deny that the Surgeons and Assistant-Surgeons of the brigade of Guards have taken advantage of every provision in that Warrant which tended to their benefit? Does he deny that the Assistant-Surgeons are at this moment in receipt of the increased pay given by that Warrant, and that in the brigade of Guards two at least of the Surgeons of the regiment have attained the rank of Surgeon-major simply through the operation of that Warrant? There was no objection on the part of the Surgeons of the Guards to accept those provisions of the Warrant which tended to their advantage; and surely, if they had any doubts on the subject of promotion, it would not have been too much trouble for them to make inquiries as to any provisions which were to be set aside in their case. A great deal has been said about what has been called the Warrant of 1860, but that term is hardly applicable to the document in question. The history of it is as follows:—In 1860 a vacancy took place in the office of Surgeon in one of the regiments of the Household Cavalry, and the Colonel of the 2nd Life Guards, Field-Marshal Lord Seaton, according to custom, recommended the appointment of the senior Assistant-Surgeon in his own regiment. At that time the Assistant-Surgeon of the brigade of Guards, Mr. Kerin, was not only Assistant-Surgeon of the Household Cavalry, but also senior of that rank in the Army. His Royal Highness the Commander-in-Chief, in a letter to Mr. Herbert (afterwards Lord Herbert) in recommending that the appointment should not be given to the Assistant-Surgeon to the 2nd Life Guards, but to Mr. Kerin, the senior Assistant-Surgeon of the brigade of Guards, took occasion to state the way in which he proposed to carry out the provisions of the warrant of 1858 with respect to the Household Cavalry and the brigade of Guards, so as to fulfil the intention of that warrant, and at the same time to preserve, not the rights of the Assistant-Surgeons—who, it seems, he did not think had any rights at all to regimental promotion—but the rights and the privileges of the colonels of the Guards, who had hitherto had the power of recommending promotions. That letter of his Royal Highness, and the reply of Mr. Herbert, I shall be able to lay on the table of this House. The reply of Mr. Herbert will show that he had no doubt whatever about the propriety of the promotion of Mr. Kerin; the only doubt that existed in his mind was whether or not the limitations proposed by his Royal Highness that promotion should go by seniority in brigade were in contravention of the warrant. The result of that correspondence between Mr. Herbert and his Royal Highness was a document which was submitted for the approval of Her Majesty, and which became what was designated the Warrant of 1860. That document, as I have explained, is not a warrant, but merely a submission by the Commander-in-Chief to Her Majesty of explanations of portions of the Warrant of 1858 applying to Surgeons of the brigade of Guards. Therein it is laid down:—

"That on the appointment of Surgeon becoming vacant, if in the Household Cavalry, the colonel of the regiment should be permitted to recommend for the succession the Senior Assistant-Surgeon of those three regiments, if duly qualified, and he thought proper to do so, or, if he considered it more desirable, to recommend the transfer of a Surgeon from the cavalry or infantry of the line, or the promotion of the Senior Assistant-Surgeon of the whole army, to fill the vacancy; and that the same rules should be observed on any vacancy becoming vacant in one of the regiments of Foot Guards, the promotion being given on the recommendation of the colonel either to the Senior Assistant-Surgeon of those three regiments or the vacancy filled by the transfer of a Surgeon or the promotion of a Senior Assistant-Surgeon of the army if duly qualified."

After this document came from the Queen there was no necessity for keeping the knowledge of it from the brigade of Guards; and I admit that through an inadvertency that document was not well known, and that this is a circumstance to be regretted. (Hear, hear.) However, for reasons I have mentioned, I do not think that that circumstance was sufficient to make it necessary to postpone the operation of the provisions the document contained. For I maintain that the Warrant of 1858 is the only warrant under which the Surgeons of the Guards, in the same way as the Surgeons of the whole of the rest of the army, are placed. If they wanted to become acquainted with the regulations affecting their promotion, they had only to look to that Warrant, and if they thought that exception should have been made in their case they should have applied for it. As it has been admitted by the hon. baronet who moved the address, the decision arrived at on this subject has been perfectly well known to the Surgeons in the brigade certainly since the year 1861. With regard to the case mentioned by my hon. and gallant friend, in which he said there had been a regimental promotion, he has omitted to mention circumstances which fully show that instead of the promotion of Assistant-Surgeon Hayward being an infringement of the Warrant, it was in conformity with the principle laid down in it—viz., that not the Surgeon who has served longest in the brigade, but longest in the army, should be promoted. My hon. and gallant friend has also referred to Surgeon-Major Wylde. Now, the Warrant of 1858 and the submission of 1860 did not refer in any way whatever to any promotion excepting the promotion from Assistant-Surgeon to Surgeon. The regimental Surgeon-Major, the hon. baronet is aware, is one of the peculiarities of the regiments of the Guards, which does not exist in any other regiments, and my hon, and gallant friend will remember that what applies to the Medical department of the lower ranks of the army no longer applies to the higher ranks. Considering, therefore, the decision arrived at in 1860 was in strict accordance with the principles laid down in the Warrant of 1858, and that the Surgeons of the brigade of Guards have without exception acted under it, and that it has not been shown that they were ignorant of the decision arrived at in 1860, I do not think any cause has been stated for setting it aside.

Sir R. Anstruther said that the Secretary for War had misunderstood him, arguing that he admitted that the Assistant-Surgeons of the Guards were aware of the Warrant. What he had said, however, was that there was absolutely no communication to them till 1865, and the communication then sent referred to a very small part of the submission from which the Secretary for War had quoted.

The Marquis of Hartington: I understood the hon. baronet to say that, although it had never been officially promulgated, the Assistant-Surgeons of the Guards were perfectly aware of the decision which had been arrived at in 1860. If my hon. friend does not admit this, I am prepared to assert on information which I possess, that the greater part, if not the whole of the Assistant-Surgeons of the Guards, previous to 1865, were aware of the decision, and that it underwent considerable discussion among them. With regard to the question of merit, I do not think it necessary to enter upon it at the present time. I do not see why what has been generally adopted in the army at large should not be adopted in the Guards. The hon. member for Leitrim contended that faith had been broken with these officers, who were naturally dissatisfied that juniors should be promoted over their heads. But that is the very thing this regulation was intended to avoid, and the objection of the hon. member for Leitrim therefore fails of its point. As to the passages which my hon. friend read out from the report of a Committee, which has not been laid on the table, but which, on the contrary, is a confidential document, I do not know how he obtained it, and I must decline to follow him into those passages, more particularly as the report is one which has no special bearing upon the case. For the reasons which I have stated, I regret that I shall not be able to advise the Commander-in-Chief to postpone the operation of the Warrant of 1858 with regard to Assistant-Surgeons; but rather that matters shall be left upon the footing on which they were placed in 1860.

The debate was continued by General Peel, Captain Vivian, Col. Annesley, Lord Dunkellin, Col. North, Col. Knox, and Col. Jervis. The first-named officer considered that the question was not one on which Parliament should be called to decide.

Sir R. Anstruther, in reply, insisted on the hardship of bringing parties under the operation of the warrant when the noble lord himself admitted they had never seen it. He had not the least wish to interfere with the prerogative of the Crown in this matter, but he begged very respectfully to submit to the noble marquis and the Commander-in-Chief, not as a question of right but of justice, that the action of the warrant should simply not be retrospective. He thanked the noble lord for having agreed to lay the papers he required on the table.

The motion was then agreed to.

Mr. Hankey moved for a Committee to inquire into the water supply of the metropolis, but ultimately withdrew his motion.

On Wednesday the Veterinary Surgeons Bill, which forbids the assumption under penalty of the title of Veterinary Surgeon except by diploma from the College of Veterinary Surgeons, was read a second time, Mr. Bruce, on the part of the Government, intimating that at a future stage he should suggest a relaxation in its stringency.

### CONFLICT OF TRUTH.

*(From a Correspondent.)*

It is a bad thing for science when one of two apparently conflicting truths is seized upon exclusively, and the other disparaged. This used to be the case with the doctrines of contagion and non-contagion. Some denied that diseases were transportable, and pointed to local impurity as their cause; others neglected cleansing, and trusted to quarantine. We are wiser now, and know that each party is right in what it asserts, but wrong in denying the position of its antagonist. So we do our best both to keep infected persons at a distance and to clean up our dirty places as well. Just now there are similar indications of exclusiveness with respect to the scientific doctrine that epidemic diseases have inherent periods of rise, increase, and decline on the one hand, and the practical maxim on the other, that it is within our power—if not to "stamp out,"—at any rate, to limit the ravages of epidemics by limiting the sources whence contagious germs proceed, and by preventing their propagation. For our own parts, we hold each doctrine in its proper place and measure. Supposing the cattle plague to visit a new and hitherto uninfected district, what should we do? Assuredly try to "stamp it out" by putting six feet of quicklime and earth between the infected carcase and the upper air; and by repeating this, combined with the "most stringent" measures of disinfection, so long as it seemed at all probable that any such sacrifice would stop the spread of the disease. But if the whole herd were infected—if sources of contagion were all around, no matter from which quarter the wind blew—and if the virulence of the epidemic were abating as shown by the ratio of recoveries, of course it would become a question what is the mode of saving the greatest quantity of beef? and then warm mashes and disinfectants would take the place of poleaxe and disinfectants. This, we think, would seem common sense to most of our readers.

## REVIEWS.

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*Medico-Chirurgical Transactions.* Published by the Royal Medical and Chirurgical Society of London. Second Series, Vol. xlviii. Longmans. 1865.

It may be thought a work of supererogation to review the transactions of a society in a journal where reports of all that is said and done in that society regularly appear. But if it be necessary to find an excuse for so doing, it is furnished by the excellency and practical importance of the papers which the Royal Medical and Chirurgical Society admits into its yearly volume. The two series of "Medico-Chirurgical Transactions" give, probably, a more worthy and favourable picture of the progress of Medicine and Surgery in England during the present century than any other serial publication we possess. They contain the best work of the best workers, the most carefully-sifted observations of the best observers, the cream of experience obtained in the great Hospitals and schools of London and the provinces. In spite of the rivalry of young and vigorous competitors, the Society still maintains its lead, not merely as a club to which the *élite* of the Profession are admitted by ballot and considerable pecuniary contribution, but as the foremost Medical and Surgical Society in Great Britain, challenging competitorship in scientific achievement as securely as in Professional status.

We should far exceed our allotted space did we notice all the papers in the present volume. We hope that our selection will not be construed into depreciation of those which we omit. Like an epicure who, glancing down an elaborate *carte*, pricks his dinner, we can only, in sight of so many good things, choose here and there, sighing the while over the limitation of our powers. Mr. Nunneley, of Leeds, under the name of Vascular Protrusion of the Eyeball, treats of that affection which was described by Travers as Aneurism by Anastomosis of the Orbit. In a former volume of the *Transactions*, Mr. Nunneley recorded four cases in which he had tied the common carotid artery for this disease; he now adds to them records of three others and an account of the post-mortem appearances in those of two patients who, having been treated by deligation of the carotid, died a considerable time afterwards from causes unconnected with the operation. The disease, as is well known, may be of spontaneous or of traumatic origin. There have been two theories as to its nature: one that of Mr. Travers, who believed the affection to be of the same nature as the erectile tumour described by John Bell under the name of Aneurism by Anastomosis; the other that of Mr. Busk, who, reasoning from the sudden accession of the disease, its rapid increase, and the powerful pulsation occurring in the tumours when recent and small, concludes that these conditions are best explained by supposing the formation of a true aneurism of some vessel within the orbit. Mr. Nunneley demurs to both these explanations of the morbid phenomena. He rejects the aneurism by anastomosis theory, on the same grounds as Mr. Busk; but whilst he concedes to that gentleman that true aneurism may occur in any of the intra-orbital arteries, and that possibly some of the reported cases may have been of that nature, he nevertheless holds that in several of the few recorded cases there has been no aneurism at all, and that where there has been aneurism, it has been within the cranium and not in the orbit. Further, he believes, "that the prominent symptoms are not essentially dependent upon an aneurism, either true or false, whether in the orbit or in the cranium, as a primary or necessary cause, but are, so to speak, secondary to it; indeed, that they may arise from other and varied causes, which produce post-ocular pressure upon the ophthalmic veins." The two cases in which post-mortem examination was obtained confirm Mr. Nunneley's view of the nature of the affection. In one there was cancerous tumour of the orbit, which extended backwards through an opening in the apex of the orbit to the side of the sella turcica. The ophthalmic vein had been pressed on until it was lost in the mass; the cavernous sinus was obliterated. In the other case there was a circumscribed aneurism of the ophthalmic artery; not intra-orbital, however, but situated at the side of the sella turcica, whilst the intra-orbital portion of the artery, both trunk and branches, was of very small size. In the majority of cases of spontaneous origin the obstruction to the return of blood through the ophthalmic vein—which, according to Mr. Nunneley's view, is the real cause of the disease—will, he believes, be produced by aneurism of the internal carotid as it emerges into the cranium or of the ophthalmic artery near to its origin. In the majority of traumatic cases he believes the pressure will be generally produced by the effusion of blood or of the products of inflammation near to or within the cavernous sinus. Less formidable degrees of protrusion of the eyeballs Mr. Nunneley is inclined, in like manner, to refer to posterior venous congestion. Tumours of any kind in the orbit, cranium, or neck may produce the necessary obstruction to the return of blood. Thus he accounts for the connexion of bronchocele with prominent eyeballs. The staring eyeballs of asthma, emphysema, and bronchitis are to be explained on the same principle. Obstruction to the return of blood to the right side of the heart or to its escape from the heart's cavities may be sufficient alone, if long continued, to produce a degree of ocular protrusion, but such a condition will be soon accompanied by some effusion into the loose post-globular tissue of the orbit, and thus the effect on the eyeball is increased. The condition of anæmia by favouring exosmosis, if accompanied by a slight impediment, readily becomes associated with protrusion of the eyeball. Mr. Nunneley's paper, of which we have given a very imperfect sketch, presents, it will be seen, points of the greatest interest both to the Physician and Surgeon, and would furnish a good text for a discourse on the essential oneness of the science and art of healing.

The chief point of interest in Professor Longmore's paper "On Osteo-Myelitis consequent on Gun-shot Wounds of the Extremities" is the substitution which he proposes of careful and complete removal of the sequestra for the more formidable operation of exarticulation or further amputation. He founds his suggestion on the history of cases in which the removal of dead bone was followed by a sound state of the stump, and on an examination of preparations of diseased portions of bone removed by exarticulation from patients in whom osteomyelitis had followed amputation for gunshot wound. To quote Professor Longmore's own words :—

"The result of the cases I have just named where stumps have been preserved without exarticulation or further amputation, and a careful examination of the diseased conditions in the preparations I have brought before the Society, where stumps have been removed by exarticulation, or where death has occurred, as in the case from which the preparation of the femur was taken, without operative interference, have led me to the conclusion that in all cases, however severe, of endosteitis and endosteitic necrosis after gunshot injuries, before resorting to the extreme measure of exarticulation, as urged for all cases by M. Jules Roux, and recommended in certain cases by Baron Larrey, the opportunity of effecting a cure by careful and complete removal of sequestra should invariably be tried. The judgment of the Surgeon will be tested in determining the precise period when the process of sequestration is sufficiently advanced to admit of operative interference with advantage; and his qualities as a Physician will be put to the test in the support he must afford to the patient's constitution while subjected to the irritation inseparable from this protracted ordeal. But when the period has arrived of nearly complete sequestration of the dead bone, then the stump should be opened if amputation has been previously performed; or the steps taken such as are employed in ordinary necrosis if no amputation has been performed; and the necrosed portions be entirely removed, and the case treated on general principles."

Professor Longmore's proposal is founded on the best established principles of Conservative Surgery, and if it become, as we think it must, a canon in practice, it will confer fresh honour on that illustrious school of Military Surgery of which he is a worthy representative.

Dr. Hillier has contributed to the present volume a remarkable case of "Congenital Hydronephrosis" in a boy 4 years old, in whom recovery took place after repeated tapping. In this case there was a large cyst springing from the right side of the abdomen, which was suspected to be connected with the right kidney. The first operation of tapping confirmed the diagnosis, for the fluid drawn off, amounting to 102 oz., had all the characters of dilute urine. The history of the case establishes that the cyst did not usually communicate freely with the bladder, but from time to time, when much distended, its contents were partially poured into that viscus. The large quantities of urea in the fluid drawn from the cyst proved that a certain amount of renal tissue existed on that side. Albumen was present in the cystic fluid, and this circumstance is believed by Dr. Hillier to explain the fact that ferrocyanide of potassium administered to the patient by the mouth appeared in the urine passed from the bladder, but not in the fluid of the cyst; for in a patient with albuminuria this salt was not detected in the urine after the administration of twenty grains. The same experiment was tried, however, with gallic acid, which, when administered, was detected in albuminous urine, but not in the cystic fluid. Dr. Hillier thinks this may be explained by supposing that the gallic acid passed only through the kidney on the left side, or else that there was not a free communication between the part of the cyst in which the canula was inserted, and that part into which the kidney first emptied itself. The cause of the intermitting flow of urine down the ureter might, the author suggests, have been valvular, or the presence of a calculus. Dr. Hillier subjoins a retrospect of the published cases, and in discussing the question of treatment notices a suggestion that the cyst might have been removed from behind. He, however, as we think very properly, decides against such a proposal on the grounds of risk of interference with the sympathetic nerve near the semilunar ganglia, risk of hæmorrhage and peritonitis, and on the fact that removal of the kidney in the lower animals has always proved fatal.

Dr. William Roberts's paper on the "Solvent Treatment of Urinary Calculi," has excited, we believe, more attention than any other contribution to the archives of the Medical Societies during the past year. The demonstration which he affords of the possibility of dissolving uric acid calculi by a properly-pursued and regulated alkaline treatment, constitutes an era in the treatment of these affections. We may state that we have obtained unmistakeable success in the treatment of uric acid renal calculus by the large doses of bicarbonate of potash he recommends, and this after the carbonate and citrate of lithia had comparatively failed to produce alleviation of the symptoms. Dr. Roberts has shown that uric acid calculi are susceptible of solution out of the body by the action of alkaline solutions of the salts of potash, and in the body, by urine rendered alkaline by the same salts; that the requisite alkalinity of the urine is to be obtained by the administration of citrate, acetate, or bicarbonate of potash, in repeated doses of from forty to sixty grains; that this method of treatment holds out a prospect of success in vesical uric acid calculi which must not be expected from the injection of alkaline solutions into the bladder. With regard to other calculi, he has arrived at the conclusion that oxalate of lime calculi are practically insusceptible to acid and alkaline solvents, but that phosphatic calculi, although insusceptible to the action of alkaline solvents, offer an encouraging prospect for the use of acid injections into the bladder.

Mr. Henry Lee's mode of amputating the leg by long rectangular flap from the calf is a modification of Mr. Teale's plan of operating. The external incisions are made according to Mr. Teale's plan, but the long flap is obtained from the back instead of the front of the leg. Mr. Lee finds that the long flap thus obtained is much thicker than when taken from the front. It is hence less liable to slough, affords a more efficient protection to the ends of the bones, and a thicker and softer pad on which to rest the weight of the body when an artificial leg is worn.

Dr. Benjamin Howard, of the United States Army, has contributed an important paper on the "Application of Sutures to Bone in recent Gun-shot Fractures." His proceeding consists in cutting down upon the seat of fracture, as in ordinary resection, removing all the fragments and spiculæ of bone, making a clear section of the fractured ends of the shaft, effecting perfect apposition, maintaining it by metallic sutures, and securing rest by a light splint. He publishes a case of extensively comminuted fracture of the humerus which was successfully treated in this manner. In a case of fractured femur, also thus treated, a like satisfactory termination was not obtained. The patient was an old man of 60, and of a broken-down constitution. The fracture was extensive, and the patient was subjected to removal in the ambulance train the day after operation. He died on the road three days after. Dr. Howard's operation seems intended especially for cases which occur on the battle-field, and which must be subjected to all the contingencies of transit. He, however, suggests that it may be useful in cases of compound fracture with great displacement occasionally met with in civil practice. The use of sutures in the treatment of ununited fracture is, of course, not a new proceeding. Dr. Howard only takes credit for having first used them in the primary treatment of fractures from gunshot.

"Fibroid Degeneration of the Lungs" is treated at great length by Dr. Henry G. Sutton. He draws a distinction between fibroid transformation or fibroid phthisis and the tubercular or scrofulous phthisis. The former consists of a form of induration of the lung, which is shown by the microscope to be made up of such elements as are considered to denote fibroid changes (granular corpuscles, cells, spindle-shaped fibres). This degeneration, he finds, is most frequently associated with a like degeneration of other organs, as the kidneys, liver, capsule of the spleen. The conclusions he draws are too numerous and lengthy to be transferred to this notice, and they are too important to justify abbreviation. We commend the paper to the careful perusal of all our readers who are studying the diseases of the respiratory organs.

Here we must stop. We hope that we have written enough to prove that this volume of the *Transactions* is worthy to take its place by the side of those which have preceded it.

**THE CHOLERA ON BOARD THE "VIRGINIA."**—It is mentioned as a singular circumstance that the cholera broke out on the *Virginia* in about the same place on the ocean at which the passengers of the steamship *England*, another of the National Steam Navigation Company's vessels (afterwards detained at Halifax), were attacked. This is important, as it tends to confirm the theory advanced by a few persons that certain states of the atmosphere, sometimes found in belts, are peculiarly adapted for the development of cholera.—*New York Herald*, quoted in the *Liverpool Weekly Mercury*, May 5.

**CHARLOTTE WINSOR.**—The Court of Exchequer has confirmed the unanimous decision of the fifteen judges in the case of this notorious criminal. She is now left a third time for execution.

## PROVINCIAL CORRESPONDENCE.

### LIVERPOOL.

May 7.

On April 24 we received the first intimation of the outbreak of cholera on board an emigrant steam ship—the *England*—a newly-built and well-appointed screw steamer belonging to the National Steam Navigation Company; in fact, it was her first trip. She sailed from this port on March 28 with 1202 passengers, and with a crew of nearly 100. About 400 of these passengers were German emigrants, and it appears that all were in perfect health till the fifth day after the *England* left Queenstown, when cholera of a very virulent form broke out among the German passengers. Under these circumstances, the captain considered it desirable to put into the nearest port, and accordingly steered for Halifax. The number of deaths that occurred previous to the *England* reaching that port were 46, and in a few days afterwards 94 more succumbed to the disease, five of the crew being among the number.

The Governor of Halifax sent down 80 tents for the accommodation of the healthy survivors on McNab's Island, while the suspected were received on the hulk *Pyramus*. The death-rate at first was 25 per diem. Dr. Slayter, the Halifax Physician who attended the cholera patients, has since died of that disease.

On the 3rd of May the *City of New York* brought the intelligence of the outbreak of cholera on board the *Virginia*, another emigrant vessel belonging to the same company. The disease, as in the *England*, commenced among the Germans; and, indeed, occurred in almost the same latitude, and about the same period after her sailing. The cabin passengers in both ships were entirely free—the Germans for the most part were its victims, very few of the Irish or English being attacked. Thirty-eight deaths occurred on the voyage, and after her arrival nine more took place, while 34 were on the sick-list. The *Virginia* sailed from Liverpool on April 4 with 1043 emigrants, and 37 more were received at Queenstown.

On her arrival on the other side the Atlantic, the *Virginia* was placed in quarantine, and the sick were removed to the Hospital ship *Falcon*, while the unaffected steerage passengers were received on board the steamer *Illinois*. The cabin passengers, since they were not allowed to land, preferred remaining on board the *Virginia*. Shortly after the news by the *City of New York*, the people of Liverpool were alarmed by a telegram from Queenstown stating that cholera had appeared on board the *Helvetia*, which had sailed from Liverpool the previous Wednesday, *a third* emigrant vessel belonging to the same Company, that she was returning to Liverpool, two deaths having already occurred.

Upon inquiry it was found that while the *Helvetia* was in the river one, if not more, of the German passengers was sent on shore, in consequence of showing some suspicious symptoms; however, when she sailed all the passengers appeared in perfect health; but soon after she had put to sea the disease developed itself, and on her arrival at Queenstown Admiral Ker refused to permit the vessel to enter the harbour, as there were no facilities at that place for combating the disease, and ordered her back to Liverpool. The *Helvetia* carried 925 emigrants, 400 of which were Germans, and 70 of that number had passed through Rotterdam. The *Helvetia* arrived in the Mersey on Friday afternoon, and was at once visited by the authorities. It was found that there was only one case on board, and that a mild one, and the alleged two deaths were not corroborated. There were a few cases of simple diarrhœa. The Mayor of Liverpool, although not legally justified in doing so, immediately on the arrival of the ship, ordered that no person should land, and that no one should visit her, except those authorised by him to do so.

Dr. Buchanan has been sent down by Government, and he expressed his approval of the arrangements which the Health Committee proposed. The National Company have provided two hulks, one for the healthy and one for the sick, which latter is under the management of the Select Vestry and their Medical officer. The *Helvetia* is now lying in the river with a white flag. A hulk has been already fitted up with every necessary in case of further outbreak.

Dr. Buchanan and Dr. Trench, the Medical Officer of Health for Liverpool, visited the *Helvetia* on Saturday morning, and found, I understand, the state of things satisfactory; there had been no recurrence of the disease, and the patient who had been attacked was convalescing; but in the evening two fresh cases were reported. Both are Germans: one is a child, which is not expected to recover, the other a man, who is not so severely ill. The 500 British subjects, passengers on board, are to be transferred at once to a hulk, and in a few days the Germans are to be placed on another vessel in order that the *Helvetia* may be disinfected. The *Helvetia* is under the charge of the river police, and an order has been received from Whitehall empowering the Mayor to refuse persons landing for the present.

It does not appear that there was illegal overcrowding on board any of these vessels, as it was proved they were all short of the full number of passengers they were permitted to carry. There cannot be the slightest doubt that the cholera was introduced into these three vessels by the Germans, among whom the disease was latent until ripened by ship crowding and the depression induced by sea-sickness, which, combined with the proverbially filthy habits of the race, broke out in all its horrors. Some of these Germans are miserably clad, and generally possessed of a very limited wardrobe.

We were again startled on the 2nd instant from the ascertained fact that the cholera had occurred in the town—amongst three German families (intending emigrants), numbering upwards of twenty persons, who had been received into the Liverpool Workhouse Infirmary, the Emigration Medical Officers having refused to pass them on account of the state of their health. They were admitted from a German lodging-house in Hanover-street.

Some very important facts were elicited as to the state of such houses. It was discovered that there was an attempt to overcrowd twice as many into rooms as they were licensed to hold, and that in a house 150 slept in one night. In another case forty slept and lived in the same room. These lodging-houses are now visited daily by the authorities, and no further outbreak in the town has taken place. Of the cases of cholera admitted into the Workhouse Hospital one was a Dane, the other a Dutch woman; they were in a state of extreme collapse on admission, and have since died. Besides these two there was a third—a child, who died on the way to the workhouse, upon whom an inquest was held, and the post-mortem verified the conclusion that it was a case of cholera. No further cases of disease have occurred among the Germans in the workhouse.

It is a very fortunate thing that such prompt and stringent measures have been adopted in Liverpool, and we trust they will prove effectual.

I may just mention that the National Steam Navigation Company has issued the following notice:—"No foreign emigrants will be taken by the *Denmark*."

## GENERAL CORRESPONDENCE.

### LANCISI AND THE CATTLE PLAGUE.

Letter from Dr. W. Farr.

[To the Editor of the Medical Times and Gazette.]

Sir,—I do not desire to discuss the laws of epidemic disease controversially; my views are meantime correctly stated(a) in your journal, and I hope ere long to be able to publish the further results of some inquiries into this very difficult question.

The experience of the course which the epizootic took in Italy is full of interest, and it is important that its description by Lancisi should be correctly given. Lancisi, as is well known, described the epidemic in the Roman States. And to his observations I referred in the following terms:—

"The cattle plague in Rome, which Lancisi has so well described, lasted less time than our calculation gives. It began about August 1, 1713, and left no vestiges of its existence in May, 1714. . . . The most minute instructions of the Pope and the College are given by Lancisi, but no authority to slaughter; and apparently not a single head of cattle was slaughtered by authority in the Papal dominions. Yet the cattle plague subsided in nine months."(b) After referring to the law of the plague curve, I then assign reasons for believing that, "although Rinderpest will remain in the country as a sporadic disease, liable to other eruptions, it will subside spontaneously as an epizootic."

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(a) See also in *Journal of Social Science*, edited by Dr. Lankester, No. 6, p. 349, letter to editor, and reprint of letter to *Daily News*.

(b) *Daily News* letter, dated February 15.

My friend Dr. Markham points this out to you as "a somewhat important historical error which Dr. Farr has made in his reading of Lancisi. Dr. Farr has used, as an illustration of his theory of the natural progress of the Rinderpest epidemic, the supposed fact that in the epidemic at the beginning of the last century it ran its course in Italy in nine months—arose, spread, and disappeared—and he quotes Lancisi as his authority." A somewhat similar statement appeared in Dr. Markham's excellent journal, at which I was surprised, as the statement implies that in the beginning of the eighteenth century the Pope ruled over the whole of Italy—a grave error in geography, as Dr. Markham will discover on turning to his map, or looking up his history of Italy. The Papal dominions were nearly the same in 1713 as they were up to the reconstruction of Italy under Victor Emmanuel. Dr. Markham gives another reading of Lancisi different from mine. "The cattle plague," he says, "Lancisi tells us, first appeared in Italy (in the Po district) in 1709, and continued its ravages there until 1713." Now, in my edition of his works (Geneva) Lancisi tells us that the cattle plague first appeared in MDCCXI. I read this 1711: Dr. Markham apparently reads it 1709. I refer this question, as well as the question of geography, to you and your readers, as well as to Dr. Markham himself. The date 1711, I may add, agrees with that given by Ramazzini. Then, Dr. Markham's date, "1713," is evidently erroneous; so is his assertion that Lancisi ascribes the extinction of the plague in nine months "solely" to the stringent measures for its suppression.

To have done with controversy, I proceed to give a short account of the Italian observation as described in Lancisi's work—"De Bovilla Peste ex Campaniæ finibus anno 1713, Latio importata."

Italy, divided by the Appenines, consisted of several states at the beginning of the eighteenth century. Lancisi mentions Venice, Milan, Naples, Latium, or the ecclesiastical dominions. Then there were Sardinia, Parma, Modena. Lancisi had recommended the slaughter of diseased cattle. I cited him to prove that, contrary to the current opinion, his advice was not adopted, and that the cattle plague ceased in nine months within the Papal dominions. The disease, he says, following Ramazzini, began in the Paduan territory in the summer of 1711, and gradually spread among the remaining flocks of Venetia, soon reached Milan, then Ferrara, and about two years afterwards Naples (denique duobus ferè abhinc annis Neapolitanum Regnum), whence it extended over the Campania to Rome in the middle of the summer of 1713. It began there in the month of August, 1713, and ceased in April, 1714 (novem scilicet mensium spatio), so that among the flocks of the Roman States (Romanæ ditionis armenta) no vestige of the plague remained in May. Lancisi does not enable us to trace the ravages of the cattle plague through all the other States of Italy. It raged, he says, more fiercely and much longer among other people, and was not extinct in the Transpaduan territory when he wrote(c) (anno 1715). When the cattle plague ceased in all Italy I do not know, but we learn in an epistle of Fantonus to Lancisi that it was entirely extinct in Piedmont in August, 1716. I infer from a passage in the same letter and from the published lecture of Ramazzini, that the system of slaughter was not followed in Italy, where the ox takes the place of the horse in England. This is well touched by Ovid in the Metamorphoses (lib. xx.):—

> Quid meruere boves, animal sine fraude dolisque
> Innocuum, simplex, natum tolerare labores?
> Immemor est demum, nec frugum munere dignus,
> Qui potuit curvi demto modo pondere aratri
> Ruricolam mactare suum; qui trita labore
> Illa, quibus toties durum renovaverat arvum,
> Tot dederat messes, percussit colla securi.

The last line might not clash harshly on the ear of a butcher, but it was otherwise in Italy, which felt almost an Indian affection for the ox. The supporters of Lancisi's rejected policy of the pole-axe admitted that on its face it had the appearance of great cruelty! Such an argument could not be urged in a country where people only eat the ox; and certainly would have told with very little effect in the House of Commons, containing many men eminent in many ways, and many sportsmen who devote no small part of their lives to fox, hare, partridge, and pheasant killing.

The cattle plague was an evil much more formidable in Italy than in England, and a large part of the regulations in Lancisi was devoted to arrangements for securing the cultivation of the fields, which were ploughed invariably by oxen. A famine of grain as well as of meat was apprehended.

Meat was neither scarcer nor dearer than usual. The cattle plague travelled over the different states of Italy, killed many beasts in many places, and, although slaughter was not resorted to, appears to have ravaged no single territory so long as four years.

Mr. Baring's valuable historical memorandum on the cattle plague shows that it pursued a somewhat similar course in the counties of Great Britain, where it long roamed about with periodic eruptions in some counties. The poleaxe policy was in full force under Acts of Parliament, and the plague was "stamped out" in fourteen years!

A large portion of the Papal regulations refer to religious ceremonies. The Pope appealed to the religious feeling and imagination of his subjects. Not only prayers, but indulgences were profusely scattered abroad, and Pope Clement XI., himself in a state of great infirmity, as described by his devoted Archiater, went in procession through the streets. All the devotional decrees in Latin and Italian are reprinted by Lancisi, and, as I read it, the speedy extinction of the cattle plague in Rome is ascribed as much to the superior sanctity of the Pope, and to the efficacy of his prayers as to secular regulations. There are many passages to that purpose, and they express sincere conviction in the efficacy of the Pope's intercessions. Lancisi was an honest man, as well as a courtier, and believed in the efficacy of Papal prayer; Dr. Markham believes in "stringent" regulations; Professor Gamgee believes in the poleaxe; I believe in the laws of biology—(and this faith, I may remark, is incompatible with none of the others)—while without it we fall into deplorable practical absurdities and alarms perfectly senseless.

I am, &c. W. Farr.

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## OVARIOTOMY IN DRESDEN.

### Letter from Dr. Bowen.

[To the Editor of the Medical Times and Gazette.]

Sir,—Having been for some weeks past on a Professional visit to this city, and having assisted Dr. Küchenmeister, the celebrated helminthologist, in operating in two cases of ovarian disease, I think some account of these cases may be interesting to your readers. I may premise that for some time previous to the publication of Dr. Küchenmeister's work on Parasites, which was translated and published some years ago by the Sydenham Society, he has devoted especial attention to the diseases of women, and has obtained a large practice in this capital. He has nearly completed a German translation of the first volume of Mr. Spencer Wells's work on Diseases of the Ovaries, which is now in the press, and is enriched by copious annotations and tables. He, however, had not performed ovariotomy himself until the 7th of this month when I assisted him.

The girl was about 22 years of age. The tumour, a multilocular one of three years' growth, springing from the left ovary. At 11·30, all being ready, I chloroformed the girl; and then Dr. Gerhard, Dr. Moldau, Dr. Lehmann, Dr. Fiedler, Dr. Curt, and Dr. Michalsky were introduced, and the chloroform being handed over to Dr. Gerhard, I took my place on the right, opposite to Dr. Küchenmeister; and the assistants being placed and told their duties, Dr. Küchenmeister cut down upon the cyst (a large one), the length of the incision being exactly 3½ inches midway between the umbilicus and the symphisis pubis. Mr. Spencer Wells's trochar having been introduced, the large cyst was emptied, and slight traction made as soon as the claws on the canula had embraced and locked the punctured edges of the cyst. The trochar was next made to pierce the nearest enclosed cyst, which it did; but the jelly-like contents would not flow away; so, holding the sides of the incised abdominal walls firmly and securely, by a slight lateral dragging movement, the opposing cyst was brought to the surface, pierced with a scalpel, and the contents squeezed out. Three others were similarly treated, and with a little gentle force the whole cyst then escaped (two enclosed cysts of fair size remaining uninjured). A portion of omentum adhered to the surface of the cyst anteriorly, which I carefully separated (six or seven inches of it), and there was no bleeding. A clamp was put on, but there being a slight twist of the pedicle Dr. Küchenmeister eased the screw and re-secured the pedicle. The galvano-caustic knife was used to cut through the pedicle; it had partly done so when the battery ceased to act, and the division had to be completed with a scalpel. There being some oozing from two vessels of large size, Dr. Küchenmeister gave an extra turn to the screw of the clamp which, working in a metal of soft material, the screw ceased to hold, and the pedicle slipped back into the abdominal cavity, the blood flying in a stream from the cut vessels. Dr. Küchenmeister—all credit to him—with courage, coolness, and lightning speed, brought the pedicle back to the surface in his fingers. The two large vessels (the only ones bleeding) I secured quickly, waited a moment to see that there was no more bleeding, and the pedicle (a very short one) I took hold of, and to the left side, where no traction was caused, I held it with my left forefinger, introduced an acupressure needle in a slanting direction, caught one extreme edge of the pedicle in the transfixion, passed the needle over the pedicle, and pierced the other extreme edge, and returned it through the abdominal wall. Thus the pedicle was securely fastened, and all danger of bleeding prevented, even had the slough, caused by the cautery, given way. After Dr. Küchenmeister had satisfied himself that not a drop of blood flowed, he sponged out the blood that had escaped into the cavity until it was quite clean, felt the right ovary, which appeared healthy, and then closed the wound by four deep and three superficial sutures, strapping, lint, and bandage were properly applied, and the patient carried to bed. A little opium was given by rectum, and afterwards four drops of solution of the acetate of morphia were injected under the skin of the forearm to relieve pain. Up to midnight all did well; urine secreted and drawn off; skin perspiring freely; pulse 80. Ice given to suck. During the night the pulse rose, but by seven the following morning, when I saw her again for the fifth time, it was reduced to 90 before I left her.

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(c) See cap. i. and cap. xv.

The cyst, a multilocular one, had been growing three years and more. The fluid drawn off measured about twenty pints. A good deal was lost, however. The emptied cyst weighed 3 lbs. One of the uninjured enclosed cysts was cut open afterwards, and contained pus-like fluid with hair. The clamps were rendered useless, owing to that portion which receives the screw being made of soft metal, and in pressing the screw home it no longer held, but turned round and round.

On the afternoon of the 8th Dr. Küchenmeister reported all as going on well, but he sent for me early on the morning of the 9th, when I found the patient bathed in perspiration, the room very hot, and pulse was very weak. We gave stimulants by rectum and mouth. There was no pain complained of anywhere, and I withdrew the needle without any inconvenience, and it came out as clean almost as when put in, and not a drop of blood. At noon, or soon after, I was with the patient again; she was dying then, some fifty hours after the operation.

Dr. Küchenmeister examined the body, but was only permitted to open the abdomen. He found effusion of sero-sanguinolent fluid in the pelvis, and considered that septicæmia was the cause of death. There had been no bleeding. The returned piece of omentum had formed an adhesion to the pedicle, which Dr. Küchenmeister had to pull asunder. I believe the galvano-caustic knife, or, better still, the galvano-caustic wire applied in the same way as the écraseur, will sear the pedicle and keep it safe. In this case the galvano-caustic knife left a hard leathery-like coating, about which no sign of inflammation appeared after fifty-two hours.

The second case appeared on examination to be one of ovarian disease of the multilocular kind. The patient, a lady over fifty years of age, had been twice tapped, but the fluid collecting again rapidly, and much inconvenience being felt, the operation was performed on the 15th inst., in the presence of several of the resident Medical gentlemen. The chloroform was admirably administered by Dr. Lehmann. An enormous quantity of a pale yellowish fluid—quite free from blood—filled the peritoneal cavity, and after the fluid was evacuated the tumour, hard and in size rather more than a man's closed fist, proved to be intimately connected with the left ovary, uterus, and rectum. By grasping the tumour—which the gentlemen present agreed with me in thinking was fibroid—we were able to move the uterus freely. The attachments were too formidable to do anything more, and Dr. Küchenmeister abandoned the idea, and the wound was closed in the usual way. The patient did remarkably well for two or three days following the operation, when she began gradually to lose ground, and to refuse nourishment by the mouth. It had therefore to be given by the rectum, but she got weaker and weaker, and died about eighty hours after the operation. The family objected to any post-mortem examination of the body being made. I am, &c.

Dresden, April 20. **Francis Bowen, M.D.**

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## WANTED, CANDIDATES FOR THE NAVY!

[To the Editor of the Medical Times and Gazette.]

Sir,—The recommendations of the Committee of which Admiral Sir Alexander Milne was the president, on the vital question of tempting Medical men to enter and to remain in the navy, have been some weeks before the public, and Lord Clarence Paget in Parliament has declared the intention of the Admiralty to carry out these recommendations. The Royal Colleges of Physicians and of Surgeons, London, have (conditionally) approved of the labours of the Committee; but these corporate bodies must recollect that Admiral Milne's summary or report is not based on the opinions of those naval Medical officers called in evidence before the Committee. The national Medical colleges of Ireland and of Scotland, with a caution to be commended, have as yet waited for the Admiralty Warrant defining the rank, the pay, the distribution of prize money, good service pensions, honorary distinctions; whether the Admiralty exacts a life-service from all Assistant-Surgeons who may enter the navy; whether the candidates are to be examined at one common portal with the army and East India Company's service; whether the right of petition is still to be denied naval Surgeons, as it is at present; whether Medical men are to be allowed to retire from the navy under the conviction that competency and honour do not belong to those who faithfully give, to a life of privation and discomfort, their best years. The publicity of Admiral Milne's report has brought no influx of candidates! The men who have avoided the navy and its ten shillings per day are not to be tempted by an additional half-crown. The ship service, it may be, up to 55 years of age gives no reasonable period of retirement with family and friends. The advice of the body of naval Medical officers to their friends is not to enter the navy. The authorities have to deal liberally and honestly with those in the service before they can expect Assistant-Surgeons for the navy; and it will take years of good works to do away with the bad impression which more than half a century of illegality and injustice has created. The inspectorial class ask for an increase to their emoluments; for an addition to their numbers in the active list of the inspectorial officers; that there should be a naval Medical school or college, or that Netley Hospital should be made available. The surviving Surgeons ask for retirement at twenty years' full pay service on one pound per day, and it will take nearly a quarter of a century, on an average, to complete such full pay time. The senior Surgeon on the active list, Dr. Patrick Martyn—promoted to that rank in 1833,—has not yet completed twenty years' full pay service. This venerable officer is attached to H.M. ship *Winchester*, at Aberdeen, and, being without an Assistant-Surgeon, he must dispense the medicines for the sick of the *Winchester*.

A naval Surgeon from foreign stations gives the opinions of his brethren on Admiral Milne's report:—"It is a great disappointment that the retirement should be so miserable as to starve us into continuous service when we ought to be abandoning the miseries of naval life for family and friends. The trick is this:—After twenty years' full pay service we can purchase our discharge by offering the Admiralty £100 per annum as 'black mail.' If we are worn out they will not deprive us of the £100, provided that a Medical Board say there is no more work in us. After that period nothing but broken-down health or 55 years of age will see us out of harness. This retirement allowance, as Dr. F. J. Brown calls it in his comments, is a 'pecuniary punishment.'"

An equitable retirement with good pay will get Medical officers for the navy, but not the present dreary prospects of continuous ship-board service.

The last March Navy List shows thirteen Staff-Surgeons retired, but it does not explain if these officers had twenty-five years' full-pay service to give them 18s. per day. Of retired Deputy-Inspectors-General there are twenty-seven, but about twenty-two are merely honorary titles given to Staff-Surgeons who have completed twenty-five years' full-pay service, but giving no increase of retiring pay and no consideration in the widow's pension. Of retired Inspectors-General there are seven, and five of these are honorary promotions from the active list of Deputy-Inspectors to the retired list of the higher rank, but giving no increase of emolument; and these have been the highest prizes of retirement.

Of the active list of Inspectors-General there are 7; of Deputy-Inspectors, 15; of Surgeons, 281; of Assistant-Surgeons, 270. One Surgeon in the last eighteen months has been promoted to be Deputy-Inspector-General, and has to commence service in this rank at Hong-Kong. Candidates for the navy should well ponder over the dreary prospects before them. There is no money that will compensate for a lifetime of privation and confinement between the decks of a ship.

I am, &c. P. P.

## "NYCTALOPIA."

### Letter from Mr. R. B. Carter.

[To the Editor of the Medical Times and Gazette.]

Sir,—Your columns have recently contained several communications descriptive of isolated cases of nocturnal blindness, and hence I am led to suppose that some more detailed account of this affection may not be unacceptable to your readers.

Perhaps it will not be out of place to say a few words upon the question of nomenclature. It would be difficult to find any better illustration of the inconvenience and confusion caused by the introduction of a jargon of sham Greek into Medical literature. Two words, nyctalopia and hemeralopia, have been coined to express nocturnal blindness and its opposite; but nobody knows from what these words are derived, or what they mean. A few writers, like your recent correspondents, would trace nyctalopia to *νύξ*, *αρτιν*, or *αλαος* and *οψις*, and would mean by it nocturnal blindness. They would regard hemeralopia as a similar compound, meaning diurnal blindness. The great majority, however, think that nyctalopia is derived only from *νυξ* and *ωψ*, or *οψις*, and that it means nocturnal *vision;* or the condition in which, from deficiency of pigment or from some other cause, the sight improves as daylight fades. With them, hemeralopia is supposed, of course, to mean diurnal vision, and hence, by inference, nocturnal blindness. I do not profess to decide between the two views, and am content to say first, that almost universal usage is in favour of the latter; and secondly, that I myself prefer to avoid obscurity by the employment of plain English.

Nocturnal blindness is seen in this country only occasionally, and is usually confined to persons who have recently returned from tropical climates, or who have been exposed to the glare of a bright day, reflected from a surface of snow, or who are the subjects of pigmentary retinitis. In a few cases, however, it exists as a simple torpor of the retina, an inability to be stimulated by a small amount of light. In such instances it may be due to the imperfect development of a hypermetropic eye, or it may be a consequence of the extension of the retinal tissues in cases of increasing myopia.

Professor Laycock, in describing the patients that he saw, makes very sweeping and general statements, such as that "no morbid change of any kind could be discovered in the organ of vision," and again "during the day vision was in all respects satisfactory." To me these statements appear incredible, and I cannot attach to them the weight that the Professor's reputation would seem to deserve, because he expressly states that he made no examination with the ophthalmoscope, so that he had no means of ascertaining whether the most probable morbid change was present or not. Furthermore, he does not notice the refraction of the eyes; and, in the absence of any information about matters so important, I may be pardoned for the inference that he did not accurately test the range or the acuteness of vision, or the extent of the visual field. Ophthalmic Surgeons are familiar with the fact that persons whose vision is highly defective are often quite unconscious that such is the case.

If the patients seen by Professor Laycock are suffering from pigmentary retinitis, it will probably be found that they have acute central vision, but that the visual field is reduced in size. The ophthalmoscope would show fine irregular black lines and stripes upon the retina, chiefly in the equatorial region, and forming an irregular circle. If they are hypermetropic, with imperfectly developed retinæ, vision for distant objects would be improved, after the instillation of a solution of atropine, by the use of convex spectacles.

During the last ten years, the subject of nocturnal blindness has been much studied by various writers. As a mere symptom of pigmentary retinitis, it forms part of that most intractable disease; but it is also seen as an independent affection, concerning which certain facts have been ascertained.

In 1857, Dr. R. Förster, of Breslau, described a series of experiments intended to test the periodicity of the disorder. By his ingenious photometer he was led to the conclusion that the defect of vision depended entirely upon the withdrawal of light, and that it had no relation to the position of the sun or to the hour of the day. It was simple torpor of the retina, and was always manifest in an artificially-darkened room.

In the same year Dr. Grosz published his treatise upon the eye diseases of the inhabitants of the great plains of Hungary. In those regions nocturnal blindness is common, and in some localities endemic. Dr. Grosz attributes it to the glare of the sun, acting upon persons enfeebled by insufficient nourishment, unwholesome dwellings, and personal filth. He asserts that it is more common, in the proportion of 100 to 1, among the Rouman than among the Magyar population; and he ascribes the difference to the prolonged and exhausting fasts of the Greek Church.

The disorder has appeared at various times and places as an epidemic in prisons, orphanages, and similar establishments. Dr. Alfred Graefe, at Halle, and Drs. Bitot and Netter, at Bordeaux, have observed and studied such outbreaks. Dr. Alfred Graefe asserts (*Arch. f. Ophth.*, 1859) that the pupils, in cases of simple nocturnal blindness, were always much dilated; while in pigmentary retinitis they are somewhat contracted. The dilatation was little diminished by exposure to light, but readily by irritation of the fifth nerve by the application of a drop of tincture of opium to the conjunctiva. He also states that in waning light some disturbance of the function of accommodation was always present, even before the darkness reached the degree at which the nocturnal blindness became manifest, and in most of the patients there was debility of the internal recti. Dr. Bitot mentions (*Gaz. Hebdom.*, 1863) the occurrence of a pustular or phlyctenular eruption around the cornea, and states that the size of the spots bore a constant relation to the degree of the impairment of vision, that their first appearance preceded the appearance of the impairment, and that the sight was restored as the spots disappeared. Dr. Netter, on the contrary, (*Gaz. de Paris*, 1863), who saw the same epidemic, believed that the connexion between the phlyctenulæ and the nocturnal blindness was only accidental. An epidemic of nocturnal blindness attacked the crew of the Prussian man-of-war *Arcona* during an expedition to Eastern Asia. In this case Dr. Eitner, who has described it (*Deutsche Klinik*, 1863), thought it due almost entirely to dazzling.

Careful researches into the whole subject have been made by Maës, whom I regret only to be able to quote at second hand. He divides nocturnal blindness into the acute and the chronic. The acute is often due to exposure to strong light, in which case it affects chiefly the central portion of the retina, and is speedily cured by keeping the patient in comparative darkness for a time. When not thus produced, it affects chiefly the periphery of the retina. The chronic form is seen as a congenital and hereditary affection; a simple torpor of the retina, which remains unchanged throughout life. When not congenital, it is usually only a symptom of pigmentary retinitis, which leads very slowly to entire loss of sight.

It appears from the foregoing that nocturnal blindness, when not dependent upon pigmentary retinitis, nor upon a congenital and incurable imperfection of the retina, is usually produced by over-exposure to light, either alone or combined with various causes of depressed vitality. It follows that the diminution or exclusion of light, and, when necessary, an actively supporting treatment and dietary, should furnish the most effectual means of cure; and this conclusion is entirely borne out by the experience of the various writers that I have mentioned. In their hands dark blue spectacles, an abundance of animal food, cod-liver oil, tonics of various kinds, fresh air and exercise, have been found to exert an influence, either curative or at least highly favourable.

I am, &c.,

Robert Brudenell Carter.

Stroud, Gloucestershire, April 23.

## THE EPIDEMIOLOGICAL SOCIETY.

### Letter from Mr. Geo. Gaskoin.

[To the Editor of the Medical Times and Gazette.]

Sir,—Now the cholera is fast closing on us it will not seem surprising that I was desirous to hear what so lively and earnest a thinker as Dr. B. W. Richardson had to say on the subject. I therefore procured an opportunity of hearing his paper at the Epidemiological Society on Monday last. It was a fair summary of all those views towards which we have been gradually advancing during these thirty years past—indeed, ever since we have emerged from those clouds of obscurantism which enveloped the beginning of the century; a state of things due then to certain active spirits who gained social position by furthering the commercial aims of the nation, to the incalculable detriment of science; displacing the springs of thought through the medium of their writings, till it became an inveterate habit of the mind to falter and deny. No way else could the firmest and most patent facts in the history and character of disease have been misinterpreted or overlooked. We know now that the contagious principle of cholera is a something; whether its vehicle be a cell or a flocculus, alkaloid or colloid, it has a real existence, and is not a mere distemperature, a chance medley of conditions, a fortuitous concourse of ill-assorted atoms. It is something we can deal with, and which as a nation we are free to accept or to reject.

In the discussion on the paper, some gentlemen of the Services spoke with a degree of sense and modesty, but as from outside, not as men sharing in a crisis or under the inspiration of duty, but rather as having experienced the futility of effort, and felt the rebuffs of power. I ask myself if society is at any time the better for that kind of knowledge ending ever as it begins? Action on the part of the Epidemiological Society there will certainly be none. The idea of the Society is noble. As it seems to me, they need the infusion of new material to keep them going, and Richardson will hesitate a second time before he puts his new wine into old bottles. In the meantime, is there no way of getting an expression of opinion from the Profession? Are we ever to stand with folded arms and closed lips before that "inexorable tyrant" Commerce? Dare no one utter the word "Quarantine?"

I am, &c.,

3, Westbourne-park. Geo. Gaskoin.

## REPORTS OF SOCIETIES.

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## THE PATHOLOGICAL SOCIETY.

Tuesday, March 20.

Dr. Sibson, Vice-President.

(Continued from page 485.)

### DR. GREENHOW ON ADDISON'S DISEASE.

Dr. **Greenhow** exhibited for Dr. Dickinson two supra-renal capsules infiltrated with cancer. They had been taken from the body of a man, aged 56, who had presented no discolouration of skin nor any of the constitutional symptoms of Addison's disease. Malignant disease of the spine was diagnosed during life, and on post-mortem examination cancer of the lumbar vertebræ, pancreas, liver, heart, and other organs was found, together with cancer of the supra-renal capsules. Dr. Greenhow likewise exhibited the supra-renal capsules, tongue, penis, and scrotum taken from the body of a man aged 55. Addison's disease had been diagnosed on the day of the patient's admission into Hospital. The constitutional symptoms were characteristic, and besides slight general discolouration of skin there was deep discolouration of some cicatrices of burns, and also of penis and scrotum, and the tongue presented on its upper surface round the free edge irregular purplish stains. On microscopical examination the pigment causing these stains was found deposited in the papillæ in brown masses, the superficial layer of epithelium remaining uncoloured. The supra-renal capsules had undergone the peculiar morbid change usual in Addison's disease. In the lungs and other organs there were also tubercular deposits. Dr. Greenhow said that these two cases were good illustrations of the difference in the effects produced on the general health by different diseases of the supra-renal capsules. A discussion two years before at the Pathological Society, showing that doubts were still entertained as to the reality of Addison's discovery, and that these doubts were mainly fostered by the confusion of genuine and spurious cases, had induced him (Dr. Greenhow) to abstract from the British and Irish journals for the purpose of analysis all the published cases not of Addison's disease only, but of cancerous and other diseases of the capsules, and also of bronzed-skin without any disease of the supra-renal capsules. Subsequently his attention had been drawn to treatises on the subject by M. Virchow and M. L. Martineau, and he had translated from the original sources all the foreign cases quoted in their writings. In all he had collected 195 cases, which he had carefully analysed, and had found that in 127 the supra-renal capsules had undergone the particular morbid change characteristic of Addison's disease. In the other 68 cases the capsules were either healthy or had undergone cancerous or some other morbid change, or the change in them was too obscurely described to enable him to determine its nature. With a few explainable exceptions, none of these 68 cases presented either the constitutional symptoms or the peculiar discolouration characteristic of Addison's disease. On the contrary, among the 127 genuine cases, 95 presented either well-marked constitutional symptoms or characteristic discolouration of skin, and 72 of these presented both. In 20 cases some of the constitutional symptoms or some discolouration of skin existed, and in many instances both, leaving only 12 out of the 127 cases which presented neither any characteristic symptoms nor any discolouration of skin. These 12 cases were all among those complicated with advanced tuberculosis or with other serious organic disease, which appeared to be the causes of death rather than the co-existing disease in the supra-renal capsules. On the other hand, only 5 of the 95 cases presenting characteristic symptoms or discolouration were found among the number complicated with serious non-tubercular diseases, and not one among those complicated with advanced phthisis. These facts seemed to be a sufficient refutation of the theory current abroad that the discolouration of skin peculiar to Addison's disease is due, not to the morbid change in the capsules, but to the general tuberculosis frequently associated with it. At the same time his (Dr. G.'s) analysis of the 127 genuine cases showed that while 46 cases were reported as entirely or virtually uncomplicated, and 16 as complicated with other serious diseases without tubercle, no less than 65, or an absolute majority of the whole number, were complicated with tubercular disease of lungs or other organs, in all gradations of development; so that it was impossible to avoid the conclusion of a very intimate relation between Addison's disease and the tubercular diathesis.

Mr. **Hutchinson** suggested that the bronzing was a question of time, and that if the patient died early of Addison's disease there might be no bronzing.

Mr. C. H. **Moore** asked if Dr. Greenhow's cases of cancer of the capsule were cases in which both these organs were quite destroyed, or in which there was a cancerous tubercle in each. Mr. Moore then made some remarks on the variety of double cancer, and concluded by saying that cancer was a disease of a texture and not of an organ.

Dr. **Bristowe** mentioned a case in which both capsules had been affected by primary cancer.

Mr. **Gaskoin** thought it questionable whether there really was a relation betwixt the bronzing of the skin and the disease of the capsules. Dr. Greenhow had collected cases of Addison's disease, and thus might have excluded cases of disease of the capsules in which there had been no symptom of Addison's disease.

Dr. **Quain** said that he would wish to hear from Dr. Greenhow a clear definition of what he meant by the term "Addison's disease." The statistics quoted included a certain number of cases of bronzed skin without any disease of the supra-renal capsules, and a still larger number of cases in which there was more or less disease of the capsules and no bronzing of the skin at all. It did not seem altogether philosophical to take these two conditions and to say that it was their coexistence which alone constituted the disease. Dr. Quain then gave the particulars of an interesting case of fatal anæmia in a young gentleman, which he had seen with Dr. Addison, Dr. Bright, and Dr. Williams. It was one of the first two or three cases which had led Dr. Addison to state his views on the subject. In that case there was a deep ash-coloured pallor of the skin; the capsules were small, but not diseased. Dr. Quain thought there was still much room for investigating the character of the disease.

Dr. **Greenhow** said in reply that the cases collected by him were not of Addison's disease only, but of all diseases, whatever of the supra-renal capsules which he had been able to find published from the time of Addison's discovery up to the end of 1865. He had only abstained from giving the well-known description of Addison's disease because he desired to be brief; but he thought it might be clearly defined as a particular lesion of the supra-renal capsules, manifested during life by a certain train of constitutional symptoms attended almost always by a characteristic discolouration of skin. No doubt his collection included a few cases of bronzed skin without any disease of capsules, but the bronzing was not the discolouration characteristic of Addison's disease. It included also a certain number of cases in which the capsules had been diseased without any discolouration of skin; but, with one or two exceptions, the disease either was not Addison's, or, being Addison's, it had been masked by some other predominant disease which appeared to have been the cause of death. As Mr. Hutchinson had suggested, when the discolouration was altogether absent, death had probably taken place at an early period of the disease. As regarded the relation between the symptoms and discolouration of Addison's disease on the one hand and the characteristic change in the capsules on the other, he had no more doubt of its existence than he had of the existence of a relation between incompetency of the mitral valve or of acavity in the lungs and the physical signs of these lesions during life. He had at present three cases of Addison's disease under observation, and he was bold enough to say that he should be quite willing to leave the question of the reality of Addison's discovery to be determined by the result of the post-mortem examination in any one of the three.

Dr. Murchison said that as Dr. Greenhow had found the disease of the capsules to be invariably tubercular, other disease of the capsules, viz., cancer, not producing Addison's disease, it would seem that the symptoms were those due to tubercular disease, and not to disease of the capsule.

In reply to Dr. Murchison, Dr. Greenhow thought that Dr. Murchison's suggestion was sufficiently answered by the fact shown by his analysis that, in proportion as the tubercular complications became general or acute, the constitutional symptoms and external signs of Addison's disease became less and less decided until they altogether disappeared.

Dr. Risdon Bennett remarked on the peculiar irritability of the stomach in Addison's disease. There was paroxysmal vomiting, followed by alarming exhaustion.

Mr. Bruce showed a specimen of

### SALIVARY CALCULUS OF UNUSUAL SIZE.

It had been presented to the Museum of University College by Mr. Price. It weighed eleven grains and a-half, and measured three-quarters of an inch by a quarter. It was regularly fusiform, but nodulated. It appeared to consist of animal matter, phosphate of lime, magnesia, a small amount of sulphate—but this, Mr. Bruce remarked, was unusual—no carbonate.

Mr. Bruce next exhibited a specimen of

### VENOUS OBSTRUCTION.

The external iliac and femoral veins from the leg of a woman plugged by a large coagulum. The clot stopped somewhat abruptly at the point of pressure, where the veins crossed the brim of the pelvis. The pressure was from an ovarian cyst.

## MEDICAL NEWS.

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**Royal College of Surgeons of England.**—The following gentlemen having undergone the necessary Examinations for the Diploma were admitted Members of the College at a meeting of the Court of Examiners on the 8th inst., viz.:—

William Alfred Cox, Bath; Charles Barlow, Staleybridge; and John Knowler Hyde, Witney, Oxon, students of Charing-cross Hospital. John Quick, Penzance; and John William Hembrough, Waltham, Grimsby, of St. Bartholomew's Hospital. James Stothard, Hull; and William Wightman Cooper, Nottingham, of the Hull School. John Sykes, West Ardsley, Yorkshire; and Thomas Edward Scatchard, Thorp Arch, Tadcaster, of the Leeds School. Alderson Newsam, Totness, Devon; and John Jenkins, Cambridge, of Guy's Hospital. Francis Stewart Manistry, Gresford, Denbighshire; and Albert Arthur Napper, Cranley, Surrey, of King's College. William Charles Watson, Poal, Cornwall, of the Westminster Hospital. John Edward Grinfield Coxwell, Woburn place, of University College. James Beresford Ryley, Myshal, Co. Carlow, of the Dublin School. James Robert Fielding, Alfreston, Derbyshire, of the Middlesex Hospital. Henry Leigh Mallory, Knutsford, Cheshire, of the Manchester School. Thomas Silvester Gell, Stafford, of the Edinburgh School. Horatio Wood, Wednesbury, of the Birmingham School. Joseph Soane, Dock-street, Whitechapel, of the London Hospital; and Arthur Cromack Turner, Swinton, Yorkshire, of the Sheffield School.

Admitted members on the 9th inst.:—

Charles Edward Walker, Stainland, Yorkshire; Nathaniel Edward Davies, L.S.A., Llanrwst, Denbighshire; Ezra John Hardwicke, Bury St. Edmunds; Thomas Coles, Bath; and Josiah Paull, Camborne, Cornwall, students of St. Bartholomew's Hospital. John Coyte Bailey, L.S.A., Plymouth; William Draper, Grantham; James Wickham, Bideford, Devon; and William Augustus Bonney, Brompton, of the Middlesex Hospital. George Sampson Elliston, Ipswich; Herbert William Fagge, Hythe, Kent; and William Grimes Palmer, Loughborough, of Guy's Hospital. Thomas Joseph Quicke, Brixton: and Walter Moore, Myton, Warwickshire, of the Westminster Hospital. William Henry Firebrace Smith, London; and Frederick Boldero, Rattlesden, Suffolk, of King's College. Charles George Edmonds, L.S.A., Peckham, of St. Thomas's Hospital. Frederick William Strange, Beenham, near Reading, of the Liverpool School, and Frederick Dale, Yarm, Yorkshire, of the Edinburgh School.

**Apothecaries' Hall.**—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, May 3, 1866:—

Christopher Allcock, Nottingham; Arthur Humphry, Balham-hill; Albert Kisch, 2 Circus-place; Frederic William Parsons, Sutherland-place, Bayswater; William James Tattersall, Bacup, Lancashire; Isaac Coalbank, Old Dalby, Leicestershire.

The following gentlemen also on the same day passed their First Examination:—

J. G. Anderson, St. Mary's Hospital; Wm. Hy. Wood, St. Mary's Hospital.

### APPOINTMENTS.

⁂ The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

**Barber, Oliver**, has been appointed Dispenser to the Public Hospital and Dispensary, Sheffield.

**Bradshawe, P.**, M.R.C.S.E., has been elected House-Surgeon to King's College Hospital.

**Bryan, Edward**, M.R.C.S. and L.S.A., has been appointed Assistant-House-Surgeon to the Public Hospital and Dispensary, Sheffield.

**Dickinson, W. H.**, M.D., has been elected Assistant-Physician to St. George's Hospital.

**Farre, Frederick**, has been appointed Physician to the Charterhouse.

**Kelly, C.**, M.R.C.S.E., has been elected Resident Accoucheur to King's College Hospital.

**Millner, F. Le Fevre**, M.R.C.S. and L.S.A., has been appointed Assistant-House-Surgeon to the General Hospital, Nottingham.

**Palanque, John A.**, L.R.C.S. Edin., has been appointed Assistant-House-Surgeon to St. Mary's Hospital, Manchester.

**Philpot, C. W.**, L.S.A., has been elected House-Physician to King's College Hospital.

**Quibell, William**, has been appointed Dispenser to the General Infirmary, Sheffield.

**Tonge, Morris**, M.D., M.A., has been appointed Lecturer on Physiology at the Medical School of Charing-cross Hospital.

### BIRTHS.

**Orr.**—On May 3, at Idvies House, Forfarshire, the wife of J. H. Orr, M.D., C.B., Deputy Inspector-General of Hospitals, Her Majesty's Indian Army, of a son.

**Paterson.**—On April 24, at Balbeggie, Perthshire, the wife of G. K. Paterson, L.R.C.P. Edin., of a daughter.

**Parrott.**—On April 27, at Clapham-common, the wife of J. Parrott, M.R.C.S., of a son.

**Robertson.**—On April 24, at the Towns Hospital, Glasgow, the wife of A. Robertson, M.D., of a son.

**Smith.**—On May 8, at Hay, Breconshire, the wife of J. E. Smith, M.R.C.S., of a daughter.

**Wolstenholme.**—On April 30, at Holywell, Flintshire, the wife of J. H. Wolstenholme, M.R.C.S., of a son.

### MARRIAGES.

**Brooke—Burnett.**—On May 8, at St. Giles', Camberwell, T. L. Brooke, L.R.C.P. Lond., to Emily Alice, third daughter of J. Burnett, Esq., The Avenue, Gipsy Hill.

**Williams—Perceval.**—On April 30, at Rathaspeck Church, R. P. Williams, M.B., to Mary, eldest daughter of the late R. Perceval, Esq., Haystown House, Co. Wexford.

**Anderson—Faux.**—On April 2, at St. Peter's, Thetford, E. C. Anderson, M.R.C.S., to Emma, daughter of the late J. B. Faux, of Thetford.

### DEATHS.

**Bally.**—M. Bally, the "father" of the Académie de Médicine, has just died, at the age of 92, in the full possession of all his faculties.

**Labmuth, M. O.**, M.R.C.S.E., of Salford, on April 21, aged 42.

**Michon.**—M. Michon, Member of the Academy of Medicine and Professeur Agrégé of the Faculty of Medicine, died last week, aged 63.

**Shaw, W.**, M.R.C.S.E., of Hampstead, on April 27, aged 57.

**Swift, J. M.**, M.D., M.R.C.S.L., at New South Wales, on December 12.

## POOR-LAW MEDICAL SERVICE.

⁂ The area of each district is stated in acres. The population is computed according to the last census.

### RESIGNATIONS.

*Banbury Union.*—Mr. James Taylor has resigned the Hornton District; area 7740; population 3062; salary £61 8s. per annum.

*Godstone Union.*—Mr. C. M. Thompson has resigned the Eastern District; area 9302; population 2308; salary £73 per annum.

### APPOINTMENTS.

*Carlisle Union.*—Daniel Anderson, L.R.C.P. Edin., L.F.S. Glas., to the Stanwix District.

*Chipping Sodbury Union.*—Edward M. Grace, L.R.C.P. Edin., M.R.C.S.E., L.S.A., to the Fifth District.

*Clitheroe Union.*—William E. Musson, M.R.C.S.E., L.S.A., to the Clitheroe District.

*Keynsham Union.*—Richard Colthurst, M.D. Edin., M.R.C.S.E., L.S.A., to the Workhouse.

*Marlborough Union.*—James B. Maurice, M.D. Scot., M.R.C.S.E., L.S.A., to the First District.

*Ongar Union.*—Matthew H. Grattan, L.K. and Q. Coll. P. Ire., L.R.C.S. Ire., L.M., to the Workhouse.

*Penkridge Union.*—Thomas Crean, L.K and Q. Coll. Phys. Ire., M.R.C.S. Ire., to the Breewood District and the Workhouse.

*Redruth Union.*—Henry Harris, M.R.C.S., L.S.A., to the Stithians District.

*Wolverhampton Union.*—Frederick Dunn, M.R.C.S.E, L.S.A., to the Second District.

Professor Hancock.—The course of lectures annually delivered at the College of Surgeons will be brought to a close by the above gentleman, who will deliver six lectures on the Anatomy and Surgery of the Foot. The course will commence on Monday, the 4th proximo.

Royal Institution of Great Britain.—At the general monthly meeting, held on Monday, May 7, Sir Henry Holland, Bart., M.D., D.C.L., F.R.S., President, in the chair, Samuel Osborn Habershon, M.D., and John Hogg, M.D., were elected Members of the Royal Institution.

The College Fellowship.—The Members of the Royal College of Surgeons, especially those anxious to obtain the Fellowship of that Institution, will be glad to learn that two important alterations have been effected by recent bye laws, in one case rendering a Member of eight instead of twelve years' standing eligible for admission to the Fellowship by examination; and in the other, abolishing what, in the present advanced state of science, might justly be considered the invidious distinction hitherto made between the metropolitan and provincial Hospitals and Schools—viz., the requiring three out of the six years spent in the acquirement of Professional knowledge to be passed exclusively in the London Hospitals and Schools. In the former case, it will benefit many Medical officers of the Army and Navy, who, from circumstances over which they had no control, have hitherto been unable to conform with the extended curriculum required for the Fellowship, and the latter alteration will give many hard-working provincial Surgeons an opportunity of obtaining this honourable distinction.

F.R.S.—The Council of the Royal Society recommend the following gentlemen for election to the Fellowship:—J. C. Bucknill, M.D.; Rev. F. W. Farrar; W. A. Guy, M.B.; J. Hector, M.D.; J. W. Kaye; Hugo Müller, Ph.D.; C. Murchison, M.D.; W. H. Perkin; Archdeacon Pratt; Captain G. H. Richards, R.N.; T. Richardson, W. H. L. Russell, Rev. Dr. Selwyn, R. Townsend, and H. Watts, B.A. Of these gentlemen four are members of the Medical Profession. Dr. Bucknill, the authority on Psychological Medicine; Dr. Guy, the accomplished statistician and Medical jurist; Dr. Hector, the explorer of New Zealand; and Dr. Murchison, the author of the exhaustive work on Continued Fevers.

Belfast Branch of the Royal Medical Benevolent Fund Society of Ireland.—The stated quarterly meeting of the committee of this branch of the above Society was held on the 2nd inst. in No. 33, High-street; Dr. T. H. Purdon, permanent president, in the chair. The treasurer reported having received subscriptions from Sir E. Coey; Dr. Johnson, Strangford; Dr. Musgrave, Lisburn; Dr. Thompson, Lisburn; Dr. M'Harg, Lisburn; Dr. Campbell, Lisburn; Dr. Pirrie, Dr. Moreland, Dr. Murney, J.P., Dr. Thomas Reade, Surgeon Thompson, Bangor, etc. This being the period of the year for recommending parties for grants at the annual meeting, several applications were now submitted, and, having been inquired into, each was recommended for assistance as far as the funds at the disposal of the Society would admit; and some further business having been disposed of, and the best thanks of the meeting given to the chairman for his most generous support of this branch, and for his exertions in promoting its truly benevolent objects, the meeting separated.

New Reptile.—The *Times* states that a dead specimen of a new species of Saurian reptile has arrived by the Black Ball packet *Young England* from Queensland. The following is the account, which reads very much like a hoax:—"The *Young England* has brought home also a tremendous specimen of the Saurian tribe, which, in the opinion of Australian *savans*, is more closely allied to the extinct reptilia of the pre-Adamite era than any living animal yet discovered. It inhabited the unexplored interior of Queensland, near the source of the Fitzroy river. The accounts related of the destruction caused by the monster upon the native population seemed perfectly incredible until the formidable jaws, armed with fangs of astonishing size, were beheld. Added to this, its claws of prodigious power, and its invulnerable skin, rendered it most formidable. In the contest which ended in its destruction one claw was torn off, but with this exception the body is in perfect preservation."

Quarantine and Cholera.—The supplement to the *London Gazette* publishes the following order issued by the authority of the Privy Council. After quoting the Act passed in the sixth year of George IV., cap. 78, the order states that:

"And whereas a certain infectious disease—that is to say, Asiatic cholera—is prevalent in certain foreign parts; and whereas it is expedient to cut off all communication between persons on board any vessel infected with that disease and the rest of Her Majesty's subjects:—

"Now, therefore, in exercise of the powers conferred upon them by the above-quoted section of the said Act, the Lords of the Council do order, and it is hereby ordered,—

"1. That in case of any vessel arriving in any port of the United Kingdom having such disease on board, no person shall land from such vessel for the space of three clear days after her arrival, without the permission of the local authority.

"2. The local authority shall forthwith cause all persons on board the said vessel to be examined by a Physician or Surgeon, and shall permit all such persons to land immediately who shall be certified by such Physician or Surgeon to be free from such disease.

"3. All persons certified by such Physician or Surgeon to be affected with symptoms of such disease shall be removed, if their condition admits of it, to some Hospital or place to be designated for such purpose by the local authority; and no person so removed shall quit such Hospital or place until some Physician or Surgeon shall have certified that such person is free from the said disease.

"4. In the event of any death from cholera taking place on board of such vessel, the body shall be taken out to sea, and committed to the deep, properly loaded, to prevent its rising.

"5. The clothing and bedding of all persons who shall have died or had an attack of cholera on board such vessel during her voyage, either at any foreign port or on shore at such port, or on her passage to the United Kingdom, shall be disinfected, or (if necessary) destroyed under the direction of an officer of the Customs.

"6. The local authority for the purposes of this order shall be the Local Board of Health, where there is such local Board; and in any corporation where there is no such local Board, the local authority shall be the Town Council of such corporation.

"7. All persons offending against this order shall be liable to such penalties as are imposed by the said Act of Parliament upon persons offending against the provisions thereof.

"Arthur Helps."

Capital Punishment Bill.—This Bill extends to England and Ireland, but not to Scotland. It is to be murder of the first degree, (1,) where a person murders another with express malice aforethought against the person murdered, or any other person, such malice being found by the jury as matter of fact; (2,) where a person murders another with a view to and in or immediately before or after the commission by such person of any of the following felonies, or for the purpose of thereby enabling himself or any other person to commit any of the following felonies, viz., rape, burglary, robbery, piracy, or unlawfully and maliciously setting fire to any dwelling-house, a person being therein; (3,) where a person murders another in the act of escape, or for the purpose of thereby enabling himself or any other person to escape from or avoid lawful arrest or detainer, immediately after committing or attempting to commit murder or any of these felonies; (4,) where a person murders a constable or any other peace officer acting in the discharge of his duty. Clauses 6 to 8 provide that on conviction for murder of the first degree, judgment of death may be pronounced in open court, and the offender shall suffer death as a felon; or the Court may order judgment of death to be entered of record, and this shall have the like effect as if judgment of death had been pronounced in open court, but execution thereof had been respited. All murders not of the first degree are of the second degree, the punishment of the latter to be penal servitude for life, or for not less than seven years. The indictment is to charge murder of the first degree, or to charge murder of the second degree. It is made felony unlawfully and maliciously to wound a child or inflict upon it grievous bodily harm during its birth, or within seven days thereafter; and it is not to be necessary to prove that the child was completely born alive. On an indictment for child murder the accused cannot be found guilty of concealment of birth. Executions are to be within the walls of the prison. The sheriff or his deputy, the governor or chief officer of the prison or his deputy, the chaplain or an officiating minister attached to the prison, the Surgeon or chief Medical officer of the prison, and such other officers of the prison as the sheriff requires, shall be present at the execution; and any justice of the peace having jurisdiction, and such persons as it seems to the sheriff or visiting justices proper to admit, may also be present at the execution. The Surgeon's certificate of the death, a certificate from the above-named officials, and a duplicate of the coroner's inquisition on the body are to be sent to the Secretary of State, and copies are to be exhibited at the prison entrance for a certain number of hours. The body is to be buried within the walls of the prison.

**Practical Homœopathy.**—M. Reymond, in a recent lecture on Heine, the German wit and satirist, tells a good anecdote. Heine and his wife, travelling in the south of France, met Ernst, the violinist, who begged of him to take charge of one of the celebrated Lyons sausages for one of his friends, a homœopathic Physician. In those days railways were not, and the road was tedious. Madame Heine became very hungry, and could not resist a little piece of the sausage, which she found excellent. Presently, Heine joined her, and was quite of her opinion; and, in fact, the sausage was a great treat, and on their arrival at Paris had so diminished in size that Heine dared not forward the mere stump that was left to its destination. But he thought better of it, and cutting with a razor a slice as thin as paper he placed it in an envelope, together with the following note:—Dear Doctor,—"As a result of your investigations the fact has been acquired by science that millionths of parts produce the greatest effects. Accept, then, the accompanying millionth part of a Lyons sausage which Ernst charged me to remit to you. If homœopathy is indeed a truth, this little portion will produce on you the same effect as the entire sausage.—Yours, Henri Heine."

It has been well said, "If Physic be a trade, it is a trade of all others the most cut out for a rogue." To some people, a new sensation in Medicine is as necessary as a new hat, or a new bonnet, and sooner than not be gratified in their desires, they will accept the most exaggerated theory as eagerly as they will don the most extravagant costume. We have had "brandy and salt" cures, "movement cures," "mesmeric cures," "homœopathic and allopathic cures," "cancer cures" without number! We know not what may come next! Truly! exclaims a transatlantic confrère, the Medical man, and particularly the struggling one, has need to pray that he may not be led into temptation; but if he has none other than sordid motives, his prayer is a useless mockery.—*Introductory Address at King's College, London, by William O. Priestley, M.D.*

The following are the last week's Cattle Plague Returns.

| Census Divisions. | 1. Attacked. Week ending April 28. | Week ending April 21. | Week ending April 14. | 2. Result of reported Cases from the Commencement of the disease. Attacked. | Killed. | Died. | Recovered. | Unaccounted for. |
|---|---|---|---|---|---|---|---|---|
| 1. Metropolis . . | 47 | 26 | 23 | 8074 | 3585 | 3536 | 850 | 603 |
| 2. South Eastern Co. . | 1 | .. | 4 | 4834 | 1655 | 2541 | 460 | 178 |
| 3. South Midland Co. | 313 | 347 | 344 | 18951 | 7151 | 9897 | 1546 | 857 |
| 4. Eastern Counties . | 92 | 120 | 127 | 10878 | 4957 | 4797 | 770 | 354 |
| 5. South Western Co. | — | 3 | 2 | 1680 | 597 | 803 | 208 | 72 |
| 6. West Midland Co. . | 357 | 360 | 182 | 13414 | 4816 | 6329 | 1442 | 827 |
| 7. North Midland Co. | 608 | 540 | 510 | 16280 | 8365 | 6077 | 1142 | 696 |
| 8. North Western Co. | 818 | 684 | 921 | 59115 | 13631 | 34180 | 6377 | 4927 |
| 9. Yorkshire . . | 203 | 304 | 824 | 33631 | 6753 | 18284 | 5837 | 2757 |
| 10. Northern Counties. | 131 | 163 | 84 | 8054 | 4394 | 2556 | 961 | 143 |
| 11. Monmouthshire & Wales . . | 88 | 172 | 101 | 8225 | 838 | 5991 | 1091 | 805 |
| 12. Scotland . . | 107 | 104 | 60 | 46533 | 6181 | 27110 | 10714 | 2528 |
|  | 2765 | 2823 | 258 | 229669 | 62923 | 122101 | 30898 | 13747 |

*Note.*—17 Inspectors who reported cases last week have not reported in time for this return—viz., for the county of Buckingham, 2; Chester, 2; Cumberland, 1; Derby, 1; Dorset, 1; Lancaster, 2; Lincoln, 2; Oxford, 1; Yorkshire, 2; "Metropolis," 1; and Scotland, 2. These Inspectors returned 129 cases last week.

# NOTES, QUERIES, AND REPLIES.

◆

He that questioneth much shall learn much.—*Bacon.*

Dr. Moxon's paper is in the printer's hands, and shall have early insertion.

*A Member* will see that his inquiry respecting the Fellowship of the College is answered in another page.

*A Student, St. Bartholomew's.*—Arrangements have been made to publish the course of lectures alluded to by yourself and Mr. F. W. H.

*Inquirer.*—It is not yet *compulsory* upon Boards of Guardians to supply cod liver oil and quinine at the cost of the Union. The Poor-law Board have recommended such a course, and the majority of guardians are falling in with the recommendation.

*J. Barrett.*—1. A captain's biscuit. 2. Brillat Savarin's Physiologie du Goût, either in the original French (which is the better) or in the English translation.

*A Constant Reader* will find his inquiry constantly answered in our advertisement columns, as he will see this day. Write to the Secretary.

*Dr. Thompson, Liverpool.*—Houses were established for the reception of leprous persons at Reading, and at Aylesbury in 1134, and all leprous persons hung if found after sunset.

*Dr. Montgomery.*—A paper was recently read before the Society of Arts, on the assumption of names, and a suggestion that the Legislature should interfere in the matter. The practice is extending into our Profession. Young men whose progenitors were content with the simple name of Snooks now adopt the prefix *de*, thus, Mr. De Snooks; and as for the large family of Smith, it will soon become extinct or swallowed up by the verdant Smyth, Harcourt Smyth, Pye Smith (no Pudding Smith appears). Our correspondent can prefix the "*de*" to his name if he thinks it will increase his practice.

*A Collector.*—The portrait of Dr. Glynn is rare. You will find copies in the libraries of the Royal Medical and Chirurgical Society and College of Surgeons. The following *jeu d'esprit* proves his physiognomy not to have been of so agreeable a cast:

"This morning, quite dead, Tom was found in his bed,
Although he was hearty last night;
But 'tis thought, having seen Dr. Glynn in a dream,
That the poor fellow died of the fright."

Dr. Glynn died in 1800, aged 82.

The Third and final Report of the Cattle Plague Commissioners has just been issued. It shall be noticed at length next week. In the meantime, we may say that the Commission have come to an opinion thoroughly contagionistic.

"It (the cattle plague) follows the lines of cattle traffic, and does not arise spontaneously." In short, all the facts obtained, both at home and abroad, "are conclusive evidence against the assumption of occult atmospheric conditions, and in favour of its spread by multiplication in the bodies of living animals." Sanitary conditions are believed by the Commissioners to be altogether subsidiary. Overcrowding, bad ventilation, and impure water cause the disease to spread faster and to be more fatal; but they neither produce the poison nor can the best sanitary conditions be relied on to exclude it. In some of the worst cowsheds in London the plague has not yet penetrated; in some of the best it has swept the stock entirely away."

### "Artificial Tympanums."

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I enclose a piece of paper, which I took from a large sheet, shown to me by a patient of mine, who had answered an advertisement in some paper, telling sufferers from deafness to send 5s. for artificial tympanums, which cure all cases of deafness. For the 5s. were returned a box of little pieces of cotton wool fixed to ends of cotton, and a small tube, the cotton to be passed through this tube and inserted into the ear, then the tube withdrawn, leaving the wool in contact with the membrana tympani. In the "directions for use," it was stated that the wool was to be wetted with the medicated fluid before being applied, which fluid was not sent. My patient therefore wrote for the fluid, and received an intimation that if 7s. 6d. more was sent she would receive it by return. I cannot understand this system, with Dr. Yearsley's name affixed to the paper, and shall be much obliged if you will have the kindness to explain it to me through your columns. I enclose my card. I am, &c.,

Bridport, May 7. A Constant Reader.

"The Artificial Tympanum, for the Relief of Deafness, attended by Loss or Injury to the Membrana Tympani, and for the Cure of Discharges from the Ear. The discovery of James Yearsley, Esq., M.D., M.R.C.S. Eng., &c.; Surgeon to the Metropolitan Ear Infirmary, Sackville-street; Author of 'Deafness Practically Illustrated,' 'Throat Deafness,' Aural Surgeon to Her Majesty the late Queen Dowager, &c., &c."

⁂ Probably Dr. Yearsley knows nothing about the matter, and may be glad to know in what way his name is used by the alleged possessor of the patent.

### The Medical Profession and the Great Metropolitan Nuisance.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—It strikes me that at the present moment the Profession has a duty before it the performance of which will enhance its well-merited position in public esteem. Of course you are aware that inquiries are pending in Parliament relative to the price and quality of the gas supplied by the several metropolitan companies to their customers. There appears to be no doubt that the latter are ill-used in various ways. But this is not the point to which this letter points. I beg a moment's attention to one very much more important.

Simultaneously with the inquiries just referred to, companies are promoting bills which would enable them in some instances to double and treble their pernicious, pestilential manufacture in London or the immediate environs. The warning of constant peril to life and limb given by the Nine Elms disaster does not discourage boards of directors, confident in the potency of the purse and the effect of extensive private influence, from making demands directly at war with the safety, the health, and the comfort of the population. The hygienic consideration is that which the Profession is concerned with. The lowering, vitiating, and deleterious effects of the gas effluvia is notorious. The evidence of our senses tells us that these works are most offensive nuisances, and their operation is more actively injurious when there is any predisposition to disease in the lungs or stomach. Facts illustrative of this might be cited *ad infinitum*, but it will be sufficient to refer to the evidence taken in the opposition of the Corporation of London some years ago to that unhappy blunder, the renewal of the City Gas Company's charter, and again in the disputes between the Imperial Gas Company and the residents in Fulham and Chelsea. To be brief, the unwholesomeness of such works is notorious, and nothing known to science can alter it, for, to use Dr. Letheby's words, it is "unfortunately inseparable from the process of gas-making." The one item of consolation is the now well-ascertained fact that there is no necessity for making gas near the place of consumption. Indeed, several of the London companies supply, not their own neighbourhoods, but parts of town most distant from their factories. To quote again the authority of Dr. Letheby. "If the gas was well purified it would lose nothing by its journey. Last month I was testing the gas at Birmingham, and I could find no difference in the illuminating power of the gas at the works and in the town, and I may tell you that one of the stations of the company is at least six miles away." The truth is, that twenty miles would make no practical difference.

Here, then, we have an extensive and unmitigable source of sickness and disease on one side, and the facile means of removing it upon the other. If the latter object cannot be effected at once, it must, at all events, be the most monstrous thing in the world to wantonly and unnecessarily permit the aggravation of the evil. Surely no subject connected with sanitary progress can be more interesting at this juncture. Surely, wherever sanitary matters are discussed in the presence of a Medical man, he ought to raise his voice against the gross anomaly and crying evil on which I have commented. Nay, it should be made a point of duty by every conscientious Practitioner to be on the alert for opportunities to bring it under the notice of such persons of local or general influence as he may come into contact with. This would produce excellent effect; the influence of such conversations would filtrate their way to the Legislature's ear, and powerful aid would thus be afforded to the efforts which are on foot for averting the scandal of increasing a terrible, but removable danger and nuisance. A correspondent of yours, who wrote so well and tersely last summer on the occasion of the rejection of one of those pestilent "extension bills," would then be enabled to renew his congratulations, and the more cordially, as, if such attempts be now defeated, the defeat will be a final and decisive one.

I am, &c.,

A VETERAN PRACTITIONER.

COMMUNICATIONS have been received from—

THE ROYAL INSTITUTION; THE PHARMACEUTICAL SOCIETY; A CONSTANT READER; A VETERAN PRACTITIONER; S. BARRETT; M.R.C.S.; A HATER OF FALSE TITLES; DR. STEWART; DR. FAYRER; J. CAMERON; J. E. HUXLEY; DR. BENCE JONES; DR. JOHN W. OGLE; MR. F. H. MARSH; MR. J. W. HULKE; DR. FARR; DR. HUGHLINGS JACKSON; MR. J. CHATTO.

BOOKS RECEIVED—

Curling, On Disease of the Testes—Anstie's Notes on Epidemics—Lardner's Handbook of Natural Philosophy—Watt's Dictionary of Chemistry, Part 34—Edinburgh Medical Journal, May—Brande's Dictionary of Science, Part 9—The Glasgow Medical Journal, May—The Dental Journal, April—The Pharmaceutical Journal, May—The Dublin Quarterly Journal, May—Beraud, Atlas of Surgical and Topographical Anatomy—Journal de Medicine Mentale, Avril, 1866—Haycock, On the Education and Training of the Veterinary Pupil—Journal of the Scottish Meteorological Society—Laycock's Clinical Inquiries into the Influence of the Nervous System and of Diathetic Tissue Changes.

NEWSPAPERS RECEIVED—

The Sunday Gazette—The Liverpool Weekly Mercury.

# VITAL STATISTICS OF LONDON.

*Week ending Saturday, May 5, 1866.*

## BIRTHS.

Births of Boys, 1003; Girls, 999; Total, 2002.
Average of 10 corresponding weeks, 1856-65, 1885·4.

## DEATHS.

| | Males. | Females. | Total. |
|---|---|---|---|
| Deaths during the week .. .. .. | 782 | 763 | 1545 |
| Average of the ten years 1856-65 .. .. | 611·6 | 590·6 | 1202·2 |
| Average corrected to increased population .. | .. | .. | 1322 |
| Deaths of people above 90 .. .. .. | .. | .. | .. |

## DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

| | Population, 1861. | Small pox. | Measles. | Scarlatina. | Diphtheria. | Whooping-cough. | Typhus. | Diarrhœa. |
|---|---|---|---|---|---|---|---|---|
| West .. | 463,388 | 2 | 10 | 6 | — | 13 | 5 | 3 |
| North .. | 618,210 | 7 | 9 | 11 | — | 23 | 11 | 1 |
| Central .. | 378,058 | 1 | 5 | 2 | 1 | 24 | 2 | 2 |
| East .. | 571,158 | 11 | 13 | 5 | 2 | 21 | 9 | 3 |
| South .. | 773,175 | 5 | 18 | 7 | 1 | 32 | 12 | 7 |
| Total .. | 2,803,989 | 26 | 55 | 31 | 4 | 113 | 39 | 16 |

## METEOROLOGY.

*From Observations at the Greenwich Observatory.*

| | |
|---|---|
| Mean height of barometer .. .. .. .. .. .. .. | 29·589 in. |
| Mean temperature .. .. .. .. .. .. .. | 42·5 |
| Highest point of thermometer .. .. .. .. .. | 61 5 |
| Lowest point of thermometer .. .. .. .. .. | 32·6 |
| Mean dew-point temperature .. .. .. .. .. | 36·1 |
| General direction of wind .. .. .. .. .. .. | Variable. |
| Whole amount of rain in the week .. .. .. .. | 0·65 |

## BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, May 5, 1866, in the following large Towns:—

| Boroughs, etc. | Estimated Population in middle of the Year 1866. | Persons to an Acre. (1866.) | Births Registered during the week ending May 5. | Deaths. | | Temperature of Air (Fahr.) | | | Rain Fall. | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Corrected Average Weekly Number.* | Registered during the week ending May 5. | Highest during the Week. | Lowest during the Week. | Weekly Mean of the Mean Daily Values. | In Inches. | In Tons per Acre. |
| London (Metropolis) | 3067536 | 39·3 | 2002 | 1400 | 1545 | 61·5 | 32·6 | 42·5 | 0·65 | 66 |
| Bristol (City) . . | 163680 | 34·9 | 110 | 73 | ‡76 | 57·5 | 30·5 | 41·7 | 0·27 | 27 |
| Birmingham (Boro') | 335798 | 42·9 | 234 | 163 | 187 | 56·6 | 28·2 | 37·7 | 0·72 | 73 |
| Liverpool (Borough) | 484337 | 94·8 | 366 | 281 | 338 | 53·4 | 33·1 | 44·0 | 0·27 | 27 |
| Manchester (City) . | 358855 | 80·0 | 264 | 203 | ‡205 | 59·0 | 32·0 | 41·7 | 0·34 | 34 |
| Salford (Borough) . | 112904 | 21·8 | 72 | 57 | 52 | 56·0 | 29·1 | 40·8 | 0·34 | 34 |
| Sheffield (Borough) . | 218257 | 9·6 | 196 | 115 | 140 | 57·6 | 29·0 | 39·4 | 0·14 | 14 |
| Leeds (Borough) . | 228187 | 10·6 | 216 | 116 | 172 | 61·2 | 24·5 | 40·8 | 0·20 | 20 |
| Hull (Borough) . | 105233 | 29·5 | 75 | 49 | 54 | .. | .. | .. | .. | .. |
| Nwcastl-on-Tyne, do. | 122277 | 22·9 | 105 | 65 | 70 | 58·0 | 26·0 | 40·9 | 0·24 | 24 |
| Edinburgh (City) . | 175128 | 39·6 | 144 | 84 | 103 | 52·7 | 28·0 | 40·2 | 0·50 | 50 |
| Glasgow (City). . | 432265 | 85·4 | 422 | 252 | 317 | 55·6 | 30·2 | 41·3 | 0·18 | 18 |
| Dublin (City and some suburbs) . | 318437 | 32·7 | 145 | †156 | 157 | 59·4 | 29·5 | 43·0 | 0·51 | 52 |
| Total of 13 large Towns . . . | 6122894 | 34·4 | 4355 | 3014 | 3416 | 61·5 | 24·5 | 41·2 | 0·36 | 36 |
| Vienna (City) . . | (1863)<br>560000 | .. | .. | .. | Week ending April 28.<br>406 | Week ending April 28.<br>.. | .. | §<br>50·5 | .. | .. |

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·589 in. The pressure of the atmosphere fell to 29·30 in. on Tuesday, and rose to 30 in. on Saturday.

The general direction of the wind was variable.

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* The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.

† Registration did not commence in Ireland till January 1, 1864; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in that city were the same as the averages of the rates in the other towns.

‡ The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

§ The mean temperature at Greenwich during the same week was 52·6°.

# APPOINTMENTS FOR THE WEEK.

### *May* 12. *Saturday* (*this day*).

*Operations* at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free Hospital, 1½ p.m.

ROYAL INSTITUTION, 3 p.m. Professor Huxley, "On Ethnology."

### 14. *Monday*.

*Operations* at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.

### 15. *Tuesday*.

*Operations* at Guy's, 1 p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; St. Peter's Hospital for Stone, 3 p.m.

ANTHROPOLOGICAL SOCIETY OF LONDON, 8 p.m. Meeting.

PATHOLOGICAL SOCIETY, 8 p.m. Meeting.

ROYAL INSTITUTION, 3 p.m. Professor Ansted, "On the Application of Physical Geography and Geology to the Fine Arts."

### 16. *Wednesday*.

*Operations* at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.

HUNTERIAN SOCIETY, 8 p.m. An Open Meeting.

### 17. *Thursday*.

*Operations* at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.

HARVEIAN SOCIETY OF LONDON, 8 p.m. Dr. Richardson will Exhibit his Instruments for Producing Local Anæsthesia. Debate, "On Infanticide in its Medical and Social Bearings."

ROYAL INSTITUTION, 3 p.m. Professor Huxley, "On Ethnology."

### 18. *Friday*.

*Operations*, Westminster Ophthalmic, 1½ p.m.

ROYAL INSTITUTION, 8 p.m. Rev. C. Pritchard, "On the Telescope: its Modern Form and the Difficulties of its Construction."

# ORIGINAL LECTURES.

NOTES ON

## SOME OF THE MORE RARE FORMS OF FRACTURES AND DISLOCATIONS,

BEING EXTRACTS FROM LECTURES (CLINICAL AND OTHERWISE) DELIVERED AT

The London Hospital.

By JONATHAN HUTCHINSON, F.R.C.S.,
Surgeon to the Hospital and Lecturer on Surgery.

(Continued from page 464.)

*Compound Fractures involving the Elbow-joint—Extract from a Former Report on this Subject—Details of Thirteen Recent Cases—Remarks.*

### COMPOUND FRACTURES INVOLVING THE ELBOW-JOINT.

It is scarcely necessary for us to speak of compound dislocations of the elbow-joint without fracture, since owing to the form of the bones entering into the articulation such a form of injury is scarcely ever met with. In compound fractures involving the joint we may, however, have very various degrees of displacement. The most common are, however, those in which there is but little displacement, but to which, quite equally with those apparently more severe, the dangers of traumatic inflammation of the joint attach. These cases constitute some of the most important and interesting with which we have to deal. Ten years ago I published in the *Medical Times and Gazette* a series of cases which had then recently occurred in different Hospitals and under the care of various Surgeons, illustrating this subject. To these in July, 1856, I appended the following comments. Since then I have had the advantage of considerable personal experience as to these accidents, the result of which I will presently relate. First, however, I will ask permission to extract the comments referred to *verbatim* :—

"COMMENTS ON THE SERIES.(a)

"Sir Astley Cooper remarks of compound fracture into the elbow-joint: 'In the most severe accident of this kind, the constitution is generally able to support the injury if it be *judiciously treated.*' He cites four examples of its occurring in his own practice, in three of which recovery ensued; in one death. He also narrates two cases from the practice of Mr. Macyntyre, in which the articulating extremities were excised immediately after the accident, and in both of which excellent results were obtained. In the "judicious treatment" above referred to, Sir Astley appears to include the dressing of the parts in lint soaked with blood, and strictly abstaining from poulticing.'

"Mr. Alcock(b), in his paper on Injuries to Joints occurring in Military Practice, states, 'Very serious injury of the elbow-joint often admits of the limb being saved.' Of excisions, he remarks that 'they have been performed with good success in cases of disease, and *are still more applicable to injuries.*' At the time he wrote, however, he was not aware of any instance 'of total excision of the articulating ends of the elbow in the annals of either British or French Military Surgery.'

"The following Conclusions appear warranted by the facts before us:—

"1. That primary amputation on account of compound fractures of the elbow ought never to be thought of unless, indeed, either the artery be torn through, or the soft parts in front as well as behind the joint hopelessly damaged.

"2. That the preceding rule requires little if any modification on account of the age, health, or previous habits of the patient. In case No. 6 of our series the man was upwards of 64, and in one given by Sir Astley Cooper the patient was a gentleman of 74, and of feeble constitution; yet in both these the result was excellent. In case 5 the patient was a cachectic, ill-fed boy of 14. In case 11 the subject was a brewer's drayman of most intemperate habits; and one of the most favourable of those given by Sir Astley Cooper occurred in a similar character.

"3. That the ill consequences to be feared are in inverse rather than direct proportion to the amount of external injury (laceration) inflicted; those cases being most serious in which the joint is crushed with but a very small opening in the skin.

"4. That in all cases sufficiently severe to warrant it, it is far better Surgery to freely enlarge the wounds behind the joint, and excise the projecting ends of the bones, than to be content with a simple reduction. Much less of suppuration and of constitutional disturbance appears to follow cases so treated, and the chance of good motion being obtained after an excision is infinitely greater than it is when the ends of the injured bones remain.(c)

"5. That, in the treatment of these injuries, poultices and warm fomentations should be avoided.

"6. That, when it has been decided to preserve the arm, it is the Surgeon's duty (excepting, perhaps, in case of sloughing) to persevere, in spite of discouraging circumstances afterwards. None of the patients in our list appear to have died directly from the effects of the injury; and, in the three cases which did end fatally, the event was due to a state (pyæmia) which amputation would have availed nothing to prevent. In several, on the contrary, recovery took place from a condition apparently of but little hope; and in one or two, the patient's own obstinacy in refusing amputation saved him his limb. Buffon described the genius necessary for the successful pursuit of natural history as consisting mainly in '*une assez grande aptitude de patience*;' and, assuredly, the quality is one no less necessary to the conservative Surgeon."

I will now proceed to relate the result of my experience in this matter during the ten years which have elapsed since these statements were written.

My subsequent observation has not in the least diminished my estimate of the dangers attending compound injuries to the elbow-joint. It has, however, I regret to say, somewhat reduced my hopefulness as to the results after excision, though still I think that the balance of evidence is clearly in favour of this practice. We will briefly consider the details of the cases to which I refer.

*Case* 1.—*Primary Excision of the Elbow-joint, with extensive Removal of Bone rendered necessary by the Injury—Favourable Result.*—In 1861, a man was admitted, under Mr. Curling's care, who had sustained a compound fracture, involving the right elbow, and a second of the left tibia and fibula. The crush of the elbow was most severe, and I have already referred to the case as an instance of dislocation of the bones of the forearm forwards. The soft parts behind the joint were most severely lacerated, and the bones were exposed in the wound. The only question which could be entertained was between excision and amputation. Mr. Curling performed excision, removing the lower fifth of the humerus and the extremities of the ulna and radius. The arm did remarkably well afterwards, and in the course of two months the parts were almost healed. The man, however, after a long illness in connexion with the compound fracture of his leg, ultimately sank. He died, I think, about five months after his accident. Secondary amputation of the leg had been performed, and pyæmia was the immediate cause of death. I think, however, that so far as the elbow was concerned, we may claim the excision as a success.

*Case* 2.—*Compound Fracture into the Elbow-joint—Destructive Inflammation of the Joint—Recovery, with Anchylosis.*—About the same time that the above case was under care, a German sugar-baker, of middle age, was also admitted under Mr. Curling's care with a compound fracture of the lower part of the humerus, which opened into the elbow-joint. The injury to the soft parts in this case was very trifling. Acute synovitis of the joint, however, followed, and the elbow became greatly swollen, and incisions were required. The man was very ill for some time, and the propriety of a secondary excision was several times discussed. Ultimately, he recovered perfectly, and the sinuses all healed. The elbow was firmly anchylosed, but at a right angle, and likely to be very useful.

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(a) *Vide Medical Times and Gazette*, July 12, 1856, and preceding numbers of same journal.

(b) Medico-Chirurgical *Transactions*, vol. xxiii., page 254.

(c) "It may be worth a question whether, even in certain cases not usually deemed sufficiently severe to warrant it for the reason abovementioned it might not be well, to enlarge the wound and excise the joint. Crushed elbows with but small external wound, undoubtedly, as a rule, do badly. The excision of joints during the acute or commencing stages of inflammation would seem to hitherto have been regarded with suspicion, though probably with no very definite reason. In cases of slight injuries, in which at the time it had been thought best to do nothing, but which have subsequently gone wrong, it might perhaps be good practice, to do *secondary* excisions, say within the first week or two. The immediate relief afforded by free incisions under such circumstances is well known, and it would probably be increased by the removal of the bones and their ulcerating cartilages."

*Case* 3.—*Compound Fracture through the Base of the Olecranon into the Elbow-Joint—Destructive Inflammation of the Joint, with Sloughing of Soft Parts—Secondary Amputation—Death.*—A healthy labourer, aged 56, was admitted under my care in 1863 with a compound fracture through the base of the olecranon. It was proved subsequently to have been compound, and to involve the joint; but at first we doubted on this point. The skin-wound was only large enough to admit a probe. There was very little contusion. The limb was placed on a splint, lightly bandaged, and bladders of ice were applied about the joint. During the fortnight following this patient's admission, I was out of town, and he was under the care of a colleague. When I again took charge of the wards, I found him exceedingly ill. There had been destructive inflammation of the joint, with sloughing of integument at its back, and burrowing abscesses in forearm and upper arm. His tongue was dry, and pulse rapid. It was clear that there was now nothing to be thought of short of amputation; and this I accordingly performed about three weeks after the accident. In spite of this measure the man sank a few days later.

Probably in this instance the man's age had something to do with the unfavourable result. A younger and stronger man might have pulled through; yet it is an instructive instance of the danger which attends even a slight compound injury to the joint.

In my next case I obtained an opportunity for an examination of the parts, owing to one of those most unfortunate occurrences—a death from chloroform—the only one, I am glad to say, which has ever happened in my practice.

*Case* 4.—*Comminuted Fracture of the Lower End of the Humerus, with Perforation of the Soft Parts communicating with the Joint—Destructive Inflammation of the Joint.*—The specimen which I now show you is the elbow joint and adjacent bones from the case alluded to. You will see that the lower part of the humerus has sustained what we might describe as a T shaped fracture, a kind of injury not very uncommon at this part. A more or less accurately transverse line of fracture crosses the shaft an inch or an inch and a half above the articular surface, and from the middle of this a vertical line passes downwards into the joint dividing the lower fragment into two. Usually there is also more or less of comminution of the lower fragments. It is, I believe, usually produced by direct violence, and the character of displacement accordingly may vary from what is the rule in fractures at this position by indirect force. In the latter, as I have already insisted, the elbow and lower fragment are displaced backwards. In our present case the injury was caused by the fall of a heavy chest on the elbow, and the displacement is of the elbow and lower fragment forwards.

FIG. 1.

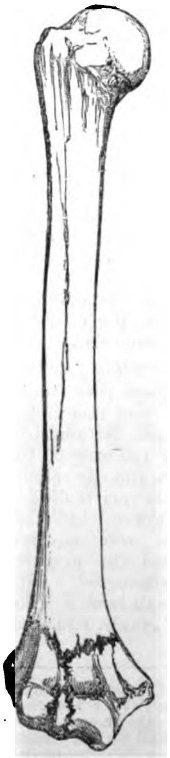

FIG. 2.

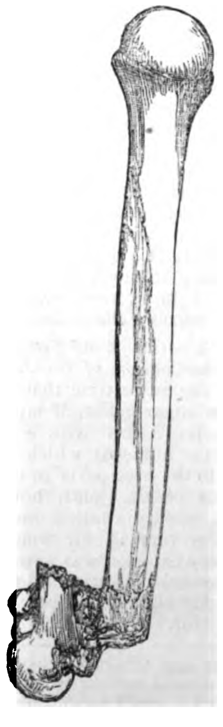

FIG. 1.—Diagram showing the lines of fracture in the lower part of the humerus in the case described. The character of the displacement is shown in the next cut—a side view of the same.

FIG. 2.—Irregular transverse fracture of the right humerus two inches above elbow-joint (by direct violence)—Displacement of the elbow and lower fragment forwards with overlapping—Partial union.

In this instance, at six weeks after the accident, when we obtained the specimen, there were, as you see, bridges of ossifying material passing between the fragments, and portions of the latter are marked out for exfoliation. The cartilage of the several bones constituting the elbow-joint is extensively removed by ulceration. You will ask why better coaptation was not maintained? To this I reply that the inflammation of the limb, after the injury, was such as to entirely prevent our having recourse to any kind of extension.

To return to that aspect of our case which exhibits it in reference to our present subject—compound injuries to the elbow-joint. The patient was a healthy man, aged 34. He was brought to the Hospital, having had his right elbow crushed and fractured as I have described. The skin was considerably contused, and there was a small laceration on the inner side of the joint, which might have admitted the tip of the little finger. We were not certain that this communicated with the joint, but on the next day the discharge of synovia-like fluid made this almost conclusive. The limb was got into good position, placed on an angular splint, and surrounded by bladders of ice. During the next fortnight, the ice treatment was carefully and efficiently carried out. It did not, however, suffice to prevent a most acute attack of traumatic synovitis. The elbow and adjacent parts became very greatly swollen, and several abscesses required to be opened. The suppuration was very profuse, and at length, fearing that the man's health would give way and that we might be compelled, under very disadvantageous conditions, to resort to amputation, I advised excision of the ends of the bones. This was between five and six weeks after the accident. It was during the administration of chloroform, in preparation for the excision, that the man's death, as I have already stated, occurred. Afterwards I dissected the limb, and removed the specimen which I have shown (see woodcuts). The dissection, as I have said, showed that the parts were in progress of repair, and had no operation been attempted, I think it not improbable that the man would have struggled through and recovered with anchylosis at the elbow and union of the compound fracture. The malposition of the fragments would not have been of nearly so much consequence as the opposite and more common condition of displacement of the elbow backwards, since it would not interfere with flexion.

My next case is one of good recovery after primary resection of the joint.

*Case* 5.—*Compound Fracture of the Humerus involving the Elbow-joint—Primary Resection—Recovery.*—A publican, aged about 50, accustomed to a very free mode of life, fell from some steps and sustained a compound fracture of the left elbow-joint. It was the inner extremity of the upper fragment (inner condyle) which had perforated the skin, and synovia was escaping from the wound. The soft parts were much bruised. I explained to him the nature of the accident and its special dangers, and advised an operation, to which he consented. I performed a complete excision of the ends of the three bones in the usual manner, employing the T-shaped incision.

During the three weeks following the accident and operation the forearm was much swollen. A slight attack of erysipelas occurred, and the man also suffered from delirium, probably a complication of delirium tremens and the traumatic form. At length, however, he recovered completely. The wound healed soundly, and he left the Hospital at the end of seven weeks in a very satisfactory condition. I saw him repeatedly afterwards, when he was in excellent health and had good use of the injured arm, which he could extend and flex through a wide range.

In my next case I was obliged to remove about a third of the entire length of the humerus, yet the patient has done well.

*Case* 6.—*Compound Fracture into the Elbow-joint—Primary Excision of the Joint—Subsequent Extensive Sloughing of Soft Parts—Resection of Lower Third of Shaft of Humerus, leaving* *the Periosteum—Recovery.*—A boy, aged 13, had his left elbow crushed by the wheel of a railway waggon, and was brought into the Hospital with synovia draining from a small wound close below the external condyle. The fracture extended obliquely through the latter. The degree of contusion, contrary to what we might have expected from such an accident, was but apparently slight. I enlarged the wound very freely, converting it into the T incision, and excised the ends of the three bones.

This boy had a severe attack of traumatic delirium during the next few days, caused, I have no doubt, by the sloughing of the soft parts which followed the contusion. The whole of the integument behind the joint sloughed to an extent almost as large as one's hand. There remained only a bridge of skin an inch wide in front of the elbow connecting the upper- and fore-arm. The bones were exposed in the wound. Several consultations were held as to the performance of amputation, and I obtained his father's consent to its performance. It seemed, indeed, for some time that nothing else could possibly be done, and we only waited for a favourable opportunity. At length, however, the sloughs cleared, and the wound granulated so well that I determined to try to save the limb. It was clear that unless we could shorten the limb healing of the very large wound which now existed could not possibly occur. I therefore excised another portion of the humerus, so as to allow the bones of the forearm to come in apposition with the humerus at about the junction of its middle and lower thirds. In doing this, according to my invariable rule, I preserved the periosteum. The latter membrane was very easily stripped off from the shaft, to which it adhered very loosely. Having done this, I cut away the portion of bone I now show. This second excision was performed about a month after the first. You will see that although the periosteum has been stripped off, the surface of the bone is still rough from the deposit of new bone which has occurred between the periosteum and the shaft, and adherent to the latter. This condition of things is very common in bones which have been exposed to irritation, and does not by any means imply that necrosis will follow.

Fig. 3.

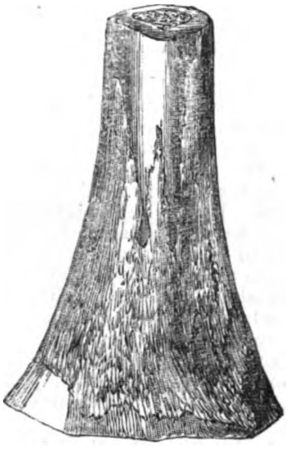

Fig. 3.—Lower third of left humerus of a boy which was excised four weeks after a primary resection of the elbow-joint for compound fracture. Its surface is covered with new bone.

After the second operation our patient did uninterruptedly well. Great attention was paid to the dressing of the limb, and in the course of a few weeks he was able to leave his bed with the limb on an angular splint. The wound at length healed soundly, with the exception of a small sinus which leads down to the end of the shaft, from which an exfoliation is in progress. A large amount of new bone has been formed by the bag of periosteum, which we were careful to preserve, and the bones of the former are firmly anchylosed to the humerus at a right angle. At present, I believe, the boy is in good health, and has a very useful limb.

*Case 7.—Compound Fracture of Lower End of Humerus into the Elbow-joint—Sloughing of Soft Parts—Secondary Amputation—Death.*—I assisted, a few months ago, at an amputation performed by a colleague on account of very severe injury to the elbow a week previously. The humerus had been fractured, as you see in this specimen, though the external condyle, and the fracture communicated with the joint. Acute inflammation of the elbow resulted, and the skin had very extensively sloughed. This sloughing involved such an extent that repair was clearly out of the question. After the amputation the man did well for a time, but eventually died of pyæmia.

*Case 8.—Compound Fracture of the Olecranon—Destructive Inflammation of the Joint—Death.*—An Irishwoman, aged 30, applied at the receiving-room during my week one day in the spring of 1865 with a compound fracture of her left olecranon. She positively refused to come into the Hospital, and consequently did not come under my observation until ten days later. The accident was caused by a fall on her elbow, and there was no great amount of contusion. She was, I believe, a temperate and healthy person. When admitted under my care ten days after the injury, she was very ill. She had had severe rigors, and the parts about the elbow were very much swollen. Her tongue was dry and pulse rapid. I thought her pyæmic, and therefore advised amputation; but to this she refused to consent. A few days later, when much worse, she was very anxious that the limb should be removed; but I did not then think it justifiable. She died a week after her admission. At the autopsy we found the cartilage of the elbow joint extensively eroded, and the joint containing dirty pus. The only fracture was that which I now show of the olecranon through its base. I must ask you to note that this patient did not contract the pyæmia of which she died—there had been repeated rigors—in the wards of the Hospital. The disease had set in before her admission.

*Cases 9 and 10.—Two Cases of Successful Result after Primary Resection of the Elbow-Joint for Compound Fracture involving the Articulation.*—The subjects of these two cases were both under the care of my colleague, Mr. Maunder, and you will find them mentioned in the second volume of our Hospital Reports. Both were men—one aged 47, and the other 28. In one a compound fracture of the ulna involved the elbow-joint, and in the other a similar condition of things had resulted in connection with a compound fracture of the humerus. In each Mr. Maunder performed a primary excision of the joint, and in each, after sharp traumatic fever, the patient recovered well.

*Cases 11 and 12.—Two Cases in which Death occurred after Primary Resection of the Elbow-joint for Compound Fracture.*—In the first of these, a man aged 50, under Mr. Maunder's care, died of pyæmia on the twentieth day after a primary resection of the elbow-joint. The original injury was a compound comminuted fracture of the humerus into the joint.

In the second the patient was a woman, aged 50, under Mr. Couper's care. The injury was very extensive and severe, both to the bones and soft parts. Traumatic gangrene followed, and the woman died on the tenth day.

I have now mentioned to you all the cases of compound injuries involving the elbow-joint, and not sufficiently severe to demand immediate amputation, which I can recollect to have seen during the last few years. I have yet one most instructive case to mention, which well illustrates the necessity for great care in diagnosis.

*Case 13.—Compound Fracture of the Ulna close to Elbow-joint, but not involving it.*—I was summoned one evening to the Hospital to a case of "compound fracture into the elbow-joint," and on arriving found the following condition of things. The patient, a healthy man, had been struck on the back of upper part of his forearm just below the olecranon by a revolving cogged wheel, and his ulna was severely comminuted. A portion of skin had been torn away and at the bottom of the wound lay the fragments of the smashed bone. The dresser of the case assured me that synovia had been draining from the wound, and taking for granted that the joint must be opened, I obtained the man's consent to an excision, and had him up into the theatre. When he was under chloroform, I examined the parts more carefully, and arrived at the conclusion that it was just possible that the joint had escaped. I could not find any flow of synovia. Although the bone was shattered at its posterior aspect, yet the olecranon still seemed to be in continuity with the shaft, and a probe did not anywhere find its way into the articulation. I therefore contented myself with picking away some detached fragments of bone, and then covered the wound with wet lint. A large ice bladder was kept in contact with the front of the elbow, and the limb at rest on an angular splint. The case did perfectly well, no inflammation of the joint ensued, and the man left the Hospital with the wound healed, and able to use his elbow-joint as well ever.

In conclusion, I can but repeat my opinion that although, even after excision, these cases are very serious ones, yet the balance of evidence and argument is decidedly in favour of primary resection in all cases in which it is *quite certain* that a compound fracture involves the elbow-joint. It requires some boldness to decide on this practice in a case in which the wound in the skin is very small and the case as yet looks trivial. These, however, are the very cases which most demand it, and in which, if it be not done, serious inflammation is likely to follow. I hope it is scarcely necessary for me to add that if you do an excision it must be a complete one. The whole articular surfaces should be removed. The only question on this point is as to whether we might not save the end of the olecranon and attachment of triceps, and bring this into apposition with the cut surface of the ulna.

## ORIGINAL COMMUNICATIONS.

◆

## BLEEDING IN CHOLERA.

By EWING WHITTLE, M.D. Lond.,

Member of the Royal Irish Academy; Sen. Hon. Surgeon to the Liverpool Dispensaries.

THOUGH fully appreciating the justice of your observation, that a terrible responsibility rests upon any one who writes on the subject of cholera at present, I feel bound to lay before the Profession some observations on the views of the treatment of cholera lately set forth so forcibly by Dr. George Johnson. This is a subject on which I have a right to speak with some degree of authority; in 1849 I devoted much time to a careful study of the history and pathology of the disease, I was largely engaged in the treatment of cholera cases during the epidemic of that year, and had the charge of the Cholera Hospital of Toxteth-park, a township then containing more than 60,000 inhabitants.

As the result of my practice I showed that the judicious use of the lancet (as practised nearly fifty years ago in India), was the key to successful treatment; that by its use four cases out of five could be saved; that next to its use the administration of calomel was most to be relied on; and I believe I was the first to show that the good effects of calomel had no reference whatever to the supposed action of that mineral on the liver. A further experience of the epidemic in 1854 confirmed these views, and you will find the results partially recorded in the *Medical Times and Gazette* for October, 1854. So much for my claim to some attention on this important and now anxious question.

I am quite satisfied that Dr. Johnson is right in his theory that the passage of blood from the right side to the left side of the heart is impeded; this arrest of the blood in its natural course is what calls for relief by blood-letting. Whether this is caused by spasm of the small vessels or whether it be the result of nervous paresis, the fact does not admit of dispute; but I cannot so readily admit the truth of Dr. Johnson's theory, that the vomiting and purging is an effort of nature to carry off the poison. How often is vomiting a symptom of sympathy with a distant organ, as in nephritis, in hydrocephalus, in pregnancy? So much for theory; now with regard to practice. I have invariably observed that if these symptoms can be relieved the severity of the disease is abated; and *vice versa*, everything which increases the vomiting and purging aggravates the disease, and precipitates the collapse. Under this head may be included all stimulants, astringents, and opium; all alike injurious, not by stopping the discharges, but by increasing them, particularly the vomiting, which is always a most harassing and exhausting symptom. On the contrary, the action of the calomel is the very reverse; it stops the vomiting immediately, and after a few doses the purging. This I have observed myself; it never purges unless it is continued until reaction is fully set up. In support of the correctness of this statement, I can refer you to all the old Indian authorities; for instance, Dr. James Johnson says "that twenty grains of calomel will act as a sedative; and, so far from griping and producing hypercatharsis, it will soothe uneasiness and rather constipate than purge. Annesley and other Indian authors have made the same observation. This appears to me to be the weak point in Dr. Johnson's views, and this I wish to combat—viz., that calomel is given as a purgative or a cholagogue. In fine, one word upon your own remark, that those who read Dr. Johnson's book will come to the conclusion that the best plan is to do nothing in the stage of collapse; if they do, I can assure you that they will lose more patients than they ought to do. Let them open a vein in the arm in all cases; if collapse has gone so far that no blood will flow, the puncture will do no harm; if only a little blood flows, some relief will be afforded; and if the stream continues until the colour changes from black to red (as Annesley long ago recommended), the relief will be very decided, and the patient will in all probability recover, particularly if he has not been previously injured by the administration of stimulants and opium or other irritants. It is generally sufficient to take three or four ounces of blood, the red colour becoming pretty well marked by the time that quantity is drawn from the vein. A few doses of calomel and a spoonful of gruel every now and then, and the application of dry heat and sinapisms to the surface, was the only additional treatment which I found necessary in 1854.

Believing that there is much truth in what Dr. Johnson has advanced, and knowing that his views have made a profound impression on the Profession, I feel bound to enter a protest against what appears to me to be the unsound point both in his theory and practice. However, I am glad that he so far concurs with me as to recommend bleeding at all; this, I think, he did not do in 1854. I practised it with success both in that year and in 1849, and I would beg most urgently of my Professional brethren to give this mode of treatment a fair trial. If they do, they will not be disappointed.

Liverpool.

## A CASE OF RECOVERY FROM REFLEX PARALYSIS.

By Dr. FRASER,

Senior Physician to the London Hospital.

THE statement by Brown-Séquard, that the principal symptoms and affections of brain diseases may be caused by an irritation starting from any viscus, or any nerve of the skin, or mucous membranes, receives corroboration from the following case, supplied to me by the patient, Dr. Douglas, residing in West Maitland, Sydney. He has given his own case so graphically that if it were not for want of space the whole of the melancholy record would be read with interest. The heads will sufficiently explain the prominent points.

Having previously been in good health, he was, on January 22, 1864, attacked with dysentery, from which he recovered, and on February 28, having experienced during his illness great inconvenience from piles, he had a ligature placed on a pile. In his own words,—"I experienced intolerable pain, with indescribable sensation in the nates and rectum while sitting."

March 5.—Pile sloughed off. Experienced a sensation of numbness on left side of the body, and in the perinæum.

6th.—Extensive ulceration round margin of anus; a fulness of left hip.

10th.—A sensation of fulness and general uneasiness of left hip and cheek; slight twitching and numbness of fingers and legs.

14th.—Speech slightly affected. Strychnine, in doses of $\frac{1}{24}$th part of a grain, ordered three times a day; but the characteristic spasms so soon followed that it was omitted. It was resumed on April 1, but again discontinued on the 5th, for the cause above named. Quinine and stimulants were now freely used.

On June 17 the symptoms had increased; there was oppressed breathing, restlessness, complete loss of sensation and motion in lower extremities. On July 10, quite helpless—cannot move either hands or feet. From this date a gradual improvement began, and on February 19, 1865, he was able to move about slowly, and now (November, 1865) has completely recovered.

Irrespective of the illustration of the reflex theory of paralysis, this case presents an instance of the beneficial employment of stimulants and avoidance of depletion, thus giving a practical instance of a change of type in disease over this globe; for although the symptoms increased for some days after the use of quinine and stimulants, these aggravated symptoms could not be traced to the use of alcohol, as this remedy was uninterruptibly continued, and the successful result followed.

# DESCRIPTIVE REMARKS ON A PECULIAR FORM OF FEVER IN A CATTLE PLAGUE DISTRICT.

By W. HARBORD, Esq., M.R.C.S.E., etc.

MUCH has been said and written on Rinderpest, and many speculations as to its nature have been suggested. What has been the result? is a natural inquiry. To this query we may reply—More facts with regard to the real nature and origin of zymotic diseases have been elicited than we were previously in possession of, and a better and more simple plan of treatment will be the result, based, as it must be, on the simple chemistry and philosophy of nature.

Rinderpest has been held to be peculiar to the bovine race, and not communicable to other creatures. Such an opinion is no longer tenable; for man, sheep, goats, cats (and if the report from India is to be relied on, horses) are all liable to the same morbific influence, either by infection or contagion. A close observation of facts and phenomena has convinced me of this, and I ask, why, if man is capable of receiving vaccinia and herpes from the cow, he should not be capable of receiving Rinderpest also? It is true that diseases may be modified materially by different animal organisms, but yet retain their original type—I will take as instances vaccinia, herpes, equinia, scabies, and many other diseases capable of propagation from brutes to man, and *vice versa*—but these modifications are not such as to bar identity; the visible sign is the same, whatever may be the effect of the particular class of disease on a particular race of creatures. Rinderpest is communicable to man by contagion, by infection, and by inoculation; its outward manifestations are similar, the symptoms progress in like manner, and the ultimate result corresponds in man and beast, save that in man it is much more amenable to treatment, owing, no doubt, to the greater simplicity of the digestive organs, and consequently not so fatal: a happy result, which is, moreover, aided by the greater facility with which local applications, especially artificial heat, may be applied; aliment administered, and strict cleanliness enforced. I have designated this disease herpetic fever.

The period of incubation varies from seven to twenty-one days, as does also that of maturation. The early symptoms are sense of fulness over the eyebrows and oppression about the chest, with listless anxiety, staggering gait and trembling limbs, rigors, followed by coldness, and an indescribable sensation along the spine, the least pressure on which causes the patient to shrink; distaste for food and drink, the most common reply being, "Leave me alone, I want nothing." After from twelve to seventy-two hours purging comes on, the previous stools having been green in colour, and of the consistence of stiff paint, and so nauseous in odour as to have caused the patient and his attendant to vomit. The odour is that of putrid fish. In severe cases there is not merely diarrhœa or dysentery, but free alvine hæmorrhage. In a few cases I have met with severe vomiting, but this is by no means uncontrollable. The skin presents a peculiar appearance, being somewhat wrinkled and covered with deep plum-coloured blotches and rings, which shine out very vividly on exposure to heat, and, as the disease goes on, patches of herpes simplex and herpes circinatus, and innumerable miliary vesicles show themselves, and decline with desquamation of the whole epidermis. The most prominent feature is the early appearance of small patches of herpetic vesicles on the lips, palate, and fauces, and in the vagina in the female and sometimes within the prepuce of the male. The mucous membrane of these parts presents a salmon-coloured surface with little ulcerated pits, and around the teeth the gum is swollen and ulcerated, and shows several streaks of a livid hue. The lacteal secretion is almost totally suspended, but returns again to its former quantity during convalescence. The urine is scanty—stinking like the stools—and of a greenish-brown colour, and during the convalescence contains the merest trace of albumen, with some pus and blood corpuscles. The countenance is expressive of anxiety throughout the whole course of the disease, yet in the greater number of cases no urgent pain is complained of. The tongue is usually swollen and corrugated at the edges, anæmic and with brown or orange-coloured fur in the centre. The pulse small, frequent, and from 100 to 130. In several instances there has been hæmorrhage from the lungs in conjunction with that from the bowels, and yet there has been no bronchial or pneumonic affection.(a) I have seen 175 cases of this singular disease and may thus classify them:—From inoculation, 5; from actual contagion, 5; taken ill after living on the heads of diseased oxen, no other cause being assigned, 4 (the eruption of vesicles and efflorescence very copious); from infection 161, in this class are those who resided a distance varying from 20 to 1700 yards from where cattle died and were buried. Many of these patients speak of the irritating nature of the gaseous effluvia with horror.

Were I to detail cases, I fear time and space would be wanting, and as the same general features are perceived in all with few exceptions—viz., some in which the attack was ushered in by epileptic convulsions, I will briefly detail the case of a family in which I had a fatal case and was enabled to make an autopsy. This little community consisted of a small farmer, his wife just out of childbed, two sons, two daughters, and an infant sixteen days old. One son and one daughter were convalescent from the disease at the time of their mother's delivery; she had an easy labour, and with her infant went on well until she joined her family ten days after, when she was seized with the train of symptoms already detailed. On the following day the infant was unwell in the same manner and improved for the space of two days, when respiration appeared difficult and scarcely any warmth could be kept up on the surface; the child from a condition of rapid emaciation became œdematous a few hours before death on the fifth day. My friend, Mr. Johnson, of Burgh, who assisted me at the post-mortem, saw similar cases in his district a few days before, and told me he thought them incompatible with any known description of disease in man. I recommended him to examine the vagina where practicable, in order to assure himself of the identity of his cases with mine, and with a view to necessary treatment of the little ulcerated pits often found.

*Post-mortem, Thirty-six Hours after Death.*—Face livid in irregular patches; cheeks hard and globular, as if stuffed with stone; an irregular, oval, plum-coloured patch over the sternal cuticle; lips and gums chalky white colour. On opening the thorax the heart was found very pale in colour, but full of dark, semi-coagulated blood. The pericardium full of fluid. The lungs healthy, but on tracing the bronchi to the trachea, a little above the bifurcation were a few little vesicles, a few minute shreds of lymph, and a few pus globules; the mucous membrane above this point was in its normal state. The liver presented several patches of ecchymosis beneath the serous covering, which gave it a spotted appearance. Stomach and bowels healthy. Kidneys rather congested.

As I have had no fatal case in which the bowel has been the chief seat of disease, I can only infer that such are more under the control of remedies, and that the hæmorrhage is rather the result of an asthenic condition of the blood-vessels than of active ulceration of the mucous membrane. A short time back I examined the carcase of a young Rinderpest beast, and found a condition in every respect similar, except that the lungs were emphysematous, which was not the case in the infant. There is a want of colour in the blood-discs, and their shape is altered: instead of a plain edge, they have a corrugated margin, which gives an idea of having been altered by some chemical action.

The period of maturation, varying from seven to twenty-one days, is followed by a tedious convalescence, during which the patient suffers more or less acutely from arthritic pains; the limbs are attenuated and trembling, and the sight is impaired. There is extreme proneness to relapse—the slightest error in diet, the least exposure to cold or fatigue, or too much conversation, so exhausts the patient and sets up a new source of irritation, that recovery is further protracted. The favourable symptoms are regular and uniform temperature of the surface, disappearance of the cutaneous congestion and appearance of herpetic and miliary vesicles on various parts of the trunk and upper limbs; the vesicles on the mucous membrane of the mouth and vagina now decline, small reddish scabs being detached, and little vermilion-coloured pits remain in their stead, which after a while disappear.

On the other hand, the prognosis is unfavourable when the heat of the body is irregular, when the temperature along the spine is so reduced as to become a constant source of anxiety to the patient, the cutaneous congestion is more diffused, and puts on the appearance of the blue skin of cholera; the vesicles in the mouth and vagina coalesce and form ulcers; hæmorrhage from the rectum occurs, and the urine is so small in quantity as four or six ounces in twenty-four hours of greenish-brown colour, very turbid, and containing some purulent matter; the pulse is feeble and intermittent; the patient is supine; there is continual twitching of the fingers; the tongue and mouth are cold; with all this the patient is conscious of the serious condition, but seems calm and perfectly resigned.

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(a) For some further details of cases *vide* letter from Dr. W. Cholmeley, *Medical Times and Gazette*, February 17, 1866, p. 184.

I have met with several instances in which the trachea has been implicated to an alarming extent, and a few in which pulmonary hæmorrhage has occurred, but without any marked symptoms of bronchitic or pneumonic inflammation.

To sum up. All these lesions of various organs have one common origin in the effect of an ammoniacal *materies morbi* acting on the components of the blood, and causing elementary separation or putrefaction, rendering the should-be vital fluid non-nutrient—a non-conductor of heat, and unable to stimulate the vessels containing it—hence, having lost its natural elasticity, it exudes through the capillaries. The consequence of this is apparent; the great nervous centres become oppressed; first, the ganglionic, and with it implication of the pneumogastric nerve; and, secondly, the brain and spinal cord.

With regard to treatment. Sulphate of magnesia and gallic acid, with alterative doses of hyd. c. cretâ occasionally, and chlorodyne to relieve pain and procure sleep are what, in the early part of the epidemic, I had recourse to; but since March I have used with marked benefit a preparation which has suggested itself to me as being applicable to the treatment of fever—viz, solution of sulphochloride of lime and magnesia. Under its use I find the tongue and fauces clean rapidly, and the skin to become moist and warm, whilst the secretions and excretions lose their putrescent condition. On a future occasion I will publish the formula for this remedy, and give some explanation of its action, of which I can only speak with feelings of great satisfaction.

Wainfleet, Lincolnshire.

# REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

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## KING'S COLLEGE HOSPITAL.

### CASES OF ACUTE ORCHITIS TREATED BY PUNCTURE OF THE TESTICLE AND STRAPPING—REMARKS.

(Under the care of Mr. SPENCER WATSON.)

THE following cases occurred in the out-patient practice of King's College Hospital, and from the difficulties of tracing the ultimate results of such cases, are necessarily imperfect in some respects. They may, however, serve to show that the experience already arrived at is not unfavourable to the plan of treatment by puncturing and strapping immediately—so far, at any rate, as the relief of the acute symptoms is concerned.

Mr. Watson remarked that the *rationale* of the treatment is so obvious that it is not worth while offering any explanation, but there is an analogous instance of similar treatment in another organ, to which he would especially wish to draw attention. The relief of pain and tension of the eyeball by puncture, or iridectomy, is a striking analogy with the relief experienced when the inflamed testicle is punctured. It is singular that the eye and the testicle are the only two organs in the body in which such a mechanical method could be adopted, or would be likely to be successful. Each is contained in a firm fibrous globular covering of which the only openings are those which admit the vessels and nerves: but while the anatomical position and relations of the eyeball prevent the relief of tension being followed up by mechanical compression, the testicle, being easily isolable, will allow of this being done, and a mere puncture is a means of temporary relief only in the one case as in the other; while the removal of a portion of iris from the eye, and mechanical compression in the case of the testicle, are necessary to make such relief permanent, by preventing a recurrence of those conditions which have produced the most distressing symptoms and destructive processes in each.

Cases still under treatment are not reported, but it is worthy of observation that of about 20 cases in which I have tried this plan in none have any bad results followed, so far as I have been able to trace them. It has been asked whether abscess did not sometimes occur; whether the testicle was not permanently injured; whether the swelling did not recur? To these questions I can answer that I have never seen abscess after an incision, though I should not be at all surprised if in a scrofulous patient such a result were to follow. As to the testicle being permanently injured, I have certainly heard of one instance (not in my own practice) in which atrophy occurred. But this has been known to occur frequently under any plan of treatment, and it would not be a strong argument against incision unless it could be proved to be a frequent result, or to occur in simple uncomplicated cases, or such as were not of a severe character. The mere fact of a testicle having wasted after it had been punctured for acute orchitis would perhaps only prove that the case was of such a severe kind that any other treatment would have been followed by the same result, or that no treatment would have been of any avail to prevent it.

In answer to the third question, whether the swelling did not recur? I find that in some such it has done so after a puncture only, and it is on this account that I have taken the precaution of strapping the testicle with adhesive plaster in order to prevent this. I may also observe that strapping alone has in one or two cases succeeded when the patient has objected to the use of the knife, but that where there has been effusion into the tunica vaginalis I should not expect this to succeed without puncture.

It is well to point out that epididymitis is a very frequent accompaniment of orchitis, or swelling of the body of the testicle, but that effusion into the tunica vaginalis seems equally frequent, although this fact seems to have been overlooked or very slightly noticed by authors; and that it is to the latter class more especially that this plan of treatment is applicable, and not to cases in which the epididymis is alone or principally affected.

*Case* 1.—*Acute Orchitis Treated by Puncture.*

James A., aged 30 years, applied to King's College Hospital on December 23, 1864, with acute orchitis. Mr. Watson punctured the tunica vaginalis with a grooved needle, letting off three drachms or half an ounce of yellow serum. The body of the testicle was not punctured. The patient expressed himself as immediately and decidedly relieved. The pain previously had been very severe. He was ordered a powder containing ten grains of Dover's powder and gr. $\frac{1}{12}$ of tartar emetic, to be taken every night at bedtime, and a mixture with twenty drops of tincture of henbane in each dose to be taken three times daily.

January 6.—The testicle is much smaller, and the pain has quite left him.

16th.—The patient complains of a great deal of pain. The cord is swollen and the back part of the testicle (probably the epididymis). Two leeches to be applied to the testicle.

27th.—The pain still continues. Strapping to be applied, and five grains of iodide of potassium three times a day.

30th.—Has been relieved since the strapping was applied. Strapping to be put on again.

*Observations.*—Here the case terminates, and it appears incomplete; it serves, however, to show the efficacy of a mere puncture for the relief of the acute symptoms, and at the same time the necessity of further treatment in conjunction with this plan.

Notes were taken of this case by Messrs. Renwick and Hart, the dressers of the patient.

*Case* 2.—*Acute Orchitis Treated by Puncture.*

A man of 25 years of age applied to Mr. Watson on December 23, 1864, with acute orchitis from an injury to the testicle. Mr. Watson punctured the tunica vaginalis with a grooved needle, with immediate relief of the pain. Ten grains of Dover's powder, with two of calomel, were ordered to be taken at bedtime, and a mixture containing tincture of henbane in camphor water to be taken three times daily.

December 28.—He was compelled to return to the Hospital on the day following the puncture on account of the return of the pain. There is now distinct fluctuation over the whole surface of the testicle, and as much pain and inflammation as before.

*Observations.*—This case seems to corroborate the conclusions drawn from the preceding case.

*Case* 3.—*Acute Orchitis Treated by Puncture.*

G. B., aged 19 years, applied on January 9, 1865, with an enlarged testicle, which he had first noticed four days before. Mr. Watson punctured the testicle with a Syme's knife, and ordered him a powder containing 10 grs. of Dover's powder and $\frac{1}{12}$ gr. of tartar emetic each night at bed time.

January 16.—The patient passed a bad night after the puncture, but felt greatly relieved the next day. The pain and swelling have nearly disappeared, and he has returned to his work as a timber sawyer; the testicle is still tender when touched.

23rd.—The patient is now almost perfectly recovered. He complains of no pain whatever, and has been at work for the last week without feeling any inconvenience from doing so.

The notes of this case were taken by Mr. Renwick, the dresser of the patient.

*Case 4.—Acute Orchitis treated by Puncture and Strapping.*

J. H., aged 20 years, applied at King's College Hospital on March 13 with gonorrhœa and acute orchitis. On March 21 the testicle was punctured, and strapped immediately afterwards.

April 17.—The strapping has been applied regularly once a week, and the testicle has gradually diminished in size. It is now nearly natural in size and shape.

*Case 5.—Acute Orchitis treated by Puncture and Strapping.*

J. H., aged 20 years, had contracted gonorrhœa in December, 1864, for which he had been treated without injections up to the early part of May, 1865.

On May 8, 1865, he presented himself at King's College Hospital with acute inflammation of his left testicle, which came on suddenly after drinking very freely the day before.

Mr. Watson punctured the testicle, and had it strapped immediately.

May 10.—The strapping again applied. The patient complained of severe pain, but said that he was able to sleep the night before. One grain of opium to be taken each night.

12th.—The testicle having become smaller, the strapping has become loose. There is no pain now. Fresh strapping to be applied.

17th.—The testicle is very little larger than natural, and is softer, and free from pain and tenderness.

*Observations.*—This case is, perhaps, as favourable as any that have occurred of this kind. The result was rapidly obtained, and very complete.

The notes were taken by Mr. Musgrave.

*Case 6.—Acute Orchitis treated by Puncture and Strapping.*

Robert Charles R., aged 29 years, was admitted as an outpatient at King's College Hospital, on Jan. 11, 1865, with acute inflammation of one of his testicles. The swelling had existed for about a week. Mr. Watson punctured the testicle and let out about one drachm of clear serum and about half an ounce of blood. The testicle was then strapped, and 1 grain of opium prescribed as a night-dose.

January 14.—The pain is so far relieved that he can sleep at night. There is an oozing of serum from the wound. Strapping again applied.

19th.—The testicle to be strapped again.

23rd.—Considers himself cured, as there is no tenderness nor pain in the part, and a hard lump of the size of a pea only can be felt in the epididymis.

April 24th, 1866.—Has had no trouble from the testicle since the last attendance, but within the last few days swelling of the same testicle has come on. There is no pain nor tenderness, however, and the swelling is of a soft kind and not associated with effusion into the tunica vaginalis. Hardness in the region of the epididymis, as if from old deposit, can still be felt. The site of the puncture is marked by a very faint white cicatrix in the skin of the scrotum. A mild saline mixture prescribed.

26th.—So much relieved that he is to discontinue further attendance.

*Case 7.—From Notes by Mr. C. B. Allen, Dresser of the Patient.*

C. B., aged 23, admitted as an out-patient on November 10, 1865, with gonorrhœal discharge, which was never very abundant, and generally thin. The discharge ceased about a week before admission; the swelling of the testicle commenced three days after. The swelling is not very painful on pressure, and is not of a uniform character, there being a hardness, partly in front and partly below, near the median line. Mr. Watson proposed that he should have the testicle punctured, but the patient objecting, it was strapped, and the following prescription given:—Liq. ammon. acet. ʒj.; tr. opii. ♏x.; mist. camph. ℥ss.; t. d. s.

November 21.—The swelling is not reduced, and there is now distinct fluctuation in the tunica vaginalis. Mr. Watson punctured the testicle; a quantity of clear serum escaped, and then a little blood. Strapping again applied, and the same medicine and one grain of opium at bedtime prescribed.

24th.—The patient states that immediately after the puncture he felt relieved, and that he was able to walk home to Pimlico without inconvenience. He has been easier ever since.

28th.—The swelling is about the same in size, but the pain has disappeared.

December 5.—No pain nor tenderness; no hardness of the epididymis; the testicle is very slightly larger than the other. The site of the puncture is marked by a little fistulous opening, from which moisture exudes.

*Observations.*—The strapping and other remedies at first applied gave no relief, while the relief afforded by puncture was immediate and permanent. The existence of a fistulous opening may be regarded as an unfortunate sequel to the case; but, though no notes were taken subsequently, it is almost certain that the opening closed rapidly, as the patient continued in attendance, and did not complain of any inconvenience, nor have any other cases happened to Mr. Watson with such a complication. A patient with orchitis, in attendance about the same time (*i.e.*, from November 21 to December 27) was treated, without puncturing, by means of strapping and the same mixture as was prescribed here, and the result was equally satisfactory, but not marked by the immediate relief which was observed in the case related. In the case of C. B. there was effusion of serum into the tunica vaginalis, and the immediate relief following the puncture was probably due to the escape of this serum; in the other case there was no effusion into the tunica vaginalis, and the principal swelling was in the epididymis. Hence the difference in the plan of treatment and the equally good result in each. In other cases, the notes of which are not complete, the effect of a puncture has been less satisfactory when no serum has escaped, and when the swelling has been principally or entirely confined to the epididymis; and in all in which there has been effusion into the tunica vaginalis, the relief from puncture has been immediate, and in most of them, if not in all, the result has been successful.

*Case 8.*

H. M., aged 23, admitted with orchitis of the right side January 7, 1865. The swelling was accompanied with great pain, and came on in the course of gonorrhœa; it had existed three or four days before admission.

January 7. Puncture and strapping; pil opii comp. gr. v. h. s. o. every night.

14th. Strapping again applied. The swelling is much reduced; He has little or no pain.

16th. The testicle decreased in size; very little pain. Is able to sleep well at night.

19th. He has now both testicles swollen; the left being more painful than the right. The gonorrhœal discharge continues. Henbane and acetate of ammonia prescribed, and the testicles to be supported.

23rd. There is scarcely any induration in the right testicle (the one that was punctured), the left is still enlarged and painful.

*Observations.*—The case is incomplete, but serves to show that the treatment by puncture and strapping was successful to some extent. The attack of orchitis on the left side was, perhaps, due to the continued use of an injection during the course of treatment.

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**Health of Convicts.**—In consequence of a representation made to the authorities by the coroner for Chatham, at the request of the jury who lately investigated the circumstances attending the death of one of the convicts at the St. Mary's Convict Prison, on which occasion the jury found a special verdict that the death of the convict was superinduced by prolonged exposure on the public works at St. Mary's Island, and insufficiency of food, and at the same time drew attention to the recent mortality among the convicts from disease of the lungs, the Government has appointed a Commission consisting of Deputy-Inspector-General J. A. Fraser, M.D., principal Medical officer at Chatham garrison, Dr. J. Balfour Cockburn, M.D., Royal Engineers, and the Governor of Milbank Convict Prison, to carry out the necessary investigation relating to this and the other deaths of convicts which have recently occurred at the Chatham Prison.

**The** Odontological Society held its ordinary monthly meeting on the 7th inst., at 32, Soho-square, the President in the chair. A paper was read by Mr. Ibbetson on the "Fossil Teeth of Fishes in the Paleozoic and Lower Members of the Mezozoic Rocks." Mr. Fox and other members described cases of retarded development of the teeth of unusual characters.

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# Medical Times and Gazette.

SATURDAY, MAY 19.

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## THE MEDICAL COUNCIL.

Whilst we are going to press the Parliament of the Medical Profession is beginning a new Session, and the speech from the chair, which we publish in another column, gives a clear and business-like account of the matters which will come under consideration. The subjects of general and Professional education will doubtless be carefully reviewed, and an endeavour be made to keep them up, so far as is possible, without running the risk of diminishing the number of young men able to enter the Profession, and so throwing the public into the hands of unqualified Practitioners. Regarding the visitation of examinations, the moral effect has been so good that we believe the majority of the Council will be satisfied without any publication of the details at present. The "British Pharmacopœia" is doing as well as can be expected of any book that is the product of joint authorship. A new Medical Bill has been drafted, after many delays arising from the change of Ministry consequent on Lord Palmerston's death, and the preoccupation of Government with the Cattle Plague and Reform Bill.

A plan will be proposed for deputing an adequate amount of power to a Committee of Delegates from the various Branches of the Council, whose meetings may be more frequent and less expensive than those of the whole Council. We believe we are justified in saying that, whilst the Council are desirous of protecting to the utmost the rights of the regularly qualified Medical Practitioner, they are exceedingly unwilling to draw upon themselves the suspicion of intolerance or exclusiveness as regards unqualified Practitioners, provided they do not sail under false colours, and assume titles they have no right to. It is considered extremely probable also that there will be no completed act of legislation during this Session of Parliament. Never mind. The moral effect of the Council is greater, and will increase yearly. The general education of candidates will be raised; courts of examiners will wake up; our Profession will be stocked with gentlemanly and well-informed recruits; and legislation for quacks and outsiders will be less and less necessary.

It seems from the speech of Dr. Acland, that beginning with a series of experiments on the value of Medicines, and their right to be included in the Pharmacopœia, the Council may in time become an authority on scientific matters, with functions such as those of an Academy of Medicine. Great ends have followed less beginnings than these.

## DR. BENCE JONES'S LECTURES.

Professor Huxley, in his address a few days ago to the students of St. Mary's Hospital Medical School, alluded to the wicked and libellous old story in which it is said that Nature and Disease are as two men fighting, and that the Doctor is a man who comes in the dark with a big stick and hits hard, and sometimes hits the disease, and sometimes Nature. The Professor, however, bid us look forward to the time when the Physician should attain as clear a mental vision of the condition of a diseased part, and the means of relieving it, as the Surgeon has in the plainest kind of Surgery. What the Physician wants is *more light*, and that light must come from the cultivation and refinement of those sciences which furnish us with the data for deduction—the sciences of anatomy, physiology, chemistry, physics, and so forth; and the much-needed and longed-for light will come, slowly perhaps, and perhaps by unequal and intermittent increments, but come it most assuredly will while there are so many earnest, honest seekers after it as we have at the present day—men working towards the light steadfastly, laboriously. Our last week's number contained the conclusion of a remarkable course of lectures by one of the most eminent of these light-seeking students. Dr. Bence Jones has attained a very prominent position as the exponent of what we may call chemical pathology. Succeeding to the mantle of Prout, but with an immensely enlarged knowledge of organic chemistry; the disciple of, and working in the same direction and spirit with Liebig, and being the chief interpreter in this country of that eminent man's doctrines, he has ceaselessly laboured at the application of chemistry and physics to the explanation and to the repair of morbid conditions of the human body. The course of lectures which we have just published gives his latest views on the subject. They are called "Lectures on Chemical and Mechanical Diseases and their Relationship," and they are founded on the modern doctrines of the conservation and correlation of force. The key-note of the whole course will be found in the "Preface," contained in the first number of this journal in 1865, in which Dr. Bence Jones remarks:—"I shall endeavour to show, by a few striking examples, that the theory of the conservation of force opens a vast field of experimental inquiry, not only as regards the origin and connexion of the actions which constitute disease, but also as regards the actions of the remedies by which those diseases are modified or removed." Again, he says "Wherever it is possible, I shall point out how excess or deficiency of molecular action produces mechanical disease, and in my last lecture I shall rapidly prove that the converse relationship exists; for massive diseases or injuries give rise to secondary chemical diseases—that is, to excess or deficiency, or altered molecular actions, which again react on the original mechanical wrong, whereby the secondary chemical actions are exalted or depressed. I am far from thinking that all the actions that take place in the body are directly chemical or mechanical. He would be but a poor Physician who overlooked the influence of the nervous system either in the origin, the progress, or the treatment of every disease. The progress of animal electricity will probably make clear the connexion between nervous, electric, and chemical force. Then the large class of diseases which arise from the disturbances in the regulators of the chemical and mechanical actions in the body will be as clear as the errors in the chemical and mechanical actions which form the subject of this course of lectures. We are just ceasing to regard the nervous force as the origin of all the power in the body. Instead of making it a creator of force, we are beginning to regard it as the liberator and restrainer of the force in the body—in other words, as the regulator, through the blood vessels, of the extent and degree of oxidation and nutrition that occurs in the human machine."

These quotations will suffice to remind our readers of how much thought and originality these lectures contain, and to justify us in congratulating ourselves on having been the means of giving them publicity. That Dr. Bence Jones's views should in their entirety meet with even a general acceptance is not to be expected, or even, as yet, to be desired. It will be a bad day when stagnant, slavish acquiescence takes the place of that sharp criticism, of that desire to supersede the teachings of authority, however eminent, by newer and newer doctrines which these lectures have already called forth. These lectures are eminently suggestive, and worthy of careful and thoughtful study, and will take their place in the history of Medical literature as shewing how far the perverted processes of life are capable of being explained on chemical and physical principles.

## THE REPORT OF THE CATTLE PLAGUE COMMISSIONERS.

The third Report of the Cattle Plague Commissioners contains a large amount of really valuable information. We have given our readers from time to time a fair share of statistical matter, and are now glad of the opportunity of presenting them with some information in reference to the more Medical and scientific aspect of Rinderpest, and the researches of the several gentlemen who were requested by the Commissioners to investigate cattle plague from special points of view. The names of the gentlemen who undertook these inquiries, and the subjects of their investigations, are—Nature, propagation, progress, and symptoms of the disease, J. B. Sanderson, M.D.; general pathology of the disease, and its relation to human diseases, C. Murchison, M.D.; chemical pathology of the disease, W. Marcet, M.D., F.R.S.; morbid anatomy of the disease, J. S. Bristowe, M.D.; microscopical researches on the disease, L. S. Beale, M.D., F.R.S.; treatment, George Varnell, M.R.C.V.S., and William Pritchard, M.R.C.V.S.; disinfection, R. Angus Smith, Ph.D., F.R.S., and W. Crookes, F.R.S.

We are told that the preparation of the third Report has devolved chiefly upon the Medical members of the Commission, who are therefore responsible for the soundness of the physiological and chemical conclusions set forth.

The following are the most important points to be noticed in the Report. In the following abstract it will be understood that we give the Commissioners' view, and that inverted commas mark quotations from their Report:—

1. *Symptoms and Course of the Disease.*—A rise of temperature precedes all other symptoms. "Within a period ranging from 36 to 48 hours after an animal has taken the cattle plague by inoculation the natural temperature rises from 102° Fah., or a little above, to 104° or even to 105½°. This occurs at a time when the animal appears to be in no way ill. It follows, therefore, that the length of the incubative period—that is, of the time when the disease is hatching in the body, is less than was supposed. The disease can be detected at least two days earlier than has been hitherto believed, and the duration assigned to the incubative period must be reduced by that time."

Two days after the first rise of temperature an eruption (epithelial desquamation) is observed about the buccal mucous membrane, and a congestive state of the vagina. These three conditions are said to be sufficient to diagnose the existence of the disease. On the fourth day "the animal for the first time shows marked symptoms of illness, and this period, which may be 110 hours after the real commencement, is usually considered by superficial observers as the beginning of the disease. After the fourth day is over the constitution is thoroughly invaded. Then ensue the urgent symptoms—the drooping head, the hanging ears, the distressed look, the failing pulse, the oppressed breathing, the discharge from the eyes, nose, and mouth, the eruption of the skin, the fœtid breath, and the other well-known signs of the disease. During the sixth day there occurs a great diminution of the contractile force of the heart and voluntary muscles, the pulse becomes very feeble and thready, the respiratory movements are modified, and the animal sometimes shows such weakness in the limbs that it has even been thought that some special paralytic affection of the spinal nerves must exist. The temperature now rapidly falls, and signs of a great diminution in the normal chemical changes in the body appear. Death usually occurs on the following or seventh day from the first perceptible elevation of temperature." Such is the progress of a typical case of Rinderpest according to the Report.

"The causes leading to the symptoms, or, in other words, the reasons why these alterations from health occur," say the Commissioners, "may be thus stated:—

"Coincident with the first elevation of temperature, and, of course, long before there is the least outward appearance of ill-health, the blood of an animal which has taken the cattle plague contains an agent which can produce the plague in another animal. In other words, the earliest fact that can be made out after infection is that the blood contains the poison of the disease, so that serum obtained from it will give the disease by inoculation. This fact, ascertained by Dr. Sanderson, is the most important pathological discovery yet made in cattle plague. It is pregnant with consequences in Medical doctrine, for though the existence of a similar fact has been long suspected in several human diseases, it has never been proved in any. So material, indeed, is it that we must dwell on it for a moment. The poison contained in a minute portion of the mucous discharge from the eyes and mouth of an animal ill with cattle plague, if placed in the blood of a healthy animal, increases so fast that in less than 48 hours, perhaps in a far shorter time, the whole mass of blood, weighing many pounds, is infected, and every small particle of that blood contains enough poison to give the disease to another animal."

In reference to the local congestions that form so prominent a feature, it is stated that "a great increase of granular matter is found to take place both within and outside of the vessels of the affected parts. The capillary vessels themselves are greatly enlarged, and the spaces between them lessened or even obliterated. At the same time a considerable nutritive alteration goes on in the mucous membrane and skin, which leads to very rapid and imperfect growth of many of the cellular elements, and this is followed by a rapid disintegration and detachment in the form of discharges."

The degree of congestion varies; it may be very superficial, and then the mucous surface may recover itself; all observers lay great stress upon the failure of the nutritive process from the loss of the epithelial lining of the digestive tract, but also it appears that "when, as sometimes happens, the mucous membrane most affected by the congestion is that of the lungs, the phenomena are not less severe; indeed, the disease is sometimes even more quickly fatal. A slight cough is soon followed by accelerated breathing, which rapidly increases, and not unfrequently the difficulty becomes so great that some of the air vesicles are broken, and the air passes into the cellular tissue between the lobules, and from this it reaches even the subcutaneous textures of the back. This is believed by Dr. Bristowe and Dr. Sanderson to be the cause of the emphysema which they fully describe."

The gravity of the disease, then, appears to be not in proportion to the degree of pyrexia, but in direct proportion to the extent of change in the mucous tracts. The true cause of this congestive condition, the Commissioners say, is still unascertained.

"The explanation which Dr. Beale gives is, that the poison itself consists of extremely minute particles of living matter, which multiply in the blood, and cause local capillary obstruction which passes on into complete stagnation. In consequence of the impeded circulation, an increased proportion of soluble nutrient matter permeates the vascular walls, and gains access to the nuclei of the vessels and adjacent tissues, which increase much in size. This change is associated with, and causes, the rise of temperature which occurs at this period of the disease.

"If regarded from a chemical point of view, it appears probable that this immediate cause resides in an increased zymotic action in the blood and in the textures, whence increased temperature, accelerated circulation, more rapid growth, congestion, obstruction, and disintegration ensue."

2. *Nature of the Disease.*—Although the cause of the disease

is contained in the discharges, the blood, and probably the textures of the diseased animal, the poison of Rinderpest cannot be separated or demonstrated either microscopically or chemically.

"Dr. Beale has examined portions of infected blood textures and mucous discharges with the highest magnifying powers that exist—namely, $\frac{1}{50}$th of an inch focal adjustment. This magnifies 2800 diameters—or, to express the magnifying power by some examples, an inch would appear to extend over 111 yards, and a child three feet tall would look as high as Mont Blanc. With such power, particles of even $\frac{1}{100000}$th of an inch in diameter having any distinct character would not be passed over. But he has found no definitely formed substance that can certainly be said to be the cause of the cattle plague. He finds a great increase of granular matter, but no new appearance decidedly characteristic of the disease. Possibly this granular matter may be the poison; possibly, again, it may exist in particles of definite form, and of a size still smaller than $\frac{1}{100000}$th of an inch, but which might be perceived if it were possible to construct instruments of still higher magnifying powers; more probably it is matter of a kind which is, and will always be, undiscoverable by the microscope. The peculiar entozoon-like bodies (Rainey's corpuscles) which are found so frequently in the muscles of animals dead with cattle plague, are not peculiar to this disease, and may be absent in it. They cannot, therefore, be the poison.

"As the microscope fails us, we turn to chemistry to detect the substance, but chemistry has not hitherto separated the poison, and no chemical test as yet exists by which it can be recognised. An examination of the air vitiated by the disease is described in the report of Dr. Angus Smith. Chemistry has as yet found in cattle plague no complex albuminoid matter in a state of rapid chemical change capable of communicating its own action to the albumen of the serum of the blood and of the textures of cattle. Hence it is only by its effects on the living body that the poison can be identified."

3. *Origin and Propagation.*—The Commissioners are entirely of opinion that the Rinderpest is an importation, and that it does not arise spontaneously. They have found no evidence of a spontaneous origin in England.

"It ought to be a matter of no surprise that we have been unable to indicate the precise channel by which the poison came into the market. From the universal ignorance of the signs of the disease at that time, and the probable slaughter of the affected animal soon after the market, evidence which might have led to the detection of it at the time would pass unnoticed and would soon be lost altogether. But, as we have since traced several introductions from the Continent, there can be little doubt that it was introduced in the same way in the first instance, and was overlooked. Moreover, in most places in England where the disease has broken out its introduction can be traced. It follows the lines of cattle traffic, and does not arise spontaneously. In the cases where no explanation can be obtained, we consider it more likely that the evidence is insufficient than that the rule proved by a multiplicity of instances should have such exceptions. In confirmation of this, we find the Austrian and Prussian veterinary Surgeons declare that, whatever may be the origin of the disease in other countries, it is always brought by diseased cattle to them.

"The way in which the disease broke out and was destroyed in the Jardin d'Acclimatation in Paris, and over and over again in Aberdeenshire, its absence from Ireland, the manner in which it has spread in England and Scotland during the summer, autumn, and winter, all these facts are conclusive evidence against the assumption of an occult atmospheric condition and in favour of its spread by multiplication in the bodies of living animals."

The poison of Rinderpest may be carried through the air a varying distance. The average is not easily defined. In an open country with a rapidly moving air it is soon oxidised and diluted so as to be powerless. The influence of soil and meteorological conditions is unimportant. Over-crowding and bad sanitary regulations act by preventing dilution of the poison and rendering animals less liable to withstand disease. It does not appear that the poison may be conveyed through the medium of drinking water, though lead water increases the fatality of the disease. The true mode of preventing the spread of cattle plague is to treat it as an "entirely contagious disease."

4. *Disinfection.*—The experiments on this point seem to have been conducted on a very large scale.

"On examining these different agents it is soon found that the number of those which can be employed with advantage is limited.

"Since the poison is constantly given off in discharges flowing from diseased surfaces, and since it may be suspended like impalpable dust in the air, it becomes necessary that any disinfectant should act continuously both on the discharges and on the air. No disinfectant can be efficacious if its action is intermittent, or if it does not act on both sources of danger.

"It is evident, indeed, that the poison ought to be destroyed at the very moment of evolution or discharge. Every minute during which it remains active increases the danger. The disinfectant must, therefore, not only be both fixed and volatile, but so cheap and easily used as to be continually in action, and it must, of course, be innocuous to cattle and men."

Out of a large number of substances, *chlorine* and the tar acids "have the advantage of being both liquid and aëriform; they can be at once added to discharges, and constantly diffused in the air." The general results, too, appear to be very encouraging.

"It is of course most desirable that no false hopes should be raised, for we have seen but too many instances in which a rude disappointment has utterly crushed what seemed reasonable expectations. But no one can peruse the account of what has been done without seeing that a fair case has been made out for a large and systematic trial of these measures. They must, however, be fairly tried; they must be used with perseverance and energy; not grudgingly or insufficiently, as has sometimes been the case, but with the determination to keep the disinfectant in presence of the poison everywhere and constantly, so that every particle of virus may be, without fail, subjected to its action."

The general use of carbolic acid in *all* cowsheds, for cleanliness' sake, is recommended.

5. *Inoculation and Vaccination.*—There is no reason to believe the Rinderpest is in any way a modified form of small-pox. "All attempts to weaken the power of the cattle plague poison or to find another agent which might make the system of the ox insusceptible to it, have entirely failed."

6. *Treatment.*—It would appear that the percentage of recoveries remains nearly the same under the most diverse plans and kinds of treatment. The influence of diet appears, however, to be important.

"But, although, as respects the value of drugs, the evidence is merely negative, this is not the case as to diet. The information obtained by the Edinburgh Cattle Plague Committee shows that by judicious feeding with soft mashes of digestible food, the proportion of recoveries has been considerably and, in some places, very largely increased. This is consistent with the pathology of the disease. In fact, out of 503 cases reported, 191 or nearly 38 per cent. recovered, and 312 or about 62 per cent. died. The result appears still more striking when the beasts are divided into two groups, according as they belonged to large or small stocks."

The sulphites have been used, but not on a sufficiently large scale to warrant us in drawing any conclusion in the matter. "No drug has been found which can be recommended as either an 'antidote' or a 'palliative.'" Inhalation of oxygen seemed to relieve the breathing; chlorine inhaled was mischievous; oxygen water as drink, useless.

7. *Future Precautions.*—After noticing the operation of stamping-out measures, the Report says:—

"With a view to the future, it is essential that the re-introduction of the disease from abroad be guarded against. In our second Report we recommended to your Majesty that foreign cattle should be slaughtered at the port of disembarkation, or, if sold for store purposes, should be placed in quarantine. We believe that the whole system of cattle transport should be revised; that good landing-places, lairs, and sheds, in which the cattle may be properly housed, tended, and inspected, should at once be constructed at the ports where cattle arrive; and that the trade in foreign cattle, which has grown of late years to such vast proportions, should be subjected to proper regulations."

The Report ends with the expression of a very strong opinion as to the necessity for some reform in reference to slaughter-houses in large towns. The Commissioners believe—

> "That it is now the time to carry out fully and permanently the changes required in the mode in which meat is supplied to our large towns. Considerable alterations have taken place already, and these have not been attended with the inconvenience which was anticipated. We would gladly see an inquiry instituted without delay, to determine whether slaughter-houses might not be transferred from all our large towns to suburban points on the lines of railway. A few large slaughter-houses, properly arranged on the best principles, and provided with pastures and sheds where the cattle could rest, would take the place of the innumerable ill-kept and ill-tended places which exist in all large towns. The change would eventually benefit alike the customer and the butcher, while the saving of pain and torture to the animals themselves would be immeasurable. The Cattle Plague has been a great calamity, but it has put a stop, for a time at least, to much that was cruel and pernicious in operation: we trust that this wholesome effect will be lasting, and that it will pave the way for more extensive reforms."

## THE WEEK.

### CHARING-CROSS HOSPITAL.

We observe that Dr. Tilbury Fox is candidate for the vacant post of Assistant-Physician to Charing-cross Hospital. His Professional claims to such a position are probably higher and more varied than it has fallen to the lot of most aspirants to possess. Dr. Fox is known to have taken the most distinguished position in honours in Medicine in the University of London, and few candidates for this junior office can show so much work well done, so many distinctions hardly won in the fields of intellectual contest. Of course, all of Dr. Fox's work is not of equal value, but we may mention especially as noteworthy contributions to Medical science, his work on "Parasitic Diseases of the Skin," containing the results of much original microscopic research, and which has done much to identify the various kinds of fungi and to define the part which they take in the production of disease; his philosophic essay in the *Brit. and For. Med. Chir. Rev.* towards the elucidation of the law of elementary lesions, suggested by the writings of Willan and Bateman; his studies of cholera and leprosy in the East, and his history of the puerperal fever epidemics of the General Lying-in-Hospital, recorded in the *Obstetrical Transactions*. We well remember that when Dr. Fox brought forward some observations on phlegmasia dolens at the Obstetrical Society, five or six years ago, they were very favourably received. Dr. Fox's antecedents lead us to expect a breadth of view which is much to be desired at the present epoch of English Medicine. We are too apt to take as our types the diseases met with in the one ward of the Hospital where we have studied; we want a more liberal and extended survey. Only one other candidate is mentioned — a young Physician of promise, doubtless, but who has yet to win his spurs; we cordially wish him success on the next occasion.

### THE METROPOLITAN SANITARY ASSOCIATION.

A meeting of this Association was held in the Vestry Hall, Back-road, Cannon-street-road, St. George's-in-the-East, on Tuesday last, to consider the subject of the "dwellings of the working classes," the Rev. the Rector in the chair. The expectation that cholera will visit London has led the Society to invite the various Vestries to consider what steps can be taken to give more effect to the existing laws. Dr. Lankester gave a sketch of the leading influences which conduce to an unhealthy condition of the dwelling-houses of rich and poor; and in the course of a capital sanitary lecture described the ill effects of overcrowding and want of ventilation, as illustrated by the difference of mortality in town and country, and in good and bad parts of one and the same town. He spoke especially of the necessity for special air supply to crowded rooms, and particularly if gas be used. He then proceeded to discuss the question of pure water, referring particularly to the disgraceful condition in which the water butts and tanks of the houses of the poor are often found. He said that especially in cholera time surface pumps, which are apt to be impregnated with sewage and other refuse, should be shut up. Mr. Godwin, F.R.S., in supplementing Dr. Lankester's remarks, referred especially to the traps of drains; in thirty instances in one row of houses which he had examined he found every trap bad. A working man in the body of the hall discussed at some length the unsuitableness of the present style of dwellings for the poor, especially the huge block and high story "model" tenements, declaring the cottage system to be the best, being the more conducive to the independent feelings of an Englishman, and preferable in an æsthetic sense. The Rev. Mr. McGill, Mr. Hodson Pratt, and others joined in the discussion.

The Society does wisely in thus invading the East of London, which may well be called the head-quarters of the enemy.

### THE "DREADNOUGHT" HOSPITAL SHIP.

It will be learnt with satisfaction by the public generally, and by those interested in the commerce of the port of London in particular, that the Committee of the Seamen's Hospital Society, with due regard to a probable visitation of cholera as the warm season advances, have already preferred an application to the Admiralty for the use of a hulk to be specially set apart for all cases of cholera that may come to the *Dreadnought*. This Hospital has, in former epidemics, received a very large number of cases of cholera. The history of these cases show in a tolerably correct way how the disease is imported into this country, and hence numerical returns from this Society have great value, in that from them can be gained the average sanitary condition of the port of London. The Committee of the Seamen's Hospital Society has shown a careful amount of foresight in making this prospective arrangement—a foresight which the Privy Council might do well to follow. The Orders in Council issued on the 7th ult., and published in the *Times* and other journals of Tuesday last, delegate all inspecting powers as to vessels to local Boards of Health, or, if they exist not, to local corporations. This as regards the port of London is really a very loose arrangement. If there be any value in Medical inspection, it should at once be adopted systematically at Gravesend. No sort of inspection will be of the slightest avail when cholera is fairly introduced into this country, and this port with its vast import trade is at present entirely unprotected by any kind of preventive measures. The cattle plague and its ravages have surely taught us the value of being wise in time.

### RUDMAN *v.* ARMSTRONG.

A Committee has been formed for the purpose of raising a fund towards defraying the legal expenses incurred by Dr. Armstrong, of Gravesend, and his son, in the late vexatious and iniquitous trial for malpraxis (Rudman *v.* Armstrong and another), in which the defendants, notwithstanding their full and righteous acquittal, have had to bear all the expenses of the trial. At the first meeting held on Saturday last, Dr. Richardson having been called to the chair, and having announced that it was expected that about £150 would meet the legal and other expenses of the trial, it was moved by Mr. Hunt, seconded by Dr. Spurrell, of Belvedere, and unanimously resolved—"1. That this meeting (with power to add to its numbers) do constitute itself into a committee to raise a fund for the above purpose." It was moved by Dr. Markham, seconded by Dr. Druitt, and carried unanimously—"2. That

Mr. Hunt be requested to act as Treasurer and Secretary." It was moved by Dr. Spurrell, seconded by Dr. Henry, and unanimously carried—"3. That the Profession be asked to express its sympathy with Dr. Armstrong and his son, and also its admiration of the firmness with which all offers of compromise were refused by them." It was also resolved—"4. That subscriptions of five shillings or upwards be requested to be sent to the Treasurer, No. 6, Hinde-street, Manchester-square, or to any member of the Committee, for the purpose of meeting the expenses of the trial. 5. That this Committee do meet again on Saturday, the 19th, at No. 12, Hinde-street, after which a list of subscriptions received up to that time shall be prepared for publication." Up to the present time the following gentlemen have been enrolled as members of the Committee:—W. Adams, Esq., 5, Henrietta-street, Cavendish-square; Dr. Druitt, 37, Hertford-street, Mayfair; W. Harvey, Esq., 2, Soho-square; Dr. Henry, 15, George-street, W.; T. Hunt, Esq. (Hon. Treasurer and Secretary), 6, Hinde-street, Manchester-square, W.; C. H. F. Lord, Esq., College-terrace, Hampstead; Dr. Markham, 3, Harley-street, W.; Dr. Richardson (Hon. Chairman), 12, Hinde-street, W.; Dr. Semple, 8, Torrington-square; Dr. Sedgewick, 11, Hinde-street, W.; Dr. Spurrell, Belvedere, Kent; Dr. Stewart, 75, Grosvenor-street, W.; T. Heckstall Smith, Esq., St. Mary Cray; Erasmus Wilson, Esq., F.R.S., Henrietta-street, Cavendish-square. The Committee will continue to hold its meetings until a sufficient sum is raised. We need hardly say that we wish it every success. That which will give the demonstration most force will be the collection of a large number of moderate subscriptions. The most agreeable testimony that can be awarded to Dr. Armstrong will be, in fact, that which proves to him the wide and deep-spread feeling of sympathy that is felt for him in the Profession. Subscriptions should be sent to T. Hunt, Esq., of 6, Hinde-street, London, W., the Honorary Treasurer. In reporting this trial last week we omitted to refer to Mr. Vinall, one of the witnesses called by the woman Rudman. Mr. Vinall gave some very important evidence, which gave great strength to the defence. We learn that Mr. Vinall, after attending Rudman a few times, was told he would be paid when a trial against a Doctor had come off, and at once he declined to attend longer on such terms. We also learn that he was subpœnaed without a word of consultation, and could form no idea of what would be asked him until he got into the witness-box. Then every method was adopted to extract from him damaging statements, but with no avail. He denied point blank the mercurial hypothesis; he persisted that the only symptoms he saw were those arising from inaction and bad air; and in the fairest way he could, under the circumstances, he showed how utterly disgusted he was with the whole proceeding. A more difficult position than Mr. Vinall's cannot easily be imagined, and we congratulate the Profession that in this case there was so honest, so honourable, and so independent a representative on the side of a prosecution for malpraxis. We have known a very different example.

### FROM ABROAD.—DILUTION OF VACCINE LYMPH WITH GLYCERINE.

Geh. Medicinalrath Müller, director of the Berlin Vaccine Institution, has just published a communication concerning vaccine lymph which he regards as of considerable importance. After adverting to the well-known difficulty of obtaining vaccine lymph in sufficient quantity, especially when large numbers have to be speedily vaccinated or re-vaccinated during the prevalence of epidemic small-pox, he observes that it is, therefore, a matter of great importance to be in the possession of a means by which every Practitioner may preserve for himself an ample store of this precious substance. Such a means is to be found in mixing the vaccine virus with diluted glycerine. Without in anywise interfering with its efficacy, this increases its quantity and its power of keeping. Finding that the vaccine scab is best dissolved in glycerine, and impelled to seek for some adjuvatory means by the numerous applications he received from every province of Prussia, as well as from foreign parts, the author was induced to try the effect of some lymph which he had mixed with diluted glycerine, and the results were in the highest degree encouraging. While augmenting the vaccinating material ten or twenty fold, the pustules which resulted neither in their course, appearance, the amount of lymph they contained, or the reaction they gave rise to differed in any degree from the pustules produced by the purest lymph. The proportion cannot be exactly determined, because the quantity taken up by the pencil cannot be weighed or measured; but as an example it may be stated that lymph from three pustules having been mixed with diluted glycerine, served not only to vaccinate several children, but to charge about forty capillary tubes. Lymph which has been preserved in tubes can be similarly treated with the glycerine, but it will be best only to employ that which has been kept in them for a few days or weeks. How far the dilution of the lymph can be carried without damaging its efficacy is being tried. At present the results have been found uncertain when diluted more than twenty times. Diluted only ten times, they are always certain.

If these statements are admitted, as they must be, it results that the Practitioner may always be in possession of a sufficient supply of reliable lymph, which may easily be stored up, seeing that the lymph enters the tubes with greater facility than in its undiluted state, and keeps much better. With the lymph derived from a single child a whole battalion of recruits may be re-vaccinated. The vaccinator may, too, not so pressed for lymph as heretofore, exercise more caution in selecting the subjects for supplying it. On account of its greater preservability, this mixed lymph will also far better bear transmission to distant countries and tropical climates than does the ordinary free lymph. The great ease with which the tubes are filled without contact with the air, and then sealed, will much aid the employment of this diluted lymph. Dr. Müller's exact mode of procedure is as follows:—Having opened some of the pustules of a child vaccinated eight days before, he collects the lymph which issues out upon a small, new hair pencil. The pencil is then moistened upon a glass or porcelain plate by means of from ten to twenty drops of chemically pure glycerine, diluted with equal parts of water—the whole being most thoroughly mixed together by means of the pencil. With this mixture vaccination is immediately performed, or capillary tubes are filled with it and sealed for future use.

### PARLIAMENTARY.—THE COALFIELDS—THE TROOPS AT HONG KONG—IRISH INFIRMARIES AND HOSPITALS—CONTAGIOUS DISEASES BILL—RINDERPEST IN IRELAND—THE CHOLERA AND QUARANTINE.

In the House of Commons on Thursday, May 10,

Sir R. Peel asked the Secretary of State for the Home Department whether it would not be desirable to instruct the Director-General of the institution charged with conducting the geological survey of Great Britain and Ireland, by which mineral statistics are annually collected and published, to collect evidence bearing on the carboniferous system of the United Kingdom, the extent of the coalfields, the thickness and quality, produce, and consumption of all beds of coal, and to report thereon; and, if so, whether the Government would issue the necessary instructions accordingly.

Sir George Grey said that Her Majesty's Government had anticipated the suggestion of the right hon. baronet, and had, even previously to the notice of the hon. member for Glamorganshire, of his intention to move for a commission on the subject, addressed a letter to Sir Roderick Murchison, who was at the head of the Geological Society, with the view of ascertaining from him whether by means of that institution certain inquiries into the extent of our coalfields could be conducted, and what would be the probable expense of such a proceeding. The answer to that letter led the Government to hope that full information on this subject would shortly be obtained.

On Friday,

Sir J. Fergusson asked the Secretary of State for War whether the 20th Regiment (2nd battalion) had been ordered, or whether it was the intention of the Government to order it, from Japan to Hong Kong, to occupy the quarters vacated by Her Majesty's 11th Regiment, in which great mortality had lately occurred, or whether it was the intention of the Government to send native troops to that station.

The Marquis of Hartington said the 2nd Battalion of the 20th Regiment had received orders to proceed from Japan to Hong Kong, to relieve the regiment at present stationed there; but it would not be necessary that they should occupy the quarters vacated by the 11th Regiment, which had proceeded to the Cape. In March last orders were sent by telegraph to Ceylon to send four companies of native troops to Hong Kong as a temporary measure.

In answer to a question by Col. North,

The Marquis of Hartington said orders were sent that the duties at Hong Kong should be diminished by the employment of native police or watchmen, and that under no circumstances were the troops to be kept too long on duty.

The following votes were agreed to in Committee of supply: £2183 for public Infirmaries in Ireland, £15,845 for Hospitals in Dublin and the Board of Superintendence.

On Monday, in the House of Lords, the Contagious Diseases Bill passed through Committee.

On Tuesday,

Lord Granville, in reply to a question from Lord Clanricarde, stated that, in consequence of the appearance in the north of Ireland of the cattle plague, the Privy Council had authorised the Irish Government to put in force the provisions of the Act of Parliament recently passed to meet such a contingency as has now happened.

Lord Carnarvon, upon a formal motion for correspondence, called attention to the recent outbreak of cholera at Liverpool among German emigrants, and, expressing an opinion that the orders issued by the Privy Council were insufficient, recommended that measures should be taken by providing hulks for the accommodation of the emigrants arriving from Germany to isolate them from the inhabitants on shore.

Lord Granville pointed out the difficulty of establishing at once a complete system of quarantine, even supposing that such a system would be an effectual preventive to the spread of cholera. He stated the various steps that had been taken, and especially that the Government had instructed the British Consuls to make known that shipowners here would not receive German emigrants on board their ships.

The Duke of Somerset added that the number of hulks at the disposal of the Admiralty suitable for Hospital purposes was very limited, but one had been placed at Cork, another at Plymouth, and a third in the Thames.

In the House of Commons,

In answer to questions from Mr. Gregory, Lord Naas, and other Irish members, Mr. C. Fortescue said there was too much reason to believe that the cattle plague had made its appearance near Belfast, and explained the stringent measures which had been taken to stamp it out.

Mr. Sandford asked what precautionary measures had been taken by the Government against the spread of cholera.

Mr. H. A. Bruce replied that the powers possessed by the Privy Council were given by the Quarantine Act of George IV., and under it they had directed local authorities at the outports to visit all ships arriving from suspected quarters, to prohibit the landing of infected persons, and, if necessary, to take measures to isolate them, and they had also offered to place any towns which desired it under the provisions of the Diseases Prevention Act. This country, he pointed out, had never acted on the system of quarantine; we had always depended on the local authorities, and our best security must be in improved sanitary regulations, such as better supplies of water and increased ventilation and cleanliness.

**New Fellows.**—At a meeting of the Council of the Royal College of Surgeons of England on the 14th inst., the following members of the College, having been elected Fellows at previous meetings of the Council, were admitted as such, viz.:—Messrs. Charles Hope Buncombe, of York-place, Bow-road, and Henry Gibbs Dalton, of George Town, Demerara, their diplomas of membership having date respectively May 29, 1840, and February 19, 1841.

# THE CHOLERA AT LIVERPOOL.

*(From a Correspondent.)*

Epidemics being rather of periodical than of unusual occurrence, it might be assumed that the regulations required to prevent the spreading or to counteract the malignancy of contagious disease would be fixed, definite, practical, and prepared. Yet it does, nevertheless, seem strange that although warnings of the probable advent of cholera were duly circulated by the Government among the municipal and other local authorities of the country in the summer of last year, and again repeated within the last few weeks, and although public and special prayers have been offered up for months in all the churches of the kingdom against this "plague, with which many lands have been visited," yet when on May 4 the emigrant steamship *Helvetia* entered the Mersey as a cholera-infected vessel, she not only spread panic, but found every one unprepared to meet the difficulties of the occasion. Now why, at least in sanitary matters, are Englishmen slow to act? Why, like their Saxon prototype, do they always merit the sobriquet of "unready?" It is certainly not from any lack of either knowledge, foresight, or energy. Is it due to the complicated machinery of our governmental action, or to the jealousy and penuriousness of ratepayers, or to the privileges of our free personal action, or to the gigantic momentum of our trade and commerce which sweeps away, as impossible and impracticable, all the trammels of quarantine restrictions?

In Liverpool the local authority was not at fault. When last year the circular from the Privy Council recommended the adoption of precautionary measures, the Mayor of Liverpool, Mr. Lawrence, was able within the lapse of a few days to announce to the Government that the Select Vestry of the parish had provided a cholera Hospital. He at the same time called attention to the strange anomaly that while vessels from Africa or the West Indies whereon there had occurred fatal cases of the bilious, remittent, or yellow fever, or whereon there were still patients suffering from the effects of such sickness, the Customs' officers were directed to place the vessel under a temporary quarantine, sufficient for the inspection of the crew and passengers, yet in the event of a vessel arriving in the port with a cholera case on board, the law did not permit any interference. The Mayor asked for an Order in Council to remedy this defect, and he restricted his demand (almost *totidem verbis*) to the power given by the Order in Council of the 7th inst.—viz., permission to prevent the sick from entering the town unless conveyed, by a specially appointed vehicle, to the Hospital, and permission to authorise a Medical man to inspect the crew and passengers before being allowed to land. The only answer received to this application was an official announcement that the Government were not prepared to authorise any measure of quarantine.

Hence the panic when the *Helvetia* arrived at Liverpool on May 4. No one knew how, to what extent, or by what authority he was to act. Hence the telegraphs from the Mayor and the Collector of Customs to the Home Secretary, asking for permission to *begin to act* when, if the Government had been wise and prescient, they would have been able and prepared to act.

The Mayor, with commendable fortitude, assumed the responsibility of preventing any of the persons on board the *Helvetia* from landing until he had received the instructions of Sir G. Grey. The best arrangement, in the emergency of the moment, was also adopted, and by the 7th a vessel—the *War Cloud*—capable of accommodating some 700 persons, had given a temporary reception to 398 of the passengers who, to that time, showed no appearance of the disease. These were the British passengers, and consisted of 243 men, 89 women, and 66 children. Within a few hours later the owners of the *Helvetia* were able to engage the use of the sheds forming the emigration depôt at Birkenhead, and to them 260 of the foreign emigrants were drafted. Another vessel—the *Jessie Munn*—was fitted up as a Hospital, and properly and liberally supplied with Medical men, nurses, medicine, and Medical comforts by the Select Vestry. As it was found impossible, on account of the suddenness and completeness of the collapse, to remove cholera cases from ship to ship at any great distance, the *Jessie Munn* was lashed to the side of the *Helvetia*, and contrivances made to remove the patients in a recumbent position. During all this time the Liverpool authorities had been most strenuous in their exertions to obtain and fit up some detached warehouse in the outskirts of the town, so as to be able to receive on shore the poor people still left on the *Helvetia*, as well as those temporarily removed to the *War Cloud*. It was felt to be not only cruel but also impolitic and physiologically wrong, to keep any person on an infected vessel; since thereby the malignancy of the disease would be intensified, and the ultimate danger to the community increased; and it was also felt that a single case occurring on board the *War Cloud* would really convert that temporary Asylum into all the frightful conditions of a plague-stricken vessel. No one who has not tried it can realise the difficulty of so far overcoming prejudice as to induce warehouse owners to let their property for the reception of cholera patients; indeed, the owner of the Birkenhead Emigration Depôt had been forced by the outcry in his township to refuse to receive any more of the passengers of the *Helvetia*. It was half-past nine on the morning of the 10th (Thursday) when arrangements were made to rent two warehouses (admirably suited for the purpose of a depôt) in Burchhall-street, near Bank Hall; orders to erect a cooking apparatus and to construct the necessary sleeping accommodation for 700 persons were given to Messrs. Holme and Nicol the same night. The borough engineer undertook all the arrangements required for water supply and for water-closets. On the morning of the 12th everything was prepared for the reception of the emigrants, who arrived about 12 o'clock. The management and feeding of the people, and the purchase of new beds and bedclothes, have been undertaken by the Vestry, and all the arrangements have, by the administrative abilities of Mr. Hagger, proved eminently successful. The people are happy, their health wonderfully improved, and only one death—that of an Irishwoman—has occurred among these emigrants since their arrival at the depôt. The present position of matters is —the *Helvetia* empty of her passengers, and undergoing the necessary purification under the inspection of the Medical emigration officers; the patients on board the *Jessie Munn* improving; the emigrants at the Birkenhead depôt under kind and considerate supervision; those at the depôt at Bank Hall well and comfortable under the circumstances of an extemporised sanatorium; while, so far as is known, no cases have occurred in the borough, except among German emigrants. I venture to believe that if last year the Government had concurred in the proposal of Mr. Lawrence, not only would the Liverpool authorities have been prepared with a cholera Hospital, but they would have recognised, in the contemplation of the practical working out of the Order of Council, the necessity of having some place prepared for the reception of those passengers and crew whom their Medical officer should consider not sick enough for Hospital, but too doubtful to be immediately transferred into the registered lodging-houses of the town. Steps are now about to be taken by the Select Vestry to provide some building where emigrants unable to find accommodation may be received as nightly lodgers at a reasonable charge, and it is expected that by this means the temptation, or, indeed, the almost necessity, of overcrowding may be removed.

I have obtained from Dr. Trench, the Medical Officer of Health, the following list of the deaths from cholera in the workhouse and on board the vessels in the river. He is not able, with any certainty, to distinguish the subdivisions of nationality among those who are registered as Germans; but he states that all the earliest cases were Dutch, and, in confirmation, has supplied me with the following names:—Johanna Schonwenberg, Evert De Boer, Peter Relfiet, Neesen Gow, Cosorlive Bosake. The passengers who, as relatives or travelling under the same broker's "contract note," were necessarily or optionally near the sick were almost always the persons attacked. Thus under the name Bosake were registered three deaths—husband, wife, and child; under that of Peterson, two brothers; under that of Relfiet, a mother and daughter. The manifest evidence that the poor Dutch were the importers of and first sufferers from the disease engendered against them an angry feeling—not only among the Irish, but also among the Prussian and other German emigrants. With Paddy the threat is that "he will have it out,"—meaning, no doubt, "in Donnybrook style;" with the Prussian and Swiss it takes the form of indignant remonstrance to their Consuls against being placed in proximity to the plague-stricken Dutch. As far as I can gather from Professional friends, nothing beyond the old treatment by opiates and external heat have been hitherto employed. The application of ice to the spine and Dr. Johnson's purgative theory have not yet found any practical adoption. All the lodging-houses of emigrants are visited daily and nightly, and in every room of the German lodging-houses purification by chlorine gas, evolved from chloride of lime and muriatic acid, is made compulsory.

*Deaths from Cholera in the Liverpool Workhouse.*

| Date. | No. of emigrants. | Nationality. | Age. | Male. | Female. | Observations. |
|---|---|---|---|---|---|---|
| 1866. | | | yrs. | | | |
| May 2.... | 2 | Germans | 34 & 3 | 1 | 1 | None of these were on board the *Helvetia*, but had come over at the same time with the emigrants that went out by the *Helvetia*. |
| ,, 3.... | 1 | ,, | 34 | 1 | | |
| ,, 11.... | 1 | ,, | 41 | – | 1 | |
| ,, 12.... | 1 | ,, | 56 | 1 | | |
| ,, 14.... | 1 | Irish .... | 40 | – | 1 | Had been on board the *Helvetia* and removed to the depôt at Bank Hall-lane. |

*Deaths from Cholera on board the Helvetia and Jessie Munn, in the River.*

| | | | | | | |
|---|---|---|---|---|---|---|
| May 7.... | 1 | German | 60 | 1 | | |
| ,, 8.... | 1 | ,, | 30 | – | 1 | |
| ,, 8.... | 1 | ,, | 7 | – | 1 | |
| ,, 9.... | 1 | Irish .... | 3 | – | 1 | |
| ,, 9.... | 1 | German | 5 | 1 | | |
| ,, 9.... | 1 | ,, | 50 | 1 | | *Note.*—Under the term "German," I include all who are not British subjects, as I cannot distinguish further. In some cases I have not even been able to obtain the names. |
| ,, 9.... | 1 | Irish .... | 40 | 1 | | |
| ,, 10.... | 1 | ,, | 50 | 1 | | |
| ,, 10.... | 1 | German | 25 | 1 | | |
| ,, 10.... | 1 | ,, | 25 | 1 | | |
| ,, 10.... | 1 | ,, | 39 | 1 | | |
| ,, 10.... | 1 | ,, | 35 | 1 | | |
| ,, 10.... | 1 | ,, | 30 | – | 1 | |
| ,, 10.... | 1 | ,, | 30 | 1 | | |
| ,, 11.... | 1 | ,, | 25 | 1 | | |
| ,, 11.... | 1 | ,, | 35 | 1 | | |
| ,, 12.... | 1 | ,, | 23 | 1 | | |
| ,, 12.... | 1 | British .. | 27 | 1 | – | Surgeon of the *Helvetia*. |
| ,, 13.... | 1 | German | 5 | – | 1 | |
| ,, 13.... | 1 | ,, | 32 | 1 | | |

## QUARANTINE.

*(From a Correspondent.)*

As day after day passes, bringing from Liverpool fresh items of news about cholera mortality, the wretched inefficiency and practical uselessness of the feeble steps taken by the Government is but too apparent. It is now upwards of fourteen days since a formal request was preferred to the Admiralty for the loan of several hulks, to be used at Liverpool and elsewhere as receiving ships. It will be found, in another column, that the Committee of the Seamen's Hospital Society have made a similar application; but no action whatever has as yet been taken in the matter.(a) It is notorious that many fair specimens of our wooden walls now encumber the Medway at Sheerness, and it is perfectly well known that these vessels will be used for no other purpose than to act as targets in naval gun-practice. It cannot now be denied, even by the opponents of the quarantine system, that mainly in consequence of defective arrangements the town of Liverpool bids fair to become a great focus of disease. The Registrar-General's report, a fortnight ago, showed that its recent mortality has lately been double that of London, and that this fact was due to the prevalence of typhus. The town is at present a sort of depôt for German emigrants; vast numbers of which class, having arrived lately, and being unable to proceed to the States, perforce remain, and crowd the already swarming lodging-houses of this port. But, on reviewing the whole question, it behoves us to look a little nearer home, and in so doing we may well glance with anxiety at the totally unprotected state of our own port of London. Very little labour and expense would have provided us with an inspecting staff at or near Gravesend some weeks ago, and thus avoided the great jeopardy in which the port is placed at every tide. But no restrictive regulations are carried out at Gravesend or elsewhere up or down the river, and we may fairly presume that the authorities will allow the disease to creep into our metropolis by its great water way, and then make some abortive effort to check its progress. Experiences of the recent epidemic in Europe gave so many tangible proofs of its infectious and contagious nature that we cannot now close our eyes to the benefits of isolation. A contemporary, in remarks made last week, urges that the happy examples of Greece and Sicily as to rigid quarantine are of little value, "because there is no trustworthy evidence to show that the exemption arose from the stringent quarantine maintained against infected ports." But it is a fact, and we speak from data carefully gleaned in the East last year, that the Kingdom of Greece was closed, not only against infected ports, but against many that never had cholera within their gates at all. This country was for the nonce practically isolated from the rest of Europe. It is true that commerce was, for a time, brought thereby to a dead-lock; but it is plainly our duty to deal, not with the commercial, but with the sanitary aspect of the question. There is not the shadow of an object in contending that "quarantine as practised in the Mediterranean and the Black Sea has not offered any impediment to the spread of the epidemic." We can testify from personal observation that in the ports of Turkey, Italy, and France the system of quarantine is simply a farce and utterly a delusion—that the lazarettes are in some instances placed immediately beside the walls of the town (as at Marseilles), and in others (as at Kustendjie) a community of feeling (and of course a community of disease) is established by occasional pipes and conversation interchanged between the inhabitants of the town and those of the lazarette over the (breast-high) palings of the latter. The system of isolation has never yet had (with the exception of Sicily and Greece) a fair trial in Europe. The difficulties to be encountered by its adoption in and around our shores may be insuperable; but it is clearly our duty, if we believe in the efficacy of any preventive system, to place that system before the public, and to emphasise it with all our might. Let a regular inspection be made at Gravesend of all vessels coming up the river. If any such be found to have cases of cholera on board, is it impossible to land the apparently healthy part of the passengers on the Isle of Sheppy for a limited quarantine, and then order off the vessel at once with her sick cargo to Heligoland or to the Channel Islands? Herm, one of the smallest of the latter, is now advertised for sale, and might readily be leased by Government for the purposes of a lazarette. A passage from the river to the Channel Islands is, in the summer months, by no means long, and ample accommodation could be provided for any reasonable number of patients. This scheme is after all only modified quarantine; but though it is in truth useless to attempt at any time to isolate ourselves wholly from other countries, it is imperative that some such plan as that above indicated be adopted, if we wish to save England from a repetition of the ravages that cholera has in former epidemics made among her inhabitants. We may do and dare much; but we dare not say to cholera, "Come in, and we will fight you." Until the science of Medicine can do this, we must build up a wall of some sort that the big stalking-horse will not care to jump, particularly if the prospect beyond be so unalluringly clean as to offer no inducements to his destructive tendencies.

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(a) Since this article was received Government have announced that three hulks are to be lent as Hospital ships. One is to be stationed at Plymouth, one at Cork, and one in the Thames. Southampton has applied for one, but we believe the request is not to be granted.

## GENERAL MEDICAL COUNCIL.

The General Medical Council commenced its annual sittings on Thursday last, at the Royal College of Physicians, Pall-Mall East. Dr. Burrows, the President, occupied the chair, and there were present the following members of the Council:—Dr. Alderson, Mr. Hawkins, Mr. Cooper, Dr. Acland, Dr. Paget, Dr. Embleton, Dr. Storrar, Dr. Alexander Wood, Dr. Andrew Wood, Dr. Fleming, Mr. Syme, Dr. Thomson, Dr. Smith, Mr. Hargrave, Dr. Leet, Dr. Apjohn, Sir D. J. Corrigan, Bart., Dr. Sharpey, Dr. Parkes, Dr. Quain, Mr. Rumsey, and Dr. Stokes.

The Registrar read a letter from Dr. Christison, in which that gentleman expressed his regret that imperative duties in Edinburgh compelled him to remain there till the end of the present week, but that it was his intention to be at the general meeting on Monday next.

The minutes of the adjourned general meeting held on April 17, 1865, were then read and confirmed.

The Registrar reported that at a meeting of the Branch Council for England of the General Council of Medical Education and Registration of the United Kingdom, held on the 8th of August last, the following official notice was read:—

"We, the Royal College of Surgeons of England, in pursuance of the power given to us by the Medical Act, do hereby appoint Mr. Cæsar Henry Hawkins, of 26, Grosvenor-street, W., to be a member of the General Council of Medical Education and Registration of the United Kingdom, for the term of five years, from the 4th of July, 1865."

The President rose and said:—

In addressing you once more from this honourable position, in which you have placed me, it is a source of gratification to me to find that public business has not compelled me to summon you to assemble at a time not generally acceptable, as unfortunately was necessary last year. Indeed, from all I can learn, our time of meeting this year meets the wishes of the members generally. (Hear, hear.)

Before we proceed to the election of our several committees and to other matters preliminary to our regular business, it appears to me that some advantages may result from a few introductory remarks from the chair in the form of a brief survey of the more important labours of the Council during the last session, of the progress of events in the interval since we last assembled in this place, of the special duties assigned to the Executive Committee and how far they have been fulfilled, as well as the labours left uncompleted when we separated, and which may be profitably resumed by the Council in the present session.

Although such a *resumé* may appear somewhat needless to those of the Council who have taken the most active part in our proceedings, and who during our long recess have directed their thoughts to our past and prospective labours, still I flatter myself that to many others it may be useful to have their memories recalled to various topics of greater or less interest to the Medical Profession, and which formed the subjects of our deliberation and discussion during the last session of Council.

The intervals between our successive sessions are so prolonged that it is almost impossible for men like ourselves, who have constant and engrossing occupation, to have before our minds, in resuming our deliberations, a clear and vivid recollection of the subjects under consideration in the previous session, and which were left undecided for various reasons, but which may now be more ripe for solution.

It will be in the recollection of the Council that a Select

Committee was appointed last year to report upon the subjects of general education to be inquired into in the preliminary examination of Medical students. That Committee made its report at a late period of the session, and the Council were of opinion that they could not then duly consider the important questions brought forward in the report of that Committee. This is a question which, I presume, the Council will think requires our immediate attention and solution, in order that the recommendations and regulations of the Council upon the subject of education of Medical students may be more complete than hitherto.

In our session of 1864 the Council directed the circulation of a document among the several licensing bodies, in which they were invited to favour the Council with observations and suggestions upon various points connected with Professional education. Many of the licensing bodies sent in last session, for the use of the Council, reports drawn up with great care, and replete with valuable suggestions. This mass of useful information has hitherto not been brought under the consideration of the Council, and certainly has not been utilised. Perhaps a committee might prepare a digest of suggestions upon points not yet settled, and which would assist the Council in deciding upon the practicability of diminishing the number of examinations where a double qualification is desired by the student, and likewise in defining the different starting points which may be recognised as the commencement of Professional study.

The next point to which I will recall your recollection is one which I think must afford unmixed satisfaction to all who are sincerely determined to carry out the provisions of the Act of Parliament which is entrusted to our administration, and who are desirous not to allow funds to remain dormant which may and ought to be exercised for the improvement of Medical education. (Hear, hear.) I allude, of course, to the visitation of the examiners of the different licensed bodies by the several branch councils. You will naturally look forward with anxiety to the reports from the branch councils, giving the results of their first visitations. What avail all our regulations and recommendations respecting Medical education if the curriculum be not completed by well-conducted and impartial examiners?

In the Session of 1864 the Council appointed a Committee to take steps for the preparation of a new edition of the British Pharmacopœia, and during the last Session the Pharmacopœia Committee made a report to the Council which was adopted. The Council afterwards thought fit to pass a resolution which may have led members of Council to suppose that a proof copy of the new edition would be in the hands of members one month before this meeting of Council, but the Pharmacopœia Committee did not pledge themselves to this effect, and the report from the Pharmacopœia Committee will no doubt give a full account of the present state of that work, and of the causes which may have interfered with the realisation of the expectations of members of Council and the Profession.

I will next allude to the duties assigned to the Executive Committee, and endeavour to explain to the Council what has been done by that body, beyond the ordinary routine work to be performed year by year.

Your Executive Committee, as far as their limited powers would permit, have endeavoured, in the interval between the past and present Session, to carry out the special business entrusted to their charge by the General Council as well as attend to communications from public bodies and private members of the Profession. A most responsible and difficult duty was last Session assigned to the Executive Committee—viz., to communicate with Government in regard to the Bill for amending the Medical Acts; it being, however, understood that no concession should be made by the Executive Committee inconsistent with the amended Bill, as proposed by the General Council.

It is but right and respectful to you that you should know what has been done in this matter.

In the latter part of the last brief Session of Parliament a communication was received from Sir George Grey, intimating that he could not undertake to introduce the Medical Acts Amendment Bill during that Session. In the autumn of last year, as you will remember, Her Gracious Majesty and her Government and people had the misfortune to be deprived of the services of the Prime Minister by the death of the octogenarian chief, Lord Palmerston. As soon as the new Government had been definitely formed, and the Ministers had returned to their official duties after the customary autumnal holiday, I brought this question under the consideration of the Executive Committee (December, 1865), and they requested your President and Registrar to seek an interview with the Home Secretary, and to urge upon his attention the wishes of the Council and Profession as to the amendment of certain clauses in the Medical Acts, 1858. Upon application, Sir George Grey favoured us with an interview, and promised to give his attention to the subject as soon as he possibly could. After the lapse of a month, and shortly before the assembling of the new Parliament, I again communicated with the Home Secretary, and brought the whole subject under his notice by letter. In reply, he courteously permitted me, in confidence, to peruse the observations of the consulting counsel to the Home Office on the proposed amendment bill, and promised to put me in personal conference with that gentleman, as soon as his most pressing occupation would permit. It must be borne in mind that at this period the Government, the Home Secretary, and the officials were oppressed by several momentous questions relating to public affairs; the cattle plague in England and Scotland, the Fenian conspiracy in Ireland, the Jamaica outbreak and inquiry, and the preparing of the promised measure on the representation of the people in Parliament, fully engrossed the time and energies of all connected with the Government, and greatly interfered with the successful progress of Medical legislation. Nevertheless, in the month of March last, I thought it my duty again to remind Sir George Grey of his promise, and of the necessity of some definite reply from the Home Office. In consequence of this renewed application, I was placed in personal conference with the counsel to the Home Office shortly before the Easter recess, and had an opportunity of perusing the draft of the Medical Acts Amendment Bill. Into this it was proposed by the Government to introduce a clause by which Medical graduates having diplomas from certain foreign and colonial universities might, under certain restrictions, be admitted into our Register rather than be compelled to practise in the ranks of irregular and unqualified Practitioners. This drafted bill, submitted to me in confidence, required careful consideration, and I found it necessary to make various suggestions in order that it might be brought more into harmony with what I believed to be the views of the General Council. I have had the advantage of further conference with the counsel to the Home Office, and the result is that the draft of the bill is completed, and I hope will be shortly submitted to you for approval.

The long interval of twelve months between our successive sessions and the limited powers conceded to the Executive Committee do, I believe, most seriously interfere with the successful transaction of the public business of the Council, and with their giving reasonable satisfaction to public bodies and private individuals who make communications to the Council. One meeting of the Council in the year, and no authoritative Executive Committee in the interval, are defects in our organisation which it would be well to remedy if practicable. It appears to me this is a subject worthy of the careful consideration of the General Council, whether they could not, by more frequent meetings or by some alteration in the constitution of the Executive Committee, render the Council more efficient as a public body empowered by Act of Parliament, capable of enforcing their own regulations and of giving satisfaction to those members of the Profession who seek advice and protection of the General Council.

The more frequent meetings of the whole of this numerous Council would entail much inconvenience upon the members, and would incur such heavy additional expenses, that such a change seems hardly feasible or desirable.

But would it be impossible to adopt the other alternative, and to alter the constitution of the present Executive Committee, to enlarge it, and make it more representative of the feelings and opinions of the whole Council by introducing a limited number of members from each of the branch Councils of Scotland and Ireland?

If the Executive Committee could ensure the attendance of any two members of each of the branch councils of Scotland and Ireland at quarterly meetings between successive sessions of the General Council, then I presume powers more extensive than can now be properly conceded to the present Executive Committee might be entrusted to this enlarged Committee, and much routine business which now occupies a large portion of the time of the General Council at each annual session might be transacted by this enlarged Executive Committee more perfectly representing the whole Council.

Our labours here would be lightened, and I think our proceedings would give more satisfaction out of doors and remove just grounds of complaint against the present unavoidable delay in answering communications made to the Council. I commend this idea to the consideration of those who are anxious to improve the efficient working of the General Medical Council.

It is out of my province, as President of the Council, to initiate measures in the course of the session, but I have not thought it beyond my proper sphere of action, at this opening of our proceedings, to recall your attention to the past, and to invite your favourable reconsideration of measures of importance incompletely decided upon in former sessions, and which appear to me not only ripe for, but also demanding a settlement. I have gone also further, and thrown out for your adoption suggestions which I believe might render the influence of the Council for the good of the Profession more uniform and continuous, and not restricted, as it now is, to the short spasmodic action of annual session.

With these prefatory remarks I conclude, congratulating the Council that so few changes have taken place in the *personnel* of the Council since we separated, and that able and distinguished members, whose period of service had expired, have been re-appointed, and are here to assist the Council with their large and varied knowledge, with their sound and independent judgment and great experience in the solution of difficult questions so frequently under discussion in the Council. (Cheers.)

The Committee was then appointed, and divided into three sections for the arrangement of the respective business matters of the Council, and a long discussion ensued as to whether two communications which the President had received from the Secretary of State relating to the new Medical Act should be read at once to the Council, or should be referred to the Committee, and also as to whether, if the letters were read, they should be published. It was first suggested that the reporters should withdraw during the reading of the letters, and then that the Council should leave it to the discretion of the reporters whether they would publish the letters or not. No resolution on the subject was passed, and the letters were ultimately read.

Dr. Acland rose to present a memorial from the Sub-section of Physiology of the British Association, adopted last year at Birmingham, and he said he only had the duty of presenting it because he was the President of the Sub-section, and therefore the duty naturally devolved upon him. The memorial presented a suggestion to the Council of a most important character, and one which had regard to one of the highest functions which they were called upon to perform. The memorial was as follows:—

" *British Association in Birmingham*, 1865.

" Having regard to the observations of the President, Professor Acland, in his inaugural address, the Committee of the Sub-section of Physiology desire respectfully to intimate their opinion of the great advantage which would accrue to physiological (and thereby to Medical) science if the General Council of Education and Registration should think fit, by pecuniary grants and the appointment of suitable persons, to undertake investigation into the physiological action of medicines. A few agents, when administered in poisonous doses, have alone been made the subjects of such research, and whilst the Medical effects of even such well-known agents as quinine have been admitted for ages, their modes of action are still unknown. Even to this moment our knowledge of the action of remedies rests only upon ordinary observations and general inferences.

" The Committee is well aware of the extreme difficulty of prosecuting exact physiological inquiries in states of disease, and above all, of the necessity for devising new modes of investigation; but bearing in mind recent researches of an analogous nature in health, they do not doubt there are Physiologists and Physicians of proved ability in such researches who would be able to devise the methods and bring the results to a satisfactory conclusion.

" The Committee also venture to suggest that no experiments should be regarded as satisfactory which (in addition to others) are not made in ordinary medicinal doses in the diseases for the relief of which the remedies are administered (as well as in other poisonous doses), and which are not performed with all the care and exactitude known in modern physiological research.

" That this resolution be signed by the President, Vice-President, and Secretaries, on the part of the Committee, and that the President be requested to present it to the Medical Council of General Education and Registration.

" Sub-Section D, Physiology.

" Signed

" Henry W. Acland, J. Hughes Bennett,
" John Davy, J. Vander Hoeven.
" George Rolleston, Alexander Fleming,
" Edward Smith, Wm. Turner."

In presenting this memorial, he would venture to make a few observations. At the meetings of the Council last year a suggestion was made by him for the appointment of a Committee for inquiring into the various ways in which the Council might justly expend its time. One of the ways which he suggested was in the consideration of scientific investigations and reports, such as were now suggested, on the effect of the remedies which, by their authority, were included in the Pharmacopœia, or which, by their authority and their power, they did not include. That Committee was not appointed, and therefore there was now no information before the Council as to whether it was in their power to make such a grant or obtain such reports. He was exceedingly anxious that a Committee should have been appointed last year for the consideration of this subject. They were now about to introduce an improved Medical Act. It was said last year that they had not the power to so expend their funds. That was a point which had to be argued, and if it turned out that they had no such powers he, for one, should be prepared to move that that power be inserted in the new Act. If it turned out that they had power to spend their funds in such a manner, it would then be a matter of opinion whether it would be desirable to exercise that power or not. Another suggestion was made to the effect that they had not sufficient funds. This was exactly one of the points raised, and he could not help thinking, although this was not the time on which he would venture to discuss that question, that they should have funds, a portion of which could be justly expended in this manner. They had expended last year £1700, as nearly as he could calculate, upon their annual meetings. The Pharmacopœia at present cost £5000. That expense was therefore over. The total invested money which they had received from the Medical Profession, which had been placed by the Government at their disposal, was more than £6000, besides their annual income. He came, therefore, to the merits of the case as to whether it was at all proper that a memorial of the kind which he presented should be entertained. The financial question he would not enter into, because he thought it would be a much better subject for the consideration of the Committee. This very argument was brought before the last meeting, when it was constantly before them. He only mentioned the fact that a large sum of money was spent by the Council, and that it had been matter of great anxiety to them that so large an amount of money should be spent on their annual meetings. He submitted on the merits of the case the proposal was a very proper proposal, to which some of their funds might be applied, and it would be impertinence on his part, speaking before men of reputation and distinction to which he could not aspire, to dilate on the subject. The Council was appointed for three distinct purposes—the registration of Practitioners, the superintendence of education, and the construction of a great Pharmacopœia. They had done with the registration—that had become a matter of routine. They were engaged in education, the expense of which in the future would probably be greater than it was in the past. The expense of registration might be considered as running its ordinary course. He regretted that Dr. Christison was not present, because when a discussion took place last year on the subject, Dr. Christison made some remarks which he should be sorry to reply to in that gentleman's absence. Dr. Christison stated that the Pharmacopœia was simply a collection of the rules and regulations for making certain preparations. The simple answer to that was that such really could not be the case, because the Council selected the articles which they introduced into the Materia Medica, or Pharmacopœia, or whatever they might call it; and in so doing they laid down the principle that those articles in the judgment of the body were the proper ones to be included. But besides that, they also excluded other articles having the same effect as those included. They included some articles and excluded others. Their authority for that arrangement seemed to him to be a simple answer to that objection. The opposition of Dr. Christison seemed to him to be untenable, and could not be sustained. The question, therefore, simply remained as to the principle on which they made their selection. In submitting the memorial of the Sub-section on Physiology, he fully coincided with that section as to the principle that the time had come in the history of physiological science and therapeutical progress when it was a highly proper thing. He would not say it would be an improper thing to do otherwise; that a series of reports and investigations such as those suggested should be made. It was quite certain that there was nobody in the country that could make those reports and investigations more properly than that Council; and the Pharmacopœia Committee were really engaged at the present moment in carrying out the work, though he was not aware that that Committee had ever had the present proposition even suggested to it. It would not be at all becoming in him to enter into the numerous questions or illustrations which might be readily brought forward with regard to the end of the investigations, or the plan to be adopted; and, therefore, he would not waste the time of the Council by entering into those questions or illustrations; but in the event of objections being raised from its being thought inexpedient to take up the question of making such a grant as he proposed, or in the event of the matter being thought unworthy of consideration, he should of course feel it his duty to exercise his right of reply, or to take such other steps as might enable him to bring the matter forward for consideration again. Such was the view taken by the members of the Physiological Section at Birmingham, when the subject came before them, upon an address which was made by himself, in consequence of certain recent investigations which had been made. He would, therefore, conclude his brief statement in presenting the memorial by proposing the following resolution:

"That the memorial of the Physiological Section of the British Association be received and entered on the Minutes, and in conformity with the suggestion of the memorialists, that the sum of £250 be placed in the hands of a Committee to be hereafter named; and that it be the office of the Committee to expend the whole or part of that sum in obtaining investigations on the points calculated to promote the knowledge and efficacy of the remedial agents which are now assumed to be of service, or of such substances as the progress of science may point out as likely to be of avail in the prevention or the treatment of disease."

In handing in this resolution, he would only say that, should it be the pleasure of the Council to make so moderate a grant as that for which he asked, either to members of the Council or to persons outside, he could foresee a series of most important results to be obtained year after year; and he would only further add that probably no period in the history of physiological science was so exceedingly opportune for making such a proposition as that which he had brought forward as the present time.

Dr. **Stokes** seconded the proposition, and said he hoped the Council would fully consider the importance of the question. They had been very hardly thought of outside the Board, and were asked what they had done. He did not see why they should not make it as perfect a Pharmacopœia as the Council could produce, and he thought that this course of action disarmed those complaints, which to a certain degree were very just. The only thing was to fix it on a more scientific basis than it stood on at the present time. It was now simply empiricism. There was no scientific basis for almost any Medical proceeding, and it therefore became a very important question as to how this great objection could be removed. He conceived that the Council ought to appoint a Committee, and in his humble judgment it would be most expedient if the members of that Committee were persons external to the Council. It would not do for them to sit round that table year after year for the purpose of distributing money amongst themselves in any way, and if they called upon the scientific men outside the Council to assist them with their knowledge, of course they must pay for that assistance. He would only remind them of the large sum of money they had spent on the Pharmacopœia, and asked them to make it as perfect a Pharmacopœia as they could.

Dr. **Andrew Wood** said he had no difficulty in coming to a conclusion as to what was his duty in regard to this motion, and he hoped to be able to show the Council his duty was also their duty. The Medical Council had been appointed under an Act of Parliament, as Dr. Acland had truly stated, for three specific purposes—first, the registration of Medical Practitioners; secondly, the regulation of Medical education; and, thirdly, the preparation of the Pharmacopœia. These were specific and important duties of a Medical political character; but if they were going to infuse into the duties of that Council a new element, and were to carry on experiments in physiology, experiments in chemistry, and experiments in every department of Medicine, then he contended they were departing from the duties for which they were appointed; and if they expended the money which they were receiving from the Profession for performing these duties, he contended, further, they were not spending money as the Act of Parliament told them they were to spend it. He was sure that no lawyer on the face of the earth would for a moment say that they had any right to expend money in the way in which Dr. Acland proposed. Clause 13 of the Act provided that all monies payable to the respective Councils should be to the treasurers of such Councils respectively, and should be applied to defraying the expenses of carrying the Act into execution? He asked Dr. Acland to show him in what way a grant of 250*l.* for physiological experiments would carry the Act into execution. Could anything be more clear or more plain than that the money which they were entitled to raise from the Profession, they were only entitled to raise in so far as these funds were necessary in carrying the Act into execution? The 15th clause provided that every person who should be possessed of any of the qualifications named in the Act should pay a sum, amounting to from £2 to £5, and should thereupon be entitled to registration. What had the Council done? Had it found it necessary to draw from the Profession the highest amount of taxation which the Act warranted them to do? He said positively that the very moment they were able to carry the Act into proper execution they were bound to give the benefit of doing so to the Profession. He contended they were bound to reduce the tax on the Profession. That Act, he did not believe, nor any other Act, gave them the authority for taxing the Profession for carrying out an indefinite series of experiments. He would ask, Why did not the British Association carry out these experiments for themselves? Why did not they levy a tax upon their own members if they were anxious for these experiments to be carried out? But why should the General Medical Council, which was not in any degree a scientific body, and which had no right to engage in scientific investigation and appropriate their funds to the object which had been proposed? Dr. Acland had stated that a good deal had been said out of doors as to the expenses of the Council and of the annual meeting. He was not prepared to say that these expenses had not been large, but he was prepared to say that they had not been unnecessarily large, because they must take into consideration that during the last seven years the Council had been placed in positions where they had to do a vast deal of work which they would never have to do again, and he felt confident that, with a proper regulation of business, when the Council had got thoroughly under weigh, and had taken all the different subjects which they were entitled to take up into consideration and carried them out, they would be able to very largely diminish the expenses which they were now incurring; but he would state a fact, in order to show Dr. Acland how extremely wrong it would be to devote a farthing, even if they had the power to do it, which they had not, to the carrying out of scientific experiments. They had been hindered from doing the most important part of their duties in the matter of visiting examinations in a thorough and effectual way on account of the want of funds, or the want of power of applying the funds to that purpose. The Council was just now considering the most important part of their duty in superintending and regulating a proper and efficient Professional education, and if they could not do that, which was above all things essential, because they had no power to appropriate funds for that purpose, and to see that the men who went into the Profession were thoroughly posted in those subjects which were laid down as essential, he had no hesitation in saying that they were not entitled to take up the matter which was before them.

Sir D. J. **Corrigan** rose to a point of order, and said the question which Dr. Wood was discussing was not then before the meeting.

Dr. **Andrew Wood** said the question of visiting examinations was not before the meeting, but the expense of such examinations was. He thought he was entitled to show, in arguing the question, that the Council would yet have to expend a large sum of money in carrying out the objects for which they were constituted, and that they would therefore require to use their funds in a proper way, and that one of the most important ways in which they could spend their money was in this matter of visiting examinations. He held that under the existing Medical Act the Council had not the power to grant any money for scientific experiments. (Hear, hear.) In the second place he held that, not having the power under the present Act to do this, the Council ought not to apply for power under any other Act, because it would be neither right nor fair to the Profession that they should be taxed in order that experiments should be carried out, which experiments ought to be carried out by the British Association and other similar bodies who were interested in the matter. In the last place, he held that it was their duty to reduce, as far as they possibly could, the expenses of carrying the Act into execution, with a view to reducing as soon as possible the tax now levied upon the Profession to the lowest possible point consistent with efficiency. He therefore gave Dr. Acland's proposition the direct negative.

Sir D. J. **Corrigan** proposed as an amendment, that the proposed investigation did not come within the province of the General Medical Council, and that they had not the power to expend the money required. He did not doubt that a vast amount of information might be obtained if the suggestion were carried out, but the point to be considered was that the whole affair was out of their province. He coincided with everything that Dr. Andrew Wood had stated, and agreed that under the Act they had no power whatever to spend a single penny for such a purpose. In addition to the clauses which Dr. Wood had read, there were others which were so strong that not only no lawyer, but no man of common sense could for a moment entertain a doubt upon the question, or could say that they had the power so to expend their money. The clauses expressly stated that the money was only to be spent in carrying the Act into execution, and nowhere did the Act give them authority to carry out such investigations as those now proposed. If the experiments should be carried out, he cordially agreed with Dr. Stokes that it should be by external persons, and not by Members of Council, for the proposition was to trace the effect of remedies when applied in poisonous doses, and he did not want that experiment carried out by any Member of the Council. (Laughter.) He thought it was quite unnecessary to argue the question that it was out of the province of the Act of Parliament.

Mr. **Cooper** reminded the Council that the proposed experiments were already being carried out by other bodies in their examinations in the Materia Medica and in Pharmaceutical Chemistry.

Mr. **Rumsey** said it had been assumed by the gentlemen who had opposed the motion that it was not one of the primary duties of the Council continuously to prepare the Pharmacopœia, but that having done it once their work was at an end. It appeared to him that in order to keep up a perfect Pharmacopœia in this country they must continuously direct their energies to that object, and he did not see how the functions of the Council could properly be performed unless some such measures were taken as were proposed in the motion now before them. He did not, perhaps, pledge himself to all the particulars of the motion, but he thought it would lead to important physiological and therapeutical inquiry. The 54th clause provided that in preparing the Pharmacopœia the Council might adopt such measures as they might think fit, and that the Pharmacopœia should be altered and republished as often as they deemed it necessary. Fresh medicines were continually being introduced, and the value of existing medicines being questioned, and he did not see how they could perform the functions which the Legislature had committed to them unless they had a continuous investigation going on. He quite agreed that the experiments ought to be carried on by persons out of their own body, and he was of opinion that no portion of their expenditure would be more heartily approved by the Profession than that which they would spend in the carrying out of this proposition. The Act certainly gave them the power to take the necessary measures to make the Pharmacopœia perfect, and therefore he held that it was quite within the power of the Council to adopt the motion before it.

Dr. **Alexander Wood** was not prepared to say whether the proposition made by Dr. Acland was not one the Council should accept. From the beginning of the Council they had been spending money for purposes that were analogous to it, and which perhaps were not so useful as the plan suggested by Dr. Acland. At the present moment they were paying large sums of money for making experiments in regard to the Pharmacopœia, so that they were really doing almost the same thing in another way, although perhaps not so usefully as they would be by adopting and carrying out the proposition before them. He thought a Committee might very properly consider how far some of the suggestions of Dr. Acland fell within the province of those to whom the Government had assigned the duty of dispensing the national fund; and therefore he trusted the Council would not be led away from a consideration of the subject in consequence of the legal difficulties intimated with regard to the Medical Act, but that they would look at that Act to see whether it did not give power to do something in the direction proposed by Dr. Acland.

After a few words from Mr. **Hargrave**,

Dr. **Sharpey** thought this matter had been fully discussed, but one or two points were likely to create some misapprehension. Any memorial coming from such a man as Dr. Acland deserved respectful consideration, and he thought a Committee for the purpose of the investigation suggested was one of the most important questions in Medical science. He could not agree, however, that that formed any function of this Council in any shape, to say nothing about the expenses. It had been said that they ought to take upon themselves to conduct investigations of this sort in order to maintain the character of the Pharmacopœia, but he thought that the object of the Pharmacopœia was of a far different character.

Dr. **Apjohn** thought if their knowledge of the action of remedies was to be extended, it would not be extended by the plan proposed. Discoveries were not generally made by bodies, but by individuals.

Dr. **Aquilla Smith** was firmly convinced that this Council was not a body to carry out such investigations. If they were to attempt to direct and superintend them, there would be no end to the amount of labour that might come upon them. If the proposition were carried they might be called upon to investigate the Rinderpest or any other pest that might happen in the country. He could not agree with Mr. Rumsey's view with regard to the Pharmacopœia. That gentleman had read the 54th clause, but if they referred to the context they would see that the words "All such other matters and things relating thereto" clearly referred to the list of medicines and compounds, and the manner of preparing them; and that, he believed, was the true and proper scope of the Pharmacopœia. He should vote against the proposition.

Dr. **Quain** said there seemed to be a double discussion going on. On the one side they were discussing the propriety of giving a portion of their funds for the purpose of carrying out physiological and therapeutical inquiries, and the other was as to their powers of doing it. He quite agreed that it was utterly beyond their province; but if the Council took the view of the Pharmacopœia that they are not only to publish the means of preparing the drugs in use, but that they are also to test the properties of drugs and to discover new ones, he felt it was an inquiry they could never efficiently carry out. (Hear, hear.) They must take what was in common use, and their duty was to follow the general means of preparing it. He thought this was not a moment when they should vote as to how the Pharmacopœia should be prepared.

Dr. **Acland** then rose to reply. He thanked the Council for having given so much attention to the subject, and the members individually for having spoken so calmly upon it. If the Council decided against him, he could only say such was the nature of his conviction on the question, that if he lived he should have the pleasure of seeing them side with him on a future occasion, as he was convinced of the correctness of the proposal which he had submitted. The objections taken were mainly four, and he would reply to them in order. Dr. Andrew Wood had referred to the unpopularity of the subject, and had stated that the Profession would object to their spending money collected from them in that manner. And then, secondly, he said that as soon as they could reduce the expenditure they should reduce the sum they collected from the Profession. He (Dr. Acland) entirely agreed with that proposition. They should diminish the registration fee; but the sum he proposed, £250, was a very small expenditure. With regard to the unpopularity, he had as good a right to express his opinion upon that point as any other Member of the Council, and he could say he believed it was one of the most popular things they could do. He had heard objection taken in respect to the articles which they included and excluded. Practitioners—men who had been called "routine Practitioners"—were very desirous that the Council should do something or other to clear up the precise value of the articles they included or excluded. Then, as regarded the legality, unless they took the opinion of Sir Roundell Palme or Sir Hugh Cairns, he did not think they could decid point. He agreed with Mr. Rumsey and Dr. Alexander Wood that it was entirely within the province of this Council. He found in the Act that they were required to construct a Pharmacopœia, which they had done at a cost of several thousand pounds. They were also required in more than one place to "alter and amend;" therefore, this was a question of interpretation. He fell in with the view expressed by Dr. Quain, that they must distinguish between therapeutical and pharmaceutical operations. He also fully concurred in what Mr. Rumsey had said, and what, in another shape, he endeavoured to press upon the Council at the outset, that the time had come when they had to render an account of the grounds upon which they admitted a thing into the lists of medicinal agents. Dr. Quain had given an instance in the case of mercury. He would give another, and that was the iodide of potassium. He (Dr. Acland) referred to a recent article in the *Annales des Chemie* as to the mode of action of that substance, and he asked those who had read that article whether it would not have redounded to the honour of this Council to have received such a report as was therein contained? The next question—that of the funds—he would drop altogether, for they had the funds, and, as Dr. Alexander Wood had truly said, they were spending money on the Pharmacopœia at this moment. The question, therefore, was upon the merits—were they limited in their expenditure to operations of a purely pharmaceutical kind? He did not think, in their present state of knowledge, they were bound to limit themselves to the list of drugs they published or simply to the way in which they were to be prepared, but they were entitled to obtain full information, and the grounds for admitting them into or excluding them from the list. With reference to the nature of the reports, he remarked that this was not a question of necessarily elaborate investigations, to be conducted at great length. The reports of the British Association and of the Royal Society were obtained either by individuals or committees at very moderate sums, and it would be perfectly competent for this Council, and that was what he hoped they would do, to give small sums to three or four members of their own body to produce reports similar to those presented to the learned societies.

The amendment was then put, and there were 16 votes for and 5 against; it was then put as a substantive motion and carried. The original motion was therefore lost.

[The Council then proceeded to other business; but owing to the time having arrived at which we are compelled to go to press, we must reserve our further report until next week.]

(Left sitting.)

# ST. MARY'S HOSPITAL.

### May 1, 1866.

## ADDRESS BY PROFESSOR HUXLEY.

Mr. Dean, Ladies, and Gentlemen, the pleasing part of this business, so far as I am concerned, is now over, and another portion of the entertainment begins, which I trust may be in some sense satisfactory to you, but which has its difficulties for me. When the authorities of this school were first kind enough to honour me by asking me to preside on this occasion, I did not clearly take in and apprehend, as I ought to have done, the notion, that attached to that honour there was a certain responsibility in the shape of an address; but when I found that it was proper and customary that the person who had been favoured with the privilege of awarding these testimonies of merit and desert to young men should say something on his own behoof afterwards, I cast about in my mind for some subject on which I might be able to say something that might be possibly worth hearing, or at any rate that might express my own mature conviction, and might at the same time be of some use to those who are engaged in Medical pursuits. It appeared that on the whole I could not do better than say a few words touching the relations of the physical sciences in general to Medicine and of education in physical science to Medical education; and, indeed, to make some remarks upon the whole subject of Medical education, which is now occupying so many minds and exciting so very large an interest among all the most intelligent members of the Profession.

It is an old and trite observation that Medicine is both a science and an art; and if you put what you know about Medicine into a homely phrase—I use the term "Medicine," as applying to the whole range of Physic, whether Surgical, or Medical, or what not—I say, if you endeavour to put into homely phraseology what the object of the science of Medicine is, I think you will find it to be to ascertain the nature of the disability a diseased or injured person labours under, and in the next place to have a knowledge of the means by which that disability can be removed. And if you look for a definition of the art of Medicine, it has a correlative extent—in other words, the art may be defined as the skilful use of all those means and appliances by which we ascertain what is the matter with a man, and of those further means and appliances by which the wrong thing may be set right again. Now, it hardly needs any remark upon my part to make you perfectly aware that the appliances of the art of Medicine are all of them derived from, or dependent upon, the physical sciences. I need only mention such instruments as the microscope and the ophthalmoscope, and that apparatus by which the chemical qualities of the fluids of the body are ascertained, to make it perfectly obvious that in order to make use of those great and familiar appliances of diagnosis (or finding out what is the matter with people), you must have a knowledge of chemical and of physical science. And although a knowledge of the principles of physical science, enough to enable you to use the microscope, and perhaps the ophthalmoscope, with some success may not be very great, yet if you would apply the methods of chemical analysis to the examination of the fluids of the body your knowledge of chemistry must be tolerably practical and tolerably extensive. Further than that, every liberally educated Medical man should know something about the nature of the bodies which he is constantly employing. It is, surely, not compatible with a liberal education that a Medical man should be employing quinine and not know that it is the produce of a plant and what kind of plant that is. It is hardly consistent with liberality of education that a man should employ musk and not even know that it is an animal product. And therefore I think, looking simply to the using of the appliances and means of Medical practice, it may fairly be required that a Medical man should have so much knowledge of botany and zoology as shall simply, for his own credit's sake and for the sake of his position in society, enable him to be on even terms with laymen, and that he shall know so much of botany and zoology as will enable him to give safe opinions upon matters of this kind.

On the other hand, the doctrine which I am now preaching has been pushed by some persons to a very extravagant length. I am quite prepared to admit, and, indeed, I have always had a very strong conviction, that there is something absolutely preposterous in the volume and bulk to which some of our treatises on Materia Medica extend, and the enormous quantity of irrelevant matters with which their pages are crammed. I am not one of those persons who think that because you use spermaceti you are bound to know all about the classification of the *Cetacea*. I do not clearly see the connexion between those things, nor do I think that a man is bound to be acquainted with physical optics—and I am not talking wildly now, I have a particular case in my mind,—I do not think a student should be dragged through the length and breadth of physical optics, because there are particular substances used in Medicine which affect the polarisation of light or exhibit the phenomena of fluorescence. That appears to be the Scylla we have to escape. The Charybdis we need to avoid, on the other hand, is the knowing nothing about these matters. So much for the relations of physical science to Medicine as an art—that is to say, to Medicine as the use of the implements and appliances which we employ in endeavouring to find out what is the matter with people and in removing their disabilities.

But there is a perfectly different aspect, and a very much more important one, under which physical science is related to Medicine. The relation to which I now refer is that in which Medical science—the science of Medicine as apart from the art—stands to physical science in general. And this relation is more close and more important and in every way more worthy of consideration than that other of which I spoke just now. Let us consider for a moment one of the simplest cases of disability—I want some word that shall apply both to Medical and Surgical lesions—which can be submitted to a Practitioner. Supposing that a person unable to use his arm, the humerus being dislocated, presents himself to any one for cure, and that this person is no better than what we call in the country a bone-setter. The bone-setter knows, from his experience and from the general look of the part, that the arm is out of joint, and he knows very well, from experience also, that a particular mode of pulling that arm will probably get it to go back into its place again; whereupon he applies the pull, and, I suppose, three times out of four, the arm does go back. The fourth time, perhaps, it does not go back, and cannot be got to go back; and the fifth time, it may be, in trying to make it go back, he does something or other which makes the matter very much worse than it was to start with. Now, that is the proceeding of unscientific Medicine.

The scientific Surgeon, such as I hope all those who leave this School will be—and it certainly will not be the fault of their teachers if they are not—pursues a totally different course. The scientific Surgeon who has the same disability presented to him, in the first place calls into his mind the knowledge he has of anatomical science, and which tells him what has become of the head of that dislocated bone, where it is lying, by what obstacles its return to its place is impeded. He calls to his aid his previously acquired physiological knowledge, which tells him what influence muscular contraction is exerting in keeping that bone in its abnormal place—which teaches him to account for all sorts of symptoms—as the result of pressure on nerves, pressure on vessels, and so forth. And lastly, if necessary, he appeals to his knowledge of therapeutics, or in other words, of the influence of medicaments upon the condition of the parts of the body, and he applies them in such a manner as to diminish the obstacles which arise from the contraction of the muscles. In other words, he makes use of the information he has acquired of the physical sciences Anatomy, Physiology, and Therapeutics, to serve as the basis of a series of deductions, by the help of which the internal condition of the injured part becomes visible to the mind's eye. He knows, in virtue of these deductions, on what the bone is resting, what it is touching, what mischief it is doing, what means he ought to apply in order to bring the bone back into its primitive place, and what will be the effect of every measure which he applies for that purpose. In other words, in the case which I have selected, the scientific Surgeon knows precisely the character of the injury; and he knows precisely the kind of operation which he should perform to remedy that injury; and so far as this particular case is concerned, we may say that scientific Medicine has here attained its perfection—that is to say, the Practitioner may know the whole conditions of the lesion; and he may know exactly what he ought to do to restore the injured part to its healthy condition. And that is exactly the difference between the empiric and the scientific man—that the empiric knows in a coarse, blind sort of way—working in the dark on the doctrine of chances—that if he does certain things it is very likely certain results will follow. The scientific man, on the other hand, makes use of the data of physical science for the purpose of reasoning out the exact conditions of the case which he has before him, and for the purpose of applying the precise measures which are adapted to meet that case. I trust it is not necessary for me to use any argument to show you that it is this latter condition of mind to which the scientific Physician or Surgeon must strive, and that the labours of your teachers here are as so much lost if they have not carried you some steps towards that end.

Now, having this conception of what is meant by scientific Medicine before us, let us consider what has to be done before Medicine will reach this desirable condition. For although it may be possible to adduce instances of what I should call perfect Medical science—that is to say, where you have a complete knowledge of the lesion, and a complete knowledge of the conditions required for the repair of that lesion—yet I need not tell you that these chiefly occur in Surgical practice, and are rarely presented to the Physician; and that in the great majority of purely Medical cases we have, unfortunately, no such complete knowledge either of the lesion which has taken place, or of the steps which should be taken to restore health. In the great majority—I speak under correction here, but I do not think I shall be far wrong—in the great majority of cases the modern Physician, beneficent as his efforts are, great as his skill, and unremitting as his attention may be, yet as compared with that which is to be hoped for, and what we may fairly expect one day to attain, it must be confessed is still very much in the condition of the bonesetter. You know there is a wicked and libellous old story—I think some Frenchman invented it—in which it is said, by way of illustration of Medical practice, that in a diseased person Nature and the disease are as two men fighting; while the Doctor is a blind man, who comes with a big club and hits hard, sometimes hitting the disease, and sometimes hitting Nature. Now, there was a time when that description of Medical practice, I fear, was not libellous, but the time has long since passed by when it could have any strict application, and it is not the fault of the cultivators of Medical science if it continues to have any sort of application. But, if I might modify this story and bring it more into accordance with the present state of things, I should say that, in these days, the Physician is not blind; but, on the contrary, is remarkably sharp-sighted, acute, and painstaking; but that he finds himself in a very dim twilight, and having ascertained that the light is very uncertain and very apt to vary, he rather, as a conscientious person, abstains from using his club, and as far as possible confines himself to the position which, if I may say so without offence to the ladies here, is known as that of a "judicious bottle-holder," ready to pick up Nature whenever she gets adrift, and bring her up to time. That, I take it, is a fair description of the modern practice of Physic; a statement in the vernacular of what is meant by our *Medicine expectante*. And no doubt a beneficent change has been brought about, satisfactory to the patient and no less satisfactory to the Physician, who feels that his club is not stained by innocent blood. But, although this may be a vast improvement upon the past condition of affairs, no one who knows what physical science is, or what men of science are thinking about, will imagine for one instant that it is to be a final condition. No one can doubt that the whole purpose of philosophical Medicine and the whole striving of philosophical Physicians must be to approximate Medicine more and more to the plainest kinds of Surgery, and to enable the Physician by-and-by to ascertain as clearly what is the condition of a diseased part, and what must be done to remove that disease; to have as clear a mental picture of that as the skilful Surgeon has of the condition of a dislocated bone, and of what is to be done to remedy the dislocation.

If you come to think of the matter, all disease is, strictly speaking, a dislocation—a something out of place. In the so-called "Medical" lesions, if it is not actually bone, and muscle, and viscera, in the gross, it is the atoms of these parts, and the molecules of the fluids, and so forth, which are not what they should be and where they should be, if the patient were in a condition of health. If our senses were so fine and so delicate as to enable us to see the ultimate molecules of the human body acting and interacting, we should discern that they were out of place in every diseased part; and if we had means of reaching them directly, we could put them back again into their right order, so as to produce their right functions, in just the same way as the Surgeon replaces a bone. To do this, the Surgeon uses coarse mechanical power. He knows the bone is out of its place; his eyes give him an indication of where it is, or his hands. Touch and vision teach him what the condition of affairs is, and coarse mechanical methods are sufficient to enable him to bring matters right; but the atomic dislocation of a fever is not to be detected by touch or sight, and cannot be set straight by mechanical forces. The difference between the Surgeon and the Physician is not that they have different things to do, nor different methods of inquiry, nor that their procedure is in any way substantially different; but it is that the something which has gone wrong in Medical lesions requires special means for its discovery, and the forces which are to put that something right again cannot be applied directly and coarsely with our bodily hands, but we must send them to the dislocated atoms upon the shoulders of the atoms of those things which we call medicines, and drugs, and so forth.

To return to my old comparison,—to put the Physician into as favourable a position as the Surgeon, what he wants is simply more light. He wants a better light upon the arena of the fight, so that he may be able to remove the obstacles in the way of Nature, and may be ready, as occasion offers, to deal her opponent a severe blow without the chance of doing herself an injury. And if you will take the trouble to reflect from whence such light may be expected, you will find that there is only one possible channel, and that is from the cultivation and improvement of those sciences which furnish us with our data for deduction. I mean the abstract physical sciences of anatomy, physiology, chemistry, physics, and so forth. Just as the Surgeon's knowledge of the nature of the dislocation of a bone is a deduction from previous anatomical knowledge—as his process of cure is a deduction from other kinds of scientific knowledge—so the discernment of the nature of all morbid processes must consist of a series of deductions from an enlarged physical and anatomical and chemical knowledge, and all our attempts to cure disease must be guided—all the light we get in that direction must be furnished to us—by a more subtle inquiry into the properties of the atoms of matter, and into the forces which they exert. Or, in other words, the whole progress of Medicine depends upon the progress of the physical sciences, from which her great principles are really deductions; and exactly in proportion as physiology, as anatomy, as pathology, as therapeutics are carefully studied and their principles better understood, so will the Physician have placed in his hands more and more powerful implements, on the one hand, for discerning the nature of disease, and, on the other hand, for meeting and conquering that disease.

This is a large subject, one which, in these curt phrases, I can hardly put before you so fully as I could wish; but I hope that you see the bearing of what I have been saying, because it is upon a clear appreciation of this that all our theories of Medical education must eventually turn. If in striving to make Medicine the noble and grand science it should be, all depends upon the perfection of certain other sciences; and if our skill in the use of the means of inquiring into disease and in using the means of cure depends upon our acquaintance with the physical sciences, it must be quite obvious to you that a thorough grounding in physical science is the basis of all Medical education. I believe that is a proposition which cannot be doubted, and which the more we inquire into it will be seen to go more and more completely into the root of the matter.

But how is such a grounding in physical science practicable? Not long ago one of the most experienced Surgeons in these islands raised his voice against the system which is at present pursued in Medical education, in throwing into the system—if I may use a Medical phrase—of a young man an enormous quantity of knowledge of all sorts of remote and theoretical kinds, to the exclusion, as he justly enough observed, of that practical information which could alone in the long run make him a skilful Surgeon. And, so far as I recollect, the argument ran somewhat in this way: —A young man leaves school; he comes to a Medical College, at which he is expected to spend three years; at the end of that time to become a Practitioner, sent forth free to kill or cure, as the case may be. He comes to you perfectly ignorant, without a scintilla of a notion of anything about science, and within that time you expect him to learn physics, or natural philosophy, chemistry, botany, zoology, with comparative anatomy, human anatomy, histology, pathology, therapeutics, Medicine, Surgery, obstetrics, jurisprudence. The thing is absurd. What you run a risk of doing is, to destroy his mental digestion, as you may destroy the physical digestion of a turkey, and make a sort of intellectual *foie gras* of him; but, as for supplying information upon all those subjects of the kind and scope which he ought to have, in that time, and with the current methods, it is out of the question. Consider for a moment: if you take only those branches of Medical study which bear directly upon practice, few persons until they come to try know how vast they are. Take human anatomy, and reflect upon the quantity of work required before a student can possess the sort of knowledge that he ought to have. And no one has a proper knowledge of human anatomy till the man who stands up before him is in a manner transparent, and all the essential organs, bones, nerves, vessels, and muscles are to the mind's eye visible in their places. Consider the knowledge of histology or the minute structure of tissue that is required. Take pathology in itself: the rudiments of it might, if they were studied thoroughly, occupy a very large share of the time. And then physiology is absolutely indispensable, and more especially that experimental physiology which is of more importance than all the rest. I say put these things together, and then superinduce upon them the practical branches of a Medical man's profession—the necessity of becoming dexterous in the use of bandages and the manipulation of instruments—and then all that a student has to learn in the way of theoretical Surgery, and Medicine, and Jurisprudence, and so forth. Why, it will be quite obvious that three years is a most scanty period to devote to all these subjects; it is as much as can be expected if in the three years, by dint of thorough teaching and zealous learning, a young man acquires a notion of the practical branches of his profession. I am not talking, of course, about the way that a man can be taught to pass an examination; anybody can be taught to pass an examination. I was almost going to say that a dog might be taught to pass an examination, or, at least, a good many of the examinations that men go through; but I speak of that kind of information which is alone worthy of being called knowledge—that information which, as I understand, your Professors here are doing their best to give you; that information which is conferred by making men go for themselves, at first hand, to the facts and see them, by leading them not to trust this teacher, or that teacher, but to work out the truth and see it as it is, and carry that away as a thing that they know of yourselves and of their own knowledge. That is the only knowledge that is to be depended upon in your future lives; and if a man is to have that kind of knowledge he cannot spare a minute out of his three years for the subjects I have been speaking of just now.

But you may turn round upon me and say, "This is excessively inconsistent; for you have been preaching to us up to this time the enormous importance of abstract physical science, and telling us we can understand nothing unless we are well grounded in the principles of physics, in the principles of chemistry, and in the principles of biology." No, I have been guilty of no inconsistency. I hold absolutely to that position. I hold that no man can have a proper knowledge of physiology, no man can understand what the Scotch well call the "Institutes of Medicine," unless he has gone back still further, and unless he has acquainted himself with the general laws of the physical forces and with the general powers of matter as revealed by chemistry and biology.

The fact is, that you ought to have this general knowledge of physical science before you approach the study of Medicine. I fully concur with the distinguished Surgeon to whom I refer that these are not the matters with which a man ought to be occupied when he is busy with his practical Professional education. In other words, if we could arrange things as they ought to be, all this general knowledge of physical science, all this acquaintance with the principles of physics, and chemistry, and biology, ought to have been acquired by you in the course of your ordinary education. If those who regulate education in this country had a right conception of what their duties are, or of the purpose of education and the conditions of the progress of mankind at this present time are, you would get that knowledge. And those who wish to improve Medical education must, to my mind, throw all their energies into the attempt to compel those who give us primary education to make physical science a very large constituent portion of that education. I thoroughly sympathise with those who groan over the present chaotic condition of affairs. I do not see how, for some time, we are to escape the attempt to force upon young men who come to learn Physic too much knowledge and too various knowledge. Perhaps, even, it is better they should have the kind of chaotic training they have now than that they should be altogether free from a tincture of physical science; therefore I do not in the smallest degree blame the existing system of instruction in Medical schools. I think the attempts which are being made in all the great schools of London to make physical science an integral part of Medical teaching are necessary so long as physical science is ignored in ordinary education. The effort is good; the evils which attend it must be met as best they may. But I repeat once more, the great effort of all Medical reformers must be to make such a pressure upon those who have the charge of education in the country that physical science shall be made an integral part of it. If that were the case,—if men came to their Medical studies trained not only in the facts of physical science, for that is only half the battle, but if the precious time which is now wasted in gerund grinding at school were even partially employed in accustoming them to the methods of scientific inquiry, the task of the Medical teacher would be infinitely lightened. If a knowledge of classical literature, or an appreciation of literary excellence, were really given at our schools, I should be the last person in the world to cry out against it, for I yield to no man in my respect and love for literature. But let any one of us turn back to his school-days, and let him try to call to mind what enduring result he obtained from all the Greek and Latin teaching he got at school. What was the whole effect? It was a pervading sense of nominative cases, and verbs, and so forth, to the end of the chapter. We read our Virgil, and Horace, and the rest of it, and when we had done, all that we knew was they were made up of verbs and substantives which had certain quantities and were packed together in accordance with certain rules; and as to what the whole thing meant, unless you were more fortunate than I, we had not the smallest notion of it.

It is the duty of every man to lift up his voice against this strange waste of human time and perversion of human ability; and it is the especial duty of every one of us who has the cause of Medical education at heart to endeavour, as far as possible, to exercise such an influence upon the general education of the country as shall relieve Medical education from three-fourths of the difficulties under which it at present labours; and to bring about the great result that, when the Medical teacher begins his work, he shall not have to commence that work upon a mere *tabula rasa*, a mere raw material which has been used for no better purposes than gerund grinding. Conceive how different the case would be if the young men who come up for Medical education had been accustomed to handle physical experimental apparatus. Suppose that they had been accustomed to acquaint themselves with chemical formulæ, with chemical reactions; suppose they had learned, and there is no difficulty in learning these things, the great distinguishing characters of the different forms of life, and the great broad facts of physiology, which (I speak from experience) may be taught perfectly well to boys of from ten to fourteen years old; I say, supposing they had done this, and that they came to the study of Medicine with their minds stored with important truths, accustomed to go back to facts at first hand, and trained and disciplined in the methods of inductive and deductive reasoning, how much easier the task would be, not only for the learner, but for the teacher, and how vastly greater would be the stride made by every man towards that great goal I have already indicated—the establishment of a scientific Medicine.

## PROVINCIAL CORRESPONDENCE.

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### LIVERPOOL.

MAY 15.

THE cholera which has appeared among the German emigrants is, I regret to say, still spreading. The authorities of Liverpool on Tuesday, the 8th inst., ordered the removal of 200 of the passengers on board the *Helvetia* to the emigration depôt at Birkenhead, and the remainder have since been transferred to the *War Cloud.* The 200 who were sent to the depôt were all in perfect health—having been passed by Dr. Buchanan and Dr. Trench, but unfortunately within a few hours after their admission a well-marked case of cholera occurred, which was followed in the course of a few days by several more. Up to the present time there have been six deaths, and there are now eleven cases under treatment. No fresh cases have been reported to-day.

The Government agent to the Emigration Commissioners intimated yesterday that the emigrants from the *Helvetia* could not be allowed to remain in the depôt, but must be at once removed, as arrangements had been made for the despatch of an emigrant ship to Brisbane at an early period, with a large number of English, Irish, and Scotch passengers, and that it was essential that the depôt should be fumigated and disinfected for their reception. Under the circumstances, it was arranged that all who could be removed should be taken to Bank Hall, preparatory to their re-embarkation on the *Helvetia.* This arrangement has not been carried out. It will be remembered that the sick from the *Helvetia* were removed to the Hospital ship—the *Jessie Munn*—which is under the charge of the parochial authorities. This vessel is provided with every requisite. Dr. Rayner, one of the Medical officers connected with the Workhouse, has been appointed to take charge of the Medical Department, and he has under him a matron and an efficient staff of nurses.

On the 11th inst. it was reported that the cholera had broken out among the emigrants that had been transferred to the *War Cloud*, but they were immediately removed to the *Jessie Munn.* It was deemed desirable, however, on Saturday, May 12, to bring the healthy emigrants on shore, and accordingly about 220 German and 450 Irish emigrants were taken to Bank Hall warehouse, a large building near Bootle, on the outskirts of the town. These premises are very commodious and well ventilated, and are sufficiently isolated from any dwelling-houses to obviate all fear of infection.

Soon after their arrival cholera again broke out, and several fresh cases have since occurred—four of these are said to have occupied adjoining beds. They have all been removed to the Workhouse Hospital.

The parish authorities have undertaken the sole charge at Bank Hall, and I understand another warehouse is about to be fitted up for the accommodation of emigrants who may not be able to obtain lodgings in the licensed houses in the town.

The influx of foreign emigrants still continues, and on the night of Monday (7th) nearly 400 arrived from Hamburgh *viâ* Hull, and in consequence of the German lodging-houses being full, much difficulty was experienced in providing them with accommodation, and some 200 of them had to be received for the night into the large waiting room of the workhouse, where they were supplied with hot coffee and bread.

Again, on Thursday night (10th) about 40 of these emigrants, finding that such difficulties had arisen in the way of their immediate embarkation, insisted upon going back to London, and from thence to Hamburgh, and these were obliged to remain all night at the Lime-street station.

On Wednesday, the 9th, about 200 German emigrants went on board a large emigrant ship bound for New York, but a number of Irishmen, who were passengers by the vessel, resisted the foreign invasion, and after some disturbance the Germans had to "skedaddle" from the ship.

The crew of the *Helvetia* addressed an urgent request to the Mayor of Liverpool for leave to come on shore, but this, of course, was refused. One of the stewards of the unfortunate steamer has died of the disease. On Friday morning, when the tender went alongside, about 40 of the crew jumped into her and came on shore—the police persuaded them, with one exception, to return to their ship.

The *Helvetia* is now cleared of passengers, and is being thoroughly cleansed and disinfected, and it is stated that she will probably sail for New York on Saturday.

In the Liverpool Workhouse Hospital there have been twelve cases of cholera admitted. Six have died. Of these, five were Germans from Rotterdam; but they were not passengers belonging to the *Helvetia.* Two of these patients had been refused admission into the Liverpool Northern Hospital, as they were suspected cases; the sixth was an Irishwoman from Bank Hall.

A German emigrant suffering from cholera was received into the Workhouse Hospital this morning from an emigrant ship about to sail from this port.

Up to the 13th, twenty deaths have taken place on board the *Jessie Munn.* Of these, sixteen were Germans, three Irish, and the twentieth was the unfortunate Surgeon of the *Helvetia*, Dr. Ross, a young man of much promise.

I have been informed that a female who keeps a small shop in Vauxhall-road died yesterday of cholera.

The Hamburg Consul stated that, according to official inquiries, there has not been a single case of cholera in the course of the present year in Hamburg.

I have thus endeavoured, briefly and with precision, to place on record the facts connected with the early stages of what may be another invasion of this country by Asiatic cholera. These facts certainly point to the conclusions that this disease is spread by contagion, and that no sufficiently vigorous and systematic efforts are being made by the authorities of this town to arrest the mischief while it may yet be practicable to do so.

The success that appears to have followed the attempts made at New York to isolate those attacked with cholera make us regret that the authorities here have not adopted the same course. The only excuse they can have may be the want of proper quarantine accommodation.

## GENERAL CORRESPONDENCE.

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### THE TRANSITORY NATURE OF EPIDEMICS.

LETTER FROM DR. W. O. MARKHAM.

[To the Editor of the Medical Times and Gazette.]

SIR,—Dr. Farr's position (as I understand it) is this:—He writes "That Rinderpest will subside spontaneously as an epidemic. The holocausts about to be offered up will, we may hope, not retard this consummation."—(*Daily News*, February 16 ult.) As an illustration of his theory of this epidemic rise and fall of the cattle plague, he quotes only one single instance —the cattle plague in Rome as described by Lancisi. "The cattle plague in Rome, he says, lasted less time than our calculation gives." It lasted, in fact, about nine months.

Now, I cannot accept this instance as an example of the epidemic rise-and-fall character of Rinderpest. I have carefully perused Lancisi, and I find, as Dr. Farr admits, that the strictest rules as regards isolation, stoppage of movement of cattle, of rustics, and of dogs, etc., burying of the dead bodies, disinfecting stables, etc.—in other words, prevention of contagion—were rigidly laid down and practised in the Roman States, the penalty of death being attached to the disobedience of many of the orders prescribed. I find in the carrying out of these orders a sufficient explanation of the arrest of the disease in nine months.

Dr. Farr should have explained (to show the consistency of his theory) how it happened that the cattle plague ravaged other parts of Italy for many years—in fact, from 1711 to 1715. He does not explain why the supposed epidemic wave did not rise and fall in other parts of Italy. The artificial division of the States of Italy could have been no barrier to the epidemic progress of the disease. Will Dr. Farr explain on his theory why, in the Roman States alone, the disease died out in nine months, and why it ravaged the rest of Italy for four or five years?

Neither Lancisi nor Rammazini had the smallest doubt as to the disease being of a purely contagious character. Both trace its origin to that Hungarian ox, "ille fatalis bos," imported into Count Borromeo's estate, "quo momento non antea; hoc ipso loco, non alibi, incendium exarsit." Moreover, Lancisi ascribes its stamping out in the Roman States to the careful measures there carried out. He says in his preface, "That same plague which infested other Italian States for years . . . . thanks to God and the vigilance of our Prince, was here completely extinguished in nine months." Again, elsewhere he tells us, "By the month of May not a trace remained of the pestilence which had so long and cruelly punished other countries, and still existed on the other side of the Po. For this we thank the piety of the Holy Father, and his providential care."

Lancisi also gives instances where the disease had been excluded from their estates by those "qui seduli contagionis rimas omnes obstruxere." The cattle on two estates—the estates of Prince Borghese and of Prince Pamphilo,—situated in the midst of the raging pestilence, were entirely preserved from the disease. "Non aliâ plane de causâ, quam quod intentissimâ vigilantiâ prohibitus fuerit externorum corporum, in quæ cadere suspicio poterat." "In the same way have been hitherto protected the provinces of the Patrimony, Umbria, Picenum, and Flaminia. Similarly, in the Duchies of Etruria and Matina, the cattle have been preserved solely by severe laws and careful watching." So wrote Lancisi.

Will Dr. Farr tell us how severe laws and careful watching can arrest the unseen footsteps of an epidemic, and prevent it leaping the artificial barriers of a *douane?* My friend Dr. Farr must excuse me for repeating that this only one example which he adduces as proof of the epidemic character of cattle plague, seems to me to tell a tale strongly illustrative of the very reverse. I cannot think any one can impartially read Lancisi's wonderful pages without arising from them with the conviction that the cattle plague of his day at all events was spread through Italy solely by contagion; and that it was extinguished in the Roman States in nine months solely by the extraordinary measures there adopted to prevent its spread. It is true, as Dr. Farr says, that the Sacred College would not allow Lancisi to have his way with the poleaxe; but I will venture to say that the measures actually adopted by the Sacred College—of isolation, etc.,—were infinitely more stringent and more stringently carried out than any which have been yet adopted in this country.

I am, &c., W. O. Markham.

London, May 14.

P.S.—The question is a very important one. If Dr. Farr is right, the Cattle Plague Commissioners are all wrong.

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## MR. PROPERT AND MR. BAKER BROWN.

[To the Editor of the Medical Times and Gazette.]

Sir,—A testimonial is being got up for Mr. Baker Brown, as a kind of answer to the sober and orthodox members of our Profession who disapprove of his peculiar operation on young women. Mr. Propert is at the head of the Committee. As Mr. Propert must have had considerable experience in epilepsy during his long career of practice, may I ask whether he believes in Mr. Brown's theories of the morals of young women, and in the consequent operation? I am, &c.,

May 14, 1866. A Country Doctor.

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# MEDICAL NEWS.

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**Royal Colleges of Physicians and Surgeons, Edinburgh.—Double Qualification.**—The following gentlemen passed their First Professional Examinations during the April and May sittings of the Examiners:—

Richard Voeght Glumpett, Devonshire; William Easby, Durham; Thos. Fell, Sunderland; Charles Wellis Wood, Askrigg; William M. Allan, Newfoundland; David Edgar Jones, Cardiganshire; John Anderson, Forfarshire; Douglas Donald Cameron Menzies, New Amsterdam; Samuel Brown, Jamaica; Archibald Campbell, Argyleshire; T. R. J. Woodifield, Sunderland; James Stockwell, Musselburgh; Nicholas Maker, Thurles; John F. Little, Kilkenny; Henry T. Brownrigg, Waterford; R. H. B. Wickham, Ascension; Edward Tulcott Norman, New Orleans; Robert Stevenson, Kilwinning; Jeremiah Vaughan, County Clare; Henry Brown, Belfast; Joseph T. W. Brass, Orkney; Andrew M'Master Paterson, Madras; John M'Gee M'Cormac, County Down; Lawrence J. Macnamara, County Clare; James Meehan, Limerick; J. H. Rutherford, Newcastle.

And the following gentlemen passed their Final Examinations and were admitted L.R.C.P. Edinburgh and L.R.C.S. Edinburgh:—

William Murray, County Westmeath; Samuel Woodcock, Derbyshire; Tom Bates, Cambridgeshire; William Edward Stainton Stanley, Cumberland; Colin William MacRury, Inverness-shire; John Grindal Brayton, Whitehaven; George Myles, Limerick; Charles Robert Straton, Montrose; Aubrey Wicks, Cambridge; Charles Jones, Herefordshire; James Robinson, Lancashire; Christopher Allcock, Nottingham; James Affleck, Ayr; Richard Young, Lanarkshire; Arthur Wellesley Roche, Cork; John M'Carthy, Cork; William Dyson Wood, Wakefield; Thomas Bennett Kehoe, Cork; Joshua Hayes, Cork; Edward Godfrey Purcell, Limerick; William Henry Clarke, Birmingham; Robert Lawson Tait, Edinburgh; Daniel Bradley, Dudley; Richard Mortimer, Cork; Edgar Gailey, Annan; Robert Stewart, Perthshire; Finlay M'Dougall, Argyleshire; William Benjamin Griffith, County Mayo.

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**Royal College of Surgeons, Edinburgh.**—The following gentlemen passed their Final Examinations, and were admitted Licentiates of the College during the April and May sittings of the Examiners:—

James Nichol Cox, Dumfriesshire; John Wilson Moir, Musselburgh; John Rhind, Cheshire; John Antoine Palanque, Windsor; Wm. Skene, Helensburg; Hugh Brown, Lanarkshire; Robert Ayre Smith, Monkwearmouth; George Gray, Newry; Chas. M'Caskie, Edinburgh; Joseph Wood, Northumberland; Joseph Lindsay, County Antrim.

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**Royal College of Surgeons of England.**—The following gentlemen, having undergone the necessary Examinations for the Diploma, were admitted Members of the College at a meeting of the Court of Examiners on the 10th inst., viz.:—

George Thomas Hawkins, L.S.A., Clapham; Arthur Bisdall Fluder, Lymington; and Alfred Harwood, Cambridge, students of Guy's Hospital. William Henry Moore, Liverpool; Edward Cleaver Maxwell, Barnstaple; and Henry Sedgwick, St. John's-street, of St. Bartholomew's Hospital. Wentworth Raynes Tindale, Peckham-rye; and James William George Farwell, St. Martins, near Liskard, of St. George's Hospital. Charles Arthur Bush, Bath; and David Edward Bernard, Bath, of Bristol. George William Mousley, Atherstone, Warwickshire; and James Sawyer, Birmingham, of Birmingham. Adam Perry Newman, M.B. Dub., Cork; and Jeremiah McCarthy, London Hospital, of Dublin. Richard Cresswell, Lewisham; and Reginald Bligh Wall, Bayswater, of St. Mary's Hospital. Richard Holt Robinson, Manchester, of King's College. John Maude Whitwell, Kendal, of the University College Hospital. Arthur Waller, Milner-square, of St. Thomas's Hospital. William M'Donald, M.D., Edinburgh; and Thomas Dealtry Atkins, Calcutta, of Edinburgh; and John Deardent Bush, Newcastle-on-Tyne.

At the same meeting of the Court of Examiners, Mr. Robert Atkinson, of H.M.S. *Prince Consort*, passed his examination for Naval Surgeon; this gentleman had previously been admitted a Member of the College, his Diploma of Membership bearing date April 17, 1854. It is stated that out of the 76 candidates who offered themselves for examination, 13 failed to acquit themselves to the satisfaction of the Court, and were consequently referred back to their Hospital studies for six months.

The following gentlemen passed their Primary Examinations in Anatomy and Physiology at a meeting of the Court of Examiners on the 15th inst., and when eligible will be admitted to the Pass Examination:—

William Jebson Stothard, George William Smith, David Owen Fountaine, and Frederick Knowles, students of Guy's Hospital. Owen Thomas Evans, John Williams Pring, and Benjamin Franklin, of Dublin. Edward Lawrie and C. H. Denny Bobbs, of Edinburgh. Charles Henry Lister and Frederick Edwin Vernède, of University College. Edward Bray Pellow and J. H. Wilkie Ridley, of Newcastle. Thomas Henry Lovegrove and George Charles Coles, of St. George's Hospital. George Ridley Millis, of King's College. David Johnston, of Belfast. John James Fraser, of Manchester; and Edward Cruikshank Malloch, of M'Gill University, Toronto.

It is stated that out of the 33 candidates who offered themselves for examination, no less than 14 failed to acquit themselves to the satisfaction of the Court of Examiners, and were consequently referred back to their anatomical studies for three months. The next Pass Examination takes place this day.

**Apothecaries' Hall.**—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, May 10, 1866:—

Owen Evans, Pandy Trefrin, near Conway, N.W.; Frederick Howse, Alexander-road, Kilburn-park; Froderic Charles Mudd, West Pallant, Chichester; George Lucas, Burwell, Cambridge; Thomas Baron, Ulceby, Lincolnshire; Alfred John Leggatt, William-street, Lowndes-square.

### APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

**Cousins**, W. J., M.D., has been appointed one of the Medical Officers for the Royal Portsmouth Hospital.

**Elliott**, **Ernest**, M.D.Aber., M.R.C.S.E., has been appointed one of the Honorary Medical Officers to the Royal Portsmouth, Gosport, and Portsea Hospital.

**Hardin**, W., L.Q.C.P.I., has been appointed one of the Medical Officers of the Royal Portsmouth Hospital.

**Pollock**, A. J., M.D., has been appointed Physician to the Foundling Hospital.

**Shuttleworth**, G. E., B.A.Lond., M.R.C.S.E., has been elected Resident Medical Officer to the Kilburn, Maida-vale, and St. John's Wood Dispensary.

**Smith**, W., M.R.C.S.E., has been appointed House-Surgeon to the West London Hospital.

### BIRTHS.

**Beith.**—On May 10, at the Royal Naval Hospital, Plymouth, the wife of R. Beith, M.D., Deputy Inspector-General of Hospitals, of a son.

**Cregeen.**—On May 15, at Upper Brent Cottage, Blackheath-hill, the wife of J. J. Cregeen, M.D., of a daughter.

**Fegen.**—On May 7, at 20, Tamar-terrace, Stoke, Devonport, the wife of W. B. Fegen, Staff-Surgeon R.N., H.M.S. *Impregnable*, of a son, stillborn.

**McBridge.**—On April 22, at Newry, the wife of Dr. A. McBridge, of a son.

**Munro.**—On May 11, at Kinross, the wife of R. Munro, L.F.P.S.Glas., of a daughter.

**Murray.**—On the 4th inst., at Newgate-street, Newcastle, the wife of John C. Murray, of a daughter.

**Stainstreet.**—On May 13, at 3, St. James's-terrace, Malahide, the wife of R. Stainstreet, M.D., of a son.

**Woad.**—On May 9, at Ashton-under-Lyne, the wife of Herbert Woad, M.R.C.S., of a son.

**Yelf.**—On May 12, at Moreton-in-Marsh, the wife of L. K. Yelf, of a son.

### MARRIAGES.

**Watson—Bewley.**—On April 26, at Monkstown Church, W. T. Watson, M.R.C.S.I., to Isabella, second daughter of W. Bewley, Esq., of Illerton Killiney, Co. Dublin.

### DEATHS.

**Allanson**, J., M.R.C.S., at Watford, on May 4, aged 63.

**Alexander**, J. T., M.R.C.S.Edin., at 2, Church-hill, Morningside, Edinburgh, on May 13.

**Brabant**, R. H., M.D., at Marlborough-buildings, Bath, on May 13, aged 85.

**Harvey**, W. H., M.D., at Torquay (Professor of Botany in the University, Dublin), on May 15, aged 55.

**Pim**, T., M.D., of Castledermot, Co. Kildare, on April 14, aged 60.

**Smith**, S., M.R.C.S.E., at Ardres, France (formerly Surgeon to the Forces of His Majesty George III.), on May 15, in the 92nd year of his age.

**Stevens**, J., L.R.C.P.Edin., at 26, Bloomsbury-square, on May 16, in the 47th year of his age.

## POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

### RESIGNATIONS.

*Croydon Union.*—Mr. Albert has resigned the Fourth District; area 2130; population 13,200; salary £100 per annum.

*Hastings Union.*—Mr. Henry E. Herbert has resigned the Third District; area 8144; population 1552; salary £40 per annum.

*Knaresborough Union.*—Mr. Joseph Frobisher has resigned the Harrogate District; area 18,069; population 6669; salary £35 per annum.

*Warwick Union.*—Mr. H. Blenkinsop has resigned the Workhouse; salary £64 per annum.

### APPOINTMENTS.

*Bosmere and Claydon Union.*—Henry O. Rowland, M.R.C.S.E., L.S.A., L.M., to the Claydon District.

*Driffield Union.*—Samuel N. Harrison, L.R.C.P.Edin., M.R.C.S.E., to the Kilham District.

*Godstone Union.*—Charles R. Thompson, M.R.C.S.E., L.S.A., to the Eastern District.

*Haslingden Union.*—William J. Stott, L.R.C.P.Edin., M.R.C.S.E., L.M., to the Haslingden District and the Workhouse.

*Thirsk Union.*—John C. Robinson, L.R.C.P.Edin., M.R.C.S.E., L.M., to the Kilburn District.

*Weymouth Union.*—Joseph Carruthers, M.R.C.S.E., L.S.A., L.R.C.Edin., to the Portland District.

**The Levée.**—At a levée held on Saturday at St. James's Palace, by his Royal Highness the Prince of Wales on behalf of Her Majesty, the following presentations took place:—Dr. Arbuckle, Inspector-General of Hospitals, Her Majesty's Bombay Army, by Secretary of State for India; Surgeon-Major W. C. Coles, M.D., by the Secretary of State for India; Staff-Assistant-Surgeon J. d'Altera, by the Adjutant-General; Dr. Mouat, Inspector-General of Prisons, Bengal, by the Secretary of State for India; Surgeon J. B. Scriven, Bengal Army, by the Secretary of State for India. The following gentlemen attended the Levée:—Drs. J. R. L. Dickson, Langdon Down, Watson, Scott, John Forbes, J. Balfour Cockburn, R.E., George Owen Rees, Ruttledge, Baines, and Alexander Marsden; Deputy-Inspector-General Graves; Messrs. Spencer Wells, Haynes Walton, Oscar Clayton, Cæsar Hawkins, and James Paget.

**The** cholera in the quarantine at New York is said to have assumed a mild form, and to be gradually disappearing.

**Charlotte Winsor**, the child murderess, has had her sentence commuted to penal servitude for life.

**The** Acclimatisation Society of Great Britain and the Ornithological Society of London have amalgamated. The first general meeting of the united Societies was held on Monday, in the council room of the Royal Horticultural Society, South Kensington.

**The Pharmaceutical Society** gave a most admirable *conversazione* on Tuesday evening, at their house in Bloomsbury-square. The guests were received by the venerable President, Mr. Morson, and Mr. Hills, representative of the chief founder of the Society, and then were ushered into spacious apartments filled with all that is new and wonderful in chemical and physical apparatus and natural history specimens. Amongst the last we must speak in terms of admiration of the collection of exotic plants, and still more of the herbaria, and especially the collections of ferns and seaweeds exhibited on the walls. A lecture by Dr. Thudichum on Parasitic Diseases of Animals gave a practical finish to a very agreeable evening's hospitality.

**The** following are the last week's Cattle Plague Returns.

| Census Divisions. | 1. Attacked. | | | 2. Result of reported Cases from the Commencement of the disease. | | | | |
|---|---|---|---|---|---|---|---|---|
| | Week ending May 5. | Week ending April 28. | Week ending April 21. | Attacked. | Killed. | Died. | Recovered. | Unaccounted for. |
| 1. Metropolis . . | 14 | 47 | 26 | 7951 | 3470 | 3711 | 817 | 453 |
| 2. South Eastern Co. . | .. | 1 | .. | 4858 | 1681 | 2587 | 464 | 171 |
| 3. South Midland Co. | 242 | 818 | 347 | 19818 | 7459 | 9956 | 1543 | 575 |
| 4. Eastern Counties . . | 74 | 92 | 120 | 10972 | 5049 | 4799 | 770 | 354 |
| 5. South Western Co. | 1 | — | 3 | 1699 | 614 | 805 | 1208 | 72 |
| 6. West Midland Co. . | 275 | 357 | 360 | 13666 | 5060 | 6320 | 1470 | 816 |
| 7. North Midland Co. | 483 | 608 | 546 | 16847 | 8910 | 6196 | 1179 | 562 |
| 8. North Western Co. | 541 | 818 | 684 | 60363 | 14461 | 34575 | 6638 | 4689 |
| 9. Yorkshire . . | 203 | 203 | 304 | 33905 | 7287 | 18335 | 5920 | 2363 |
| 10. Northern Counties. | 110 | 191 | 16 | 8164 | 4504 | 2556 | 961 | 143 |
| 11. Monmouthshire & Wales . . | 37 | 88 | 172 | 8012 | 679 | 5784 | 1050 | 299 |
| 12. Scotland . . | 77 | 107 | 104 | 45879 | 6143 | 27144 | 10583 | 2009 |
| | 2007 | 2765 | 2823 | 221694 | 65497 | 122716 | 31103 | 12806 |

*Note.*—11 Inspectors who reported cases last week have not reported in time for this return—viz., for the county of Cambridge, 1; Chester, 3; Huntingdon, 1; Leicester, 1; Middlesex (extra Metropolis), 1; Norfolk, 1; Nottingham, 1; North Riding of York, 1; and the Metropolis, 1. These inspectors returned 80 cases last week.

**Remarkable Suicide(?).**—Mr. Humphreys, the Middlesex Coroner, held an inquiry on Thursday, May 10, touching the death of a woman whose name is unknown. Inspector W. H. Maskell said that the deceased had fastened a piece of string round her neck. She had evidently held with her left hand the end of the twine against the left side of her neck, while with her right hand she had wound the twine eighteen times round her neck. Every time that she had twisted the string round her throat she had pulled it tight. When found, the remains of the ball of twine were in her right hand. On the ground near her lay a black velvet bonnet, which she had evidently taken off in order that it might not be in the way. The deceased was about 35 years of age. Mr. George Yarrow, M.R.C.S., deposed that he found on the body of the deceased various marks of violence. The jury returned a verdict—"That the deceased woman unknown was found dead, and that the cause of her death was strangulation; but how, or under what circumstances she became strangled, there is no evidence to show."—*Express.*

**Criminal Abortion.**—At Clerkenwell, on Saturday, May 12, Helen Forester, described as a nurse, and her daughter, Caroline Forester, were placed at the bar before Mr. D'Eyncourt, on remand, on the charge of having caused the death of Mrs. Henry Slowman, aged 35, by means of abortion. Dr. Brown said that since the last examination Mrs. Slowman had died. Before her death she made a statement to him and Dr. Walker, in which she described what had taken place. Evidence having been given that the cause of death was the attempt to procure abortion, Mr. D'Eyncourt committed the elder prisoner, who is about 60 years of age, to take her trial for wilful murder, and the younger prisoner as an accessory after the fact.

**New Surrey County Hospital at Guildford.**—The building stands on a terrace on the eastern slope of the Hog's Back, overlooking the town, from which it is distant little more than a furlong; it covers, together with outbuildings, a plot of two acres, enclosed in a low wall, and consists of a centre block and two wings facing N. and S., and running parallel to the high road to Farnham. It is built of Bargate stone with red brick dressings, and has a plain unpretending front. The general arrangement is on the Pavilion principle. The ground floor is designed for the "administration" and out-patients' departments only, and is an exact copy of the new Hospital at Aylesbury. The matron's and House-Surgeons' rooms, porter's room, store rooms, and board room fill the centre and left wing; the consulting rooms, dispensary, and out-patients' waiting room, with bath room, occupy the right wing. There is a small hall and spacious staircase in the centre, with corridors leading to the offices above-mentioned. The kitchen department is placed in a building in the rear of the centre block, with which it communicates by a corridor, and consists of the kitchen, scullery, bread room, servants' dining room, pantry, larder, etc. The stores for coal, beer, and wine are in the basement under the centre block. The first floor is devoted entirely to the in-patients, and is arranged in strict accordance with the plans laid down for small Hospitals by Miss Nightingale. There are two large wards, each occupying the whole of one wing, with small wards in the centre block, and the nurse's rooms placed between the large and small ward on each side, so as to command both. The large wards are 92 feet by 26 feet, and are 16 feet high, with opposite windows, five on each side, filling one-fourth of the wall space, and a large end window opening on to a balcony with a smaller one on each side of it. The number of beds in each is 21. At the further end of each long ward are two projections, or wings, one containing a lavatory and bath room, the other having a row of three water-closets with a lobby ventilated by opposite windows. These wards have fire-proof floors. At the entrance of each long ward is the nurse's room, with windows looking into ward on each side; opposite to it is the ward scullery, also having a window overlooking the ward. Two small wards on the north side of the corridor are intended for eye cases. There is another small ward which may be used as a recreation room, with a long window opening on to a balcony. A third corridor leads from the staircase to the floor over the kitchen department, in which is a small operating room, lighted by a skylight and two windows in the north wall, and on each side of it is a small ward with nurse's room. On the same corridor are the lift for raising coals from the basement, a closet with a shoot for dirty linen, a store closet, a scullery for the use of the operation wards and a watercloset. On the second floor, which is only over the centre block, are the sleeping rooms for nurses and servants. The roof of the long wards has an inner roof of deal, which was put in at the wish of Lord Onslow, who paid the cost of it, as well as giving the site for the building. The warming of the long wards is effected by three open fire-places in each ward, aided by air flues which are heated by the fire-places and discharge the warm air through openings on each side of the fires. The ventilation of these wards is chiefly dependent on the windows, but there are three large apertures in the ceiling over the gas burners which light the ward, leading into air shafts which are carried up by the side of the chimney flues, so that the heat thus communicated gives an ascensional force to the air within. The laundry is in a detached building in the rear, as far removed from the Hospital as the space would admit of. It consists of a ground floor, where the washing is performed with the assistance of the modern machines for washing and wringing, and of an upper storey where there is a drying-room and a mangle. A stable with one stall is built against the laundry. The dead house is also in the rear, and at an opposite corner of the enclosure. It contains a small receiving room and a post-mortem room, with the usual conveniences. Among the various gifts should be noticed that of Mr. G. Curling, of Cullum-street, City, who gave the drugs, all the dispensing appliances and fittings, in sufficient quantities for making a fair start. The architect is Mr. E. W. Lower, of Guildford.

## NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

The review of Trousseau's Lectures shall be inserted next week.

The remarks of Dr. Bushnan on Medical education and the functions of the Medical Council in the *Temple Bar* magazine for January are so good that we commend them heartily to our readers. We have had them for a long time "in the printer's hands" for publication, and we hope to make room for them next week.

G. Chaplin, 14, Poland-street, Oxford-street, manufactures the extension splints used at the Middlesex Hospital. The cost is from 8s. to 10s.

*Bath.*—Mr. Parkes will oblige us by sending an account of the means he employed in curing the 111 cases he mentions.

*A Candidate.*—The new regulations for the Fellowship of the College will not be published for a fortnight. Write to the Secretary.

Mr. Chattaway's successful case of operation for inguinal hernia performed with the aid of Dr. Richardson's anæsthetic spray, shall have early insertion.

### Testimonial to Mr. Griffin.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—May I ask for a prominent place in your journal for the annexed circular, which has been forwarded to every known subscriber to the Griffin Testimonial Fund? I am, &c.

145, Bishopsgate Without, May 12. Robert Fowler, M.D.

"*Griffin Testimonial.*

"Dear Sir,—The design for the above being nearly completed, I am desirous to receive from every individual subscriber to the fund a written intimation, as to whether it would be consistent with his desire and convenience to attend a banquet in London (say about 3 p.m. in the day) whereat to publicly present the Testimonial to Mr. Griffin.

"I would also respectfully ask each subscriber to forward me, at his earliest convenience, his *carte de visite*, having his designation, professional title, and (if a Poor-law Medical officer) the name of his Union plainly written on the back.

"I have reason to believe that it would be most agreeable to Mr. Griffin to additionally receive an appropriate album containing the photographs of his friends and admirers.

"Prompt attention to the above will greatly oblige.—Yours faithfully,

"Robert Fowler, Treasurer and Hon. Sec.

"145, Bishopsgate-street Without, London, May, 1866."

### Mr. Baker Brown on Epilepsy.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I believe I am only expressing the feeling of a vast majority of the Profession when I thank you for the review of Mr. Baker Brown's book in your number of the 5th instant. If the literature of which Dr. Marion Sims with his ethereal coitus, and Mr. Baker Brown with his declitorisation, have published typical specimens, grows fast, we may be sure that the admission of a Medical man to family confidence will be jealously guarded.

Putting moral considerations aside, I believe Mr. Brown's recommendations to be based on mistake. When the practices he alludes to prevail, the initial movement begins, not in the clitoris, but in the brain. History tells freely of the lust of eunuchs, who cannot be much subject to "peripheral irritation" when the emasculation has been, as it often is, complete. Mr. Brown's theory and practice would indicate excision of the tongue as the treatment in cases of voracious appetite.

Doubtless vicious habits exist among girls, and I fear to a greater extent than your reviewer seems to think; but they are to be conquered, when conquest is possible, by moral treatment, by watchfulness, by providing incessant occupation and amusement.

I can only say that I should be easily tempted to chastise any Medical man who ventured to catechise a daughter or a sister of mine on such a subject, and I venture to say that any jury would excite considerable "peripheral irritation" in the hero of the operation which has been gibbeted by Dr. West. I am, &c. M.D.

May 9.

### Erratum.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Observing in the *Times* of Saturday that my name, in the pass list of the College of Surgeons, is put down as being of the London Hospital, I beg to say it should be of St. Mary's Hospital. Would you kindly have it so inserted in your impression of next Saturday? It would thus run:—Wall, Reginald Bligh, Bayswater, St. Mary's Hospital.

I am, &c.

4, Bishop's-road, Bayswater, May 14. R. B

### Doctors' Cards.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—It is not uncommon for a Physician or Surgeon to give a card to a patient, in order to obtain for him admission to a Hospital, or to give a Hospital patient the address of some other doctor. I have done this many times. It has now and then dimly occurred to me that an improper use might be made of these cards, however innocently they might be given. A few days ago a Medical friend told me that a patient to whom he had given his card for some such purpose as I have just mentioned had used it in order to get a pair of boots. I was selfishly amused at this incident, but my friend—who, by the way, never shows a very great sense of the humorous—thought it no joke; nor was he sufficiently temperate to feel grateful to the rogue for being modestly satisfied with a pair of boots. I am quite sure the fellow might, with a little management and plausibility, have lived for weeks on the highly-respectable introduction the card of so reputable a householder as my esteemed friend is would give him. I had almost forgotten this little incident, which combines so much instruction and amusement, when this morning it was brought to my mind in a rather disagreeable way. I called on an "interesting case" of recovery from paralysis, which I had been permitted to see, with a Medical friend, in order to get a specimen of the patient's urine for examination. After thanking me very elaborately for what he was good enough to call my kindness to him during his illness, the man said that his sister, a lady's-maid in a family at the West-end, had given my card to her master, who was, he added significantly, a wealthy man. My card had been given to this patient merely to ensure the safe delivery of a bottle of urine. I then wished very heartily that, so far as the loss to myself would be in question, that he had used my card to get himself a pair of boots on my credit, instead of sending it out to spread my reputation. A thing like this is liable to cause much misunderstanding among Medical men. I dare say a good many would run the slight risk of misunderstanding rather than be obliged to pay for a pair of boots; I would rather lose the boots, for, from what I have seen of Medical squabbles, the disputes arise, not so much from mistakes, errors, and inadvertencies, as from the distortions and magnifyings that foolish and uncharitable people give to them. Nevertheless, as I am far from anxious to supply even the most interesting of my cases with boots on a large scale, and as I am more anxious still that my private card should not be carried by ladies'-maids with warm praises to their masters, I shall try to make less use of my cards; and I ask insertion of this letter as a warning to those who are in the habit of giving cards to patients. I am, &c.,

CARDIAC MURMUR.

### The Effects of Public Executions.

It appears to me that the framers of the new bill touching capital punishments have made a cardinal mistake in that clause of the proposed measure which recommends the execution of criminals within the walls of a prison, only to be witnessed by a select number of persons, who are to certify to the hanging. I have smoked a pipe with criminals who have been hanged in front of the old debtors' door of Newgate—boozed with them—congratulated Calcraft on his appearance, good health, and the like, among them all, including divers and sundry other characters; and I know that the fear—or dread, which is the same thing, I suppose—of appearing on the scaffold, and seeing the great multitude of people, and hearing the hum of many voices, strikes more terror into the mind of the criminal than the horror of strangulation. I have seen poor creatures—I won't say cajoled, but spoken kindly to by Sheriffs of London—spoken to by the reverend ordinary of the gaol in brotherly love, and then shaking hands all round—why, the doomed man was never in all his life in such gentle company before, and he looked happy, delighted. Fact! But when the cold bleak wind whistled down by St. Sepulchre's, with her doleful bell striking on the ear, in a minute or two to be shut for ever, the dramatic illusion of the "press-room," the sheriffs in their gold chains and "clear starched" ruffles, all disappeared—the culprits shiver and weep. A public execution is dreaded by these persons; and I write from personal observation in the prison, and on the gallows. The Earl of Malmesbury seems to hold the same opinion; he has been ill for some time now, but he came down to the House the night of the second reading, and strongly opposed the clause of the Bill referred to. His Lordship considered that a public and infamous death was highly calculated to have a deterrent influence on any one inclined to heinous crimes; and you are right, my noble Lord. To my utter surprise, Samuel Wilberforce, Bishop of Oxford—as knowing a Bishop as ever wore lawn sleeves, expressed himself as believing that private executions were regarded with greater horror and dread by the criminal classes than public ones. I am sure that this is a great mistake, and I have had more experience in that line than most "honest men."—*London Correspondent of the Perthshire Journal.*

COMMUNICATIONS have been received from—

R. ELLIS; ALPHA; APOTHECARIES' HALL; HARRY LEACH; E. WHITTLE, M.D.; ROYAL COLLEGE OF SURGEONS, EDINBURGH; J. CHISHOLM, M.D.; A. G. CHATTAWAY, M.D.; DR. FRASER; PROFESSOR HUXLEY; DR. MOXON; MR. SPENCER WELLS; MR. J. CHATTO; DR. CHOLMELEY; MR. J. HUTCHINSON.

BOOKS RECEIVED—

Laurence and Moon's Ophthalmic Surgery; Streatfeild's Lecture on Posterior Staphyloma; Atkinson's Elementary Treatise on Physics; The Eighteenth Annual Report of the Manchester Medico-Ethical Association; The Report of the Committee of the Cheshire Lunatic Asylum.

## VITAL STATISTICS OF LONDON.

*Week ending Saturday, May* 12, 1866.

### BIRTHS.

Births of Boys, 1076; Girls, 1012; Total, 2088.
Average of 10 corresponding weeks, 1856-65, 1823·8.

### DEATHS.

| | Males. | Females. | Total. |
|---|---|---|---|
| Deaths during the week .. .. .. | 819 | 809 | 1628 |
| Average of the ten years 1856-65 .. .. | 595·2 | 591·1 | 1186·3 |
| Average corrected to increased population.. | .. | .. | 1305 |
| Deaths of people above 90 .. .. .. | .. | .. | .. |

## DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

| | Population, 1861. | Small pox. | Measles. | Scarlatina. | Diphtheria. | Whooping-cough. | Typhus. | Diarrhœa. |
|---|---|---|---|---|---|---|---|---|
| West .. | 463,388 | 3 | 9 | 2 | — | 18 | 9 | 1 |
| North .. | 618,210 | 6 | 12 | 10 | 1 | 27 | 17 | 4 |
| Central .. | 378,058 | — | 5 | 3 | 1 | 13 | 10 | 1 |
| East .. | 571,158 | 8 | 15 | 7 | — | 26 | 15 | 5 |
| South .. | 778,175 | 7 | 23 | 8 | — | 29 | 9 | 4 |
| Total .. | 2,808,989 | 24 | 64 | 30 | 2 | 113 | 60 | 15 |

## BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, May 12, 1866, in the following large Towns:—

| Boroughs, etc. | Estimated Population in middle of the Year 1866. | Persons to an Acre. (1866.) | Births Registered during the week ending May 12. | Deaths. | | Temperature of Air (Fahr.) | | | Rain Fall. | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Corrected Average Weekly Number.* | Registered during the week ending May 12. | Highest during the Week. | Lowest during the Week. | Weekly Mean of the Mean Daily Values. | In Inches. | In Tons per Acre. |
| London (Metropolis) | 3067536 | 39·3 | 2088 | 1400 | 1628 | 66·6 | 41·2 | 51·7 | 0·50 | 51 |
| Bristol (City) . . | 163680 | 34·9 | 110 | 73 | ‡103 | 63·0 | 39·3 | 50·3 | 0·64 | 65 |
| Birmingham (Boro') | 335798 | 42·9 | 247 | 163 | 170 | 61·2 | 40·3 | 51·5 | 0·66 | 67 |
| Liverpool (Borough) | 484337 | 94·8 | 374 | 281 | 336 | 59·5 | 41·9 | 51·8 | 0·77 | 78 |
| Manchester (City) . | 358855 | 80·0 | 219 | 203 | ‡212 | 65·0 | 33·8 | 51·1 | 1·18 | 119 |
| Salford (Borough) . | 112904 | 21·8 | 63 | 57 | 71 | 60·4 | 32·1 | 48·5 | 1·31 | 132 |
| Sheffield (Borough) . | 218257 | 9·6 | 164 | 115 | 143 | 62·6 | 36·5 | 49·3 | 0·53 | 54 |
| Leeds (Borough) . | 228187 | 10·6 | 260 | 116 | 171 | 65·0 | 33·0 | 50·0 | 0·46 | 46 |
| Hull (Borough) . | 105233 | 29·5 | 81 | 49 | 57 | .. | .. | .. | .. | .. |
| Nwcastl-on-Tyne, do. | 122277 | 22·9 | 111 | 65 | 69 | 59·0 | 38·0 | 49·9 | 0·74 | 75 |
| Edinburgh (City) . | 175128 | 39·6 | 129 | 84 | 105 | 58·7 | 39·0 | 49·0 | 0·90 | 91 |
| Glasgow (City) . . | 432265 | 85·4 | 377 | 252 | 277 | 57·3 | 38·2 | 48·9 | 1·10 | 111 |
| Dublin (City and some suburbs) . | 318437 | 32·7 | 174 | †156 | 154 | 63·9 | 41·5 | 52·3 | 0·52 | 53 |
| Total of 13 large Towns . . . | 6122894 | 34·4 | 4397 | 3014 | 3496 | 66·6 | 32·1 | 50·3 | 0·78 | 79 |
| | | | | | Week ending May 5. | Week ending May 5. | | § | | |
| Vienna (City) . . | (1863)<br>560000 | .. | .. | .. | .. | .. | .. | .. | .. | .. |

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·777 in. The atmospheric pressure increased to 30·11 in. on Monday, and declined to 29·43 in. on Saturday.

The general direction of the wind was S.W. and W.

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[*] The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.

[†] Registration did not commence in Ireland till January 1, 1864; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in that city were the same as the averages of the rates in the other towns.

[‡] The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

[§] The mean temperature at Greenwich during the same week was 42·5°.

## APPOINTMENTS FOR THE WEEK.

### *May* 19. *Saturday* (*this day*).

*Operations* at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free Hospital, 1½ p.m.

ROYAL INSTITUTION, 3 p.m. Professor Huxley, "On Ethnology."

### 21. *Monday.*

*Operations* at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.

### 22. *Tuesday.*

*Operations* at Guy's, 1 p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; St. Peter's Hospital for Stone, 3 p.m.

ETHNOLOGICAL SOCIETY OF LONDON, 4 p.m. Anniversary.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8½ p.m. Mr. Gaskoin, "On Continued Syphilitic Inoculation."

### 23. *Wednesday.*

*Operations* at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m. Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.

### 24. *Thursday.*

*Operations* at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.

### 25. *Friday.*

*Operations*, Westminster Ophthalmic, 1½ p.m.

## BONUS YEAR—SPECIAL NOTICE.

# CLERICAL, MEDICAL, AND GENERAL LIFE ASSURANCE SOCIETY.

ESTABLISHED 1824.

The **Eighth Bonus** will be declared in January, 1867, and all With-Profit Policies in force on the 30th June, 1866, will participate, **so that Persons who complete such Assurances before June 30th next, will share in that Division, although one Premium only will have been paid.**

Tables of Rates, and Forms of Proposal, can be obtained of any of the Society's Agents, or of

13, St. James's-square, London, S.W. GEORGE CUTCLIFFE, Actuary and Secretary.

# THE PANCREATIC EMULSION,

## A NEW REMEDIAL AGENT.

Originated by **Dr. DOBELL**, Physician to the Royal Infirmary for Diseases of the Chest.

*Vide* THE LANCET, *Nov.* 11*th* and 18*th*.—"A third report of cases of consumption treated with Pancreatic Emulsion at the Royal Infirmary for Diseases of the Chest."

**This Preparation is now made on an extensive scale, and the Price is therefore considerably Reduced.**

N.B.—The TRUE PANCREATIC EMULSION has an acid reaction, and is readily miscible with water or milk. Preparations in IMITATION of it have an alkaline reaction, and are not miscible with water or milk.

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CHEMISTS TO HER MAJESTY THE QUEEN, HIS ROYAL HIGHNESS THE PRINCE OF WALES, HIS IMPERIAL MAJESTY NAPOLEON THE THIRD, AND HIS MAJESTY THE KING OF THE BELGIANS.

## HOOPER'S

# WATER BEDS AND CUSHIONS,

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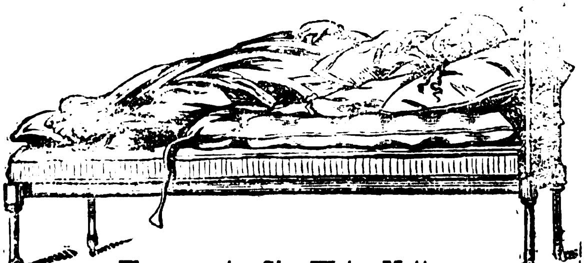
Full Length Water Mattress.
*In sending an order the Width of the Bedstead should be stated.*



Three-quarter Size Water Mattress.

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**HOOPER, Operative and Manufacturing Chemist, 7, Pall-mall East, and 55, Grosvenor-street, London.**

## GENERAL MEDICAL COUNCIL.

First Day, Thursday, May 17—*Continued.*

**Dr. Alexander Wood** rose to move, in pursuance of notice, "That when the sittings of the Council shall extend over a Saturday, the Council shall on that day assemble at 10 a.m. and adjourn at 1 p.m." He said the object of this proposal was sufficiently obvious. There was a certain portion of the Council who lived within a reasonable distance of London, and on the breaking up of their meeting on a Saturday could reach their homes and spend the evening with their families; but there were others who lived at a greater distance who were unable, in consequence of the lateness of the hour at which the Council rose to enjoy this privilege, and were obliged to remain in London over the Sunday. Seeing that the arrangement he proposed would let them free earlier in the day, and would not inconvenience those who resided in or near London, it would be a great boon to the members who lived at a distance from London. Under these circumstances, he did not think the Council would stand in the way of the proposal being carried out.

**Dr. Parkes** seconded the resolution.

**Sir D. J. Corrigan**, Bart., supported the motion.

**Mr. Cæsar H. Hawkins** said he intended to move an amendment, because he felt that Dr. Alexander Wood and the other gentlemen coming from the country could not be aware of the effect of the resolution. The Council were asked to sacrifice three of the most valuable hours of the whole twenty-four; and though he was sure the members living in London would gladly accommodate the country members as much as possible, still he did not think they were justified in giving up their Saturday sittings, for the proposition virtually amounted to that. They must consider that committees were appointed upon different questions, and those committees had to meet in the morning and prepare their reports for the general assembly, but they could not possibly do this and be prepared to meet the Council so early as 10 o'clock. He thought, therefore, he should be quite justified in proposing an amendment, which he trusted Dr. Alexander Wood would take as a kind of compliment, to show they were really desirous of meeting the views of those who came from the country. His amendment was, "That the hour of meeting of the Council shall be 1 p.m., and of adjournment 4 p.m., when the meetings shall take place on Saturdays."

**Dr. Quain** seconded this amendment.

**Mr. Syme** thought there were only three members who would be affected by the motion. He should be sorry to advocate any measure which would be inconvenient to any member of the Council, but considering that not a few—the majority—submitted to great inconvenience and pecuniary loss by coming to London, he did not think the proposition was unreasonable.

**Dr. A. Smith** called attention to the 3rd Section of the Standing Orders and Regulations, which provided that the Council should meet each day at 2 p.m. and sit till 6 p.m.

The **President** said he felt it his duty, as their President and as a defender of the public interests, to put before them what must necessarily be the consequences of this motion if it were carried. They ought to consider they were not a private club, or engaged in any private business for themselves, but they were really trustees for the Profession and the public, and were engaged on public business. They had representatives present of great interests, who had particular duties to perform; and therefore he did not think any alteration should be made in their mode of procedure or the time of meeting that would materially interfere with the performance of their public duties. He should not only oppose the resolution on personal grounds, but he thought it was his duty to oppose it in every way he possibly could—by argument, solicitation, and vote—and to beg that the Council would not accede to it. What would be the consequences of such a motion as this? In the first place, they had standing orders and regulations, which had been framed after very careful consideration, and which the Council hitherto had always been tenacious of adhering to. When it had sometimes happened that, through pressure of business, a member had been unable to bring forward a motion of which he had given notice, he had solicited the Council to have the meeting prolonged from 6 to 7 o'clock, or to meet at an earlier hour on the next day, but almost invariably the Council had determined they would not depart from the regular order of business. It was of the utmost importance that they should adhere to their stated hours of meeting and breaking up. It was of importance because it would ensure a more regular attendance of members of the Council. He could not at all agree with the observations which had fallen from Sir J. D. Corrigan, that the principal part of their work was confined to the two hours from 4 to 6. Any member of the Council must know that some of the most valuable and some of the hardest work—the work that was most highly appreciated—was done in Committee. It would often happen that the Council would not be able to go on with its business if the committees appointed had not met and brought forward their reports. In the business of that very day it had been proposed that a Committee should meet on the following day at 12 o'clock upon the subject of the Medical Amendment Act. It was impossible that Committee could get through their work in one day. If this measure were carried, the consequence would be that even the Committee which was to meet on the next day would not be able to meet again till Monday, and as the result of that this important question must be put on one side; for if the Council were to meet at 10 o'clock, how could the Committee prepare a report for their consideration? The result of the motion would be not merely to curtail the Council meeting one hour, but entirely to put aside all committees on a Saturday, as it was unreasonable to suppose a Committee would meet before 10 o'clock or after the Council had met. In the latter case it would be putting the cart before the horse, because the Committees were required to precede and not follow the Council. Therefore he begged them to seriously consider the question before they made up their mind to spend a half holiday on the Saturday. Moreover, it had been said that their present arrangement was a hardship, but he really did not think it could be regarded in that light. Whenever the Council had been assembled, if any member of it had had any pressing business, either private or public, there had never been any difficulty in his absenting himself on any particular day. If any one of them wished to go away in the course of the afternoon, he was entitled to ask permission of the President, and that permission was always freely granted. As their President, he felt bound to put these facts before them. Then he was reminded by the Registrar that if they were to have important business transacted on a Friday, and have that business carried on up to six o'clock, they could not get the Minutes printed and ready for the use of the Council by ten o'clock on the following morning. He protested against the motion, which would, in fact, so far from shortening, add one day to their session. A great deal had been said about the inconvenience to those who would like to go away from London on the Saturday; but when they had public business to transact they should not look to making half-holidays, and he did not think that was a reason which should be urged upon them to induce them to adopt this course. It had been said, and properly, that those members who came from a great distance had, no doubt, willingly accepted their appointment, and would accept the responsibilities. He had followed his predecessor's example in endeavouring to meet the wishes of the members who resided away from London. It was practically impossible those who resided in London could meet at the hour proposed. Out of the twenty-four hours there were three in which it was absolutely incumbent upon them to attend to practice in their own homes, and those three were from ten to one o'clock. Patients travelled by railway long journeys to consult their Professional Medical advisers in London between those hours, and therefore he did not think the convenience of the resident members ought to be disregarded, as it would be if the proposition were agreed to. He, therefore, recommended the Council to accept the compromise of Mr. Cæsar H. Hawkins to meet at one o'clock and separate at four, which would still enable the members who were anxious to go away to leave London earlier.

**Dr. Alexander Wood**, in reply, said he felt himself placed in an awkward position. He was sure that nothing but a perfect sense of duty would have compelled their President to take part in this discussion; at the same time, he (the President) must excuse him if he dealt with him the same as he should deal with any other member sitting round that table. He thought the latter part of the President's speech was an answer to the commencement. He first laid down most strictly that they were engaged in the performance of great public duties, with the discharge of which no private considerations should interfere—that they were present to discharge those duties to the Profession and the country to the best of their ability, and that none of them had a right to come there and plead his private convenience and interests as an argument for interfering with the arrangement which had been laid down to regulate their proceedings; and yet what appeared to him to be the most powerful part of the President's speech was when, in conclusion, he appealed to them not to drag away the metropolitan Practitioners from their private duties in order that they might attend to their public duties. Their being continually present at the Council had such an effect upon them as to render it practically impossible for them to discharge their labours properly towards the end of the sittings. Many of them suffered from the constant and incessant sedentary occupation, and from breathing an atmosphere they were not accustomed to, when their sessions extended over a Saturday; and he simply proposed that they should have an opportunity of leaving London until Monday, when they would meet again. He did not think that was too much to ask. If his proposal were carried out, it would be a great boon to those who lived within a short distance of London, such as the representatives of Oxford and Cambridge. It was, of course, a painful thing to interfere with the Professional duties of any class, but he wished to ask whether two hours in one day, or two at the most, during the session was too much for their friends in London to sacrifice for the convenience of those living at a distance? The House of Commons, for example, did not sit in perpetual session from Monday to Saturday. With reference to the compromise proposed, he did not think that was sufficient. He would rather go on with the existing system, for if they were to sit till four o'clock the boon was not worth their acceptance. The President had told them that in case of imperative duties necessitating their absence they might go to him, and ask for leave of absence; but he, for one, should not like to ask him, and he did not think any member of the Council would do so. As regarded the committees not being able to meet, he thought there should be one day in which their labours might cease, inasmuch as the constant working from ten in the morning till six at night had a very bad effect upon them, and it would be very much to their advantage if they had one day in the week in which no committee sat.

The amendment was then put and carried by 11 to 6. It was accordingly put as a substantive motion and agreed to.

Dr. Storrar moved "That the motion which has been just carried be inserted in the standing orders."

The motion was seconded by Dr. Embleton and agreed to.

The next business was with respect to the reports from the Branch Councils for the visitation of examinations.

Dr. Paget said that with respect to these visitations of examinations, he should like to draw attention to the fact that since the last meeting of the General Council, reports had been made by certain licensing bodies in accordance with the resolution passed on April 12, 1865, which required that those licensing bodies which had not already done so, should be requested to furnish a statement of the dates of their examination—whether they were written, oral, or practical examinations, and the length of time the candidate was under examination in all these ways; and that the Registrar should transmit these reports to the members of the Council, in order that they might be taken into consideration at the next meeting of the several Branch Councils. Accordingly, these reports had been got in by the Registrar and printed; but they did not appear in any way upon the Minutes. He would ask the Council whether it would not be proper that these reports should be entered on the minutes, or put in some form, so that they could be cited?

The Registrar: We have them all printed except two, which came in since; all could be printed if desired.

Dr. Stokes wished to know whether the reports from the English, Irish, and Scottish Branch Bodies respecting the examinations would be read now or not?

Dr. Sharpey thought they had better be printed and circulated amongst the members.

The Registrar said the report from Scotland had already been printed for the use of the members.

The President: It will be desirable that the Registrar read the resolution of the General Council of last year; there seems to be some misunderstanding as to the special and general reports.

The Registrar read the resolution as follows:—"That each of the Branch Councils, or such of the members as may be deputed by their Councils, shall from time to time visit the examinations, preliminary as well as special, conducted by a qualified body in the respective divisions of the United Kingdom, and report the result of their observations to the General Council."

The President: Now, we have to request the several Branch Councils to communicate to this Council the result of their examination. Some one must move that the Branch Councils be asked to do this.

Dr. Alexander Wood called attention to a resolution (page 293 of 3rd volume of Minutes) of April 16, 1865, which required the Councils either to visit the examinations themselves or depute certain of the members to do it. But to whom was the Report to be made? He thought that if the Branch Councils paid a visit of examination they had to report to the General Council, and if the Branch Councils deputed certain members to do it, then these members stood in place of the Branch Councils, and these members must make the Report. He did not think that the Branch Councils had any power whatever to intervene between the members they deputed to visit and the General Council, but the Report must be made direct by those visitors.

The President: The Council must decide that question—that is not the interpretation put upon it by the Executive Committee of the English Branch Council.

Dr. Alexander Wood: I should like some of those who take this view to read an extract which in the slightest degree warrants such a view. The resolution is in page 293 of the 3rd volume of Minutes.

The Registrar: The original resolution is in page 165.

Dr. Sharpey said it was a small matter. It was competent for a Branch Council to originate any report respecting these general Reports. The object was to have them sent on. The Branch Councils could hand in any Reports of their own.

Dr. Alexander Wood did not suppose that this Council would object to receive any Report from any English Branch Council; but what they were insisting upon was, that they should receive direct the reports of those gentlemen deputed by the English Branch Councils to visit the examinations.

After one or two further observations,

The President said: We have a matter before us, which is, "That the Reports be entered on the Minutes which have been received from the licensing bodies, in accordance with the resolution of the General Council, passed on April 12, 1865, viz.: That those licensing bodies which have not already done so be requested to furnish a statement of the dates of their examinations and of the mode in which such examinations are conducted—whether by written, oral, or practical examination; and of the length of time a candidate is under examination in each or all of these ways; and that the Registrar transmit these Reports to the members of the Council, in order that they may be taken into consideration at the next meeting of the several Branch Councils." (Minutes General Council, vol. 3, p. 237).

This motion was then moved by Dr. A. Smith, seconded by Dr. Paget, and agreed to.

The President: I have this motion handed in by Dr. Alexander Wood, and seconded by Mr. Hargrave,—"That the reports from the Branch Councils, and from the members of those Branch Councils deputed by them for the visitation of examinations, be printed and circulated; and that the business Committee be instructed to set apart an early day for their consideration."

Dr. Acland said he resolved to make a remark upon one matter on which he thought a little misapprehension existed. When the English Council were called together it was a distinct understanding (at least, he understood it so), that these reports should not be made public, but they would be handed in to the Branch Councils, and the Branch Councils would hand them in as they thought fit. Whether that was a good or a bad plan was another question, but certainly that was the understanding; and one of the reasons assigned for it was that there was a great want of uniformity in the reports which were drawn up—some were elaborated and some short.

Dr. Alexander Wood said that at the last meeting a committee was appointed; that committee made a report and the report was agreed to; and if any one wanted the reports to be private, that was the proper time to suggest it. He did not think any Branch Councils had power to come to such an understanding upon the question. He did not think that any Branch Council could say there was anything to be kept back. The General Council had issued definite instructions and they ought to be obeyed.

Dr. **Storrar** understood that the Branch Councils were to make reports to the General Council. The reports from the Branch Councils would be presented, and by all means let the Council have the original reports; but he entreated Dr. Wood not to bring anything in the way of a charge against the Branch Councils of a desire to omit anything they ought to do.

Dr. **Alexander Wood** assured Dr. Storrar that he did not, in any degree, mean to bring any charge.

The motion was put to the meeting and agreed to.

The Council then adjourned.

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### Second Day.—Friday, May 18.

The Council met at 2 o'clock.

The names of the members having been called, the minutes of proceedings at the meeting on the preceding day were read by the Registrar (Dr. Francis Hawkins) and confirmed.

The **President** said the first business on the programme was the consideration of the Report of the Committee on the subjects of General Education deferred from last session. (Minutes of General Council for April 15, 1865, vol. 3, pp. 285-6.) He thought it would be better if that Report were read first of all.

The **Registrar** read the Report, which was as follows:—

"The Committee on the subjects of General Education having duly considered the subject remitted to them, resolve to recommend to the Council—That after the year 1867 the examinations in subjects of general education be left entirely to the National Educational Bodies recognised by the Medical Council—the Council confining its regulations on general education to publishing a list of the examinations which may from time to time be approved of by them; it being understood that no certificate which does not affirm the proficiency of the candidate in Latin, and also his knowledge of the elements of geometry, and of the elements of mechanics and hydrostatics, be accepted.—W. **Stokes**, Chairman."

Dr. **Stokes** suggested whether it would not be advisable to defer the consideration of this Report for a day or two. When the reports of the visitants of examinations were before them they would be in a better position to discuss it.

Dr. **Andrew Wood** said he rose to make a motion upon this subject, which was brought before them on the last day of the last meeting of the Council. The motion which had been made, by which this Committee was constituted, was for a most important purpose, that purpose being no other than the laying down of some curriculum of subjects, in which all candidates for diplomas or degrees should be examined before the commencement of Professional study. He must confess, and re-state what he stated last year, that he was greatly disappointed by the Report which was presented to them on a subject so important and extensive, and the more so because, as Dr. Stokes had said, the preliminary education of those that were to enter upon the Medical Profession was, if anything, of more consequence to be regulated by the action of this Council than even the Professional education.

Dr. **Stokes** rose to a point of order. He did not know there was any question before the Chair.

Dr. **Andrew Wood** said he was going to move that this Report be recommitted. He thought he was quite in order in doing that.

The **President** remarked that he thought it better the Report should be read to the Council before it was considered by them. It had been read; and having been read, he asked the Council if any member had any motion to make upon the subject.

Dr. **Stokes** said he thought it better the consideration of the Report should be postponed till the following day.

Dr. **Andrew Wood** rose and said he had a motion to make in reference to it; and, of course, that being the case, they must hear what he had to say.

Dr. **Stokes** said that if Dr. Andrew Wood moved the consideration of the Report be deferred, he should move an amendment upon it.

It was arranged that Dr. **Stokes** should move first in the matter, and he accordingly proposed, and Dr. **Paget** seconded —"That the Report of the Committee on General Education be considered on Saturday, May 19."

Dr. **Andrew Wood** said he would then move an amendment, which was to the effect that the Report of this Committee be recommitted to the Committee, with instructions to them to take under their consideration the very important document which had been prepared, as was stated yesterday by the Registrar in this Council, entitled "Preliminary Examinations in Arts," with replies, in which were given, in a most admirable form, all the different examinations which were now recognised by the General Medical Council. His reason for moving this was that he thought that they were entitled to a full report upon this most important question before discussing it. He held that in this matter they had done very much like putting the cart before the horse. They had first recognised the examinations of some eighteen different national bodies as preliminary examinations. They seemed to be taken at random, because, when he looked at the requirements of these different examinations, he found they differed very much both in their matter and in their quantity. What would have appeared to him a much more rational mode of proceeding would have been for them to have laid down what they considered the proper minimum curriculum of preliminary education, and then, looking at the different bodies presented to them and claiming admission, to have said, "All those that come up to that, or go beyond it, shall be recognised by this Council." He made bold to say, and he recollected his friend Dr. Paget saying the same thing last year, that there were some of the examinations which were recognised at this moment by the Medical Council as examinations by national educational bodies which came infinitely short of the requirements they considered necessary for their Profession—which came infinitely short also of those instituted by many of the licensing bodies who were held to be only capable in a secondary measure to superintend this important matter. When he looked at the examination required by the body which he had the honour to represent, he found that the examination was much fuller than the examinations conducted by these National Educational Bodies whose examinations had been so highly lauded and recommended to them to supersede their own examinations. He, for one, did not think they would be prepared, as a body, to part with the power of examining in preliminary education until the bodies that were recognised as National Educational Bodies had gone beyond their requirements, or at least come up to them. Now, it appeared to him it would be greatly for the edification and the good of the Council if this report should be sent back to the Committee, that the Committee should take into their consideration this most important and circumstantial document, and then that they should come forward with such a report as should enable the Council to discuss the several questions, one question being whether they should lay down any minimum curriculum of examination for Medical students; and the second question would be whether, having laid down that curriculum and seen exactly what bodies came up to it, they might not greatly amend the list they had at present. They might be met with the proposition that this matter should be left entirely to the National Educational Bodies. (Hear, hear.) He was quite prepared to leave it to those National Educational Bodies when they should have so improved that they came up to the full requirements of that Council for the Medical Profession, but not till then; and therefore he trusted the Council would agree to the amendment he now submitted, that the matter be recommitted, and that the document entitled "Preliminary Examinations in Arts recognised by the General Medical Council" be placed before them, and then the Committee would be in a position to give them a full and circumstantial report upon this matter, and then they would be able to discuss, and he hoped to settle, this important question. They had been going on for some years, and they had never yet laid down this curriculum of Professional study; but it was quite time they should do so, and if they were to begin to do it they should begin at the beginning—the preliminary educational examination of those who were to enter into the Profession. He then moved an amendment in the following terms:—"That the report of the Committee on General Education be recommitted, and that the Committee be instructed to take into consideration and report upon the examinations in general education at present conducted by the various National Educational and other Bodies recognised by the General Medical Council."

Dr. **Parkes** seconded the amendment.

Dr. **Storrar** said he hardly thought this was an amendment upon Dr. Stokes's motion. He could support both, and he thought the Council might support them both with very great advantage. Dr. Stokes had contemplated what he was not previously aware of,—that certain of the reports upon education would contain information as to the perfect or imperfect manner in which the present system of Arts examinations were conducted. If so, then such reports would be most proper to come under the consideration of the preliminary or Arts Education Committee. He looked with considerable favour upon Dr. Andrew Wood's amendment. He thought the time had come when this Council might very properly lay down more precise expressions of opinion as to the importance of subjects which should constitute the Arts curriculum of men entering the Medical Profession. In the year 1859 Dr. Andrew Wood and himself held very strong views upon this subject. They felt it was highly desirable they should mark down with some degree of precision the various subjects, whether compulsory or optional, on which the preliminary attainments of students entering the Profession should be tested. A very strong pressure was put upon them by Dr. Acland, who at that time was very much engaged, and he must say meritoriously engaged, in presenting the scheme which had been adopted by the Universities of Oxford and Cambridge for the purpose of testing the general education of the Profession. The line taken up by himself and friends was this,—"Do not let us do anything which will indicate an interference with the general education of young men in the country; let us fairly accept the tests that have been prescribed by the existing bodies. The Universities will not be content with this; let us not prescribe any special or particular subject, but let us be satisfied to receive from young men desiring to enter our Profession a certificate of having passed the examination of one of those public bodies." That was the view they propounded at that time. He felt that now, in 1866, after a lapse of seven years, they might fairly advance a step further. He did not think that all the arrangements for preliminary examinations had been carried out with the vigour or rigour which he thought the importance of the Medical Profession required; at the same time, it must be admitted that upon the whole they had made some progress, and that the importance of preliminary education was now largely acknowledged, and acknowledged, in fact, to that extent that he believed the prevailing opinion was that if they were confined to the pointing out of one single blot, to the exclusion of all others, the effacing of which blot would be most important for the improvement of Medical education, that blot would be the insufficiency of the examinations. Now, entertaining these views very strongly, he would invite the members of the Council to join him in supporting Dr. Andrew Wood's amendment, which simply amounted to this,—that the time had arrived, after a lapse of seven years, when they might fairly take the whole machinery into consideration, and judge whether they had not arrived at that point when they might come to some decision upon the subject.

Dr. **Alexander Wood** thought it was incorrect to suppose the Committee existed at the present time.

The **President** said he was quite aware of that, and he had communicated his opinion to Dr. Stokes, that at the present moment no Committee existed. If Dr. Andrew Wood's amendment were adopted, they would have to appoint a committee.

Dr. **Paget** said his only objection to Dr. Andrew Wood's amendment was, that it seemed likely to defer the full consideration of this matter to a late day in the session, and if Dr. Andrew Wood had named an early day for the full discussion of it, he should gladly have voted for his proposal; but, as last year the matter was referred over to the following year because it was before them late in the session, it might happen again this year, and that, he thought, should not be the case. Dr. Andrew Wood had mentioned that it was brought forward on the last day of the last session. That was not quite correct; it was the last day but two; but on that day even they were told it was too late to consider so important a question. Now, if this were to be referred to a committee, and the committee did not make their report very early indeed, they might be told again that as the day for its consideration might be likely to be the last but two, it would be too late this session. All he wished was an early day for its discussion; and if an early day for the consideration of it were fixed, he should certainly vote for the appointment of a committee. With regard to the report of last year, he did not think it was justly disparaged at all. The Committee consisted of Dr. Stokes (the Chairman), Mr. Arnott, Dr. Acland, Dr. Storrar, Dr. Thomson, Dr. Apjohn, and Dr. Quain; and that Committee, consisting of persons very well qualified to consider this matter, was unanimous in its report, and it was unanimous for one reason, because the members of it wished to make a moderate report—a report so moderate in its requirements that it could be carried into effect without any violent opposition. It was substantially in two parts; and Dr. Stokes moved the adoption of the first part in order that it might be considered independently, and the second part was not discussed generally by the Council; but Dr. Acland made some remarks disparaging the latter part of the report, which was this: "It being understood that any certificate which testified to affirm the proficiency of the candidate in Latin, and also his knowledge of the elements of geometry, and the elements of mechanics and hydrostatics, be accepted;" subjects without which the examination could not be considered satisfactory. He remembered that when Dr. Andrew Wood disparaged that, he did make a remark which he (Dr. Wood) had referred to, though not quite correctly. What he said on that occasion was, that there was not sufficient ground for disparaging this part of the report; because one at least of the examinations which the Council already recognised, was inferior in its requirements to what the Committee recommended in their report. He did not use any words so eloquent as "infinitely short." He said it fell short of the requirements; nor did he use any such expression as that it fell infinitely short of what was required by the preliminary examinations for conducting preliminary education by the licensing body; and for a good reason he did not make that remark, because he didn't think—and he believed the Council generally did not know—what the examinations of this licensing body were. (Hear, hear.) If he had known, he might have added one or two to the list of examinations, which had fallen actually short of what was represented by the Committee, and which was disparaged by Dr. Andrew Wood.

Dr. **Stokes** expressed his willingness to accept the amendment, provided an early day was appointed for the discussion of the subject.

Dr. **Andrew Wood** said that would depend upon the Committee. If they would be ready by Monday, he should be willing to consider the report then. Would that do?

Dr. **Stokes** then withdrew his motion, and the proposition of Dr. Andrew Wood stood as the original motion.

Dr. **Acland** wished to say a few words in reference to what fell from Dr. Storrar. He referred to the history of this matter. It was hardly worth while to go into the history of it, but at the same time there were several members of the Council who did not join in the discussion which took place, extending over five days, and ending in a unanimous vote, with one exception, of the Council, to refer the educational examinations to the National Educational bodies, that being the real fact of the case. He would venture to draw the attention of the Council to that, because he was sure Dr. Storrar would agree with him that not one word said by him (Dr. Acland) at that elaborate discussion, advocated in any way the interest of the Universities or middle class or local examinations, or any other sort. He, amongst others, said that the wisest thing to do at the commencement of the institution of this body was to take the verdict of those gentlemen, but what was it he did afterwards? If they would refer to page 99 of the Minutes, vol. iii., May 7, 1864, they would find, he then ventured to say, that the time had come when the principle of *quis custodiet custodes* might be very properly inquired into; and he then moved that a committee of this Council be appointed to draw up a report to the Council in the ensuing year, giving them ample time for their work, as to what were the subjects of examinations which should be required by all students prior to their prescribed course of Professional study, because they would see it might be a very proper thing that they should form their own judgment upon these systems, and see whether they agreed in their judgment or not. Now, he believed, though he was not quite sure, that Dr. Andrew Wood was in the majority which drew up that recommendation. He (Dr. Acland) did not think it could have been more completely done, as he then proposed a committee be appointed to draw up a report, seriously and considerately, during the interval between the two Councils, but this was then considered to be an obstructive movement, whereas it turned out it was a movement just the reverse, because if it had been carried out in the last year they would have had an elaborate report—eight months being allowed to the Committee to draw it up in, and they would not only have had this list, but a full discussion of the whole question of the Professional course of study. Most of them had given their attention to this matter. There was a great difference in the opinions which persons held as to what subjects would be required in a preliminary Arts examination, and what should be referred to the second, and so forth. He therefore, having proposed this very matter two years ago, was quite ready to join heartily in it now. It was of the utmost consequence that this should be done without delay, but he had great doubts whether a report such as would be satisfactory to the Council could really be drawn up in two or three days during the session. It would be exceedingly facilitated by the documents presented by the Registrar. He should support Dr. Andrew Wood's proposal, on the understanding that it came forward at once, and that all could be done during the two or three days should be done. As to the extreme value of the question, he entertained no more doubt now than he did two years ago.

Mr. RUMSEY said he should be sorry to appear an obstructive in any way on this occasion, although some of the considerations thrown out by Dr. Acland were of such great importance that he could not avoid pressing them upon the Council again. He did not see how such an important question as the determination of the subjects for the curriculum for pre-Professional education could possibly be settled by a committee appointed in the continuance of a session, and acting and reporting during that session. It seemed to him to be a work of such gravity, involving so many questions of deep interest in regard to the training of the human mind in those branches of education which were required to enable persons to belong to this learned Profession, that he hoped before they proceeded to the appointment of a committee, which was to report in a day or two, the Council would fairly consider whether any such report was likely to be worth their receiving. He would not underrate the great power of mind possessed by the majority of the members of the Council, but he conceived a subject so vast would be sufficient to appal men to have committed to them to decide and report upon in a few days. He confessed his entire disbelief in the possibility of framing a report worthy of their reception within that period, and therefore he asked that before any such report be presented a long and full examination of this question be granted, that a comparison of the various subjects to be included, and the amount of qualification on each, might be fairly considered.

The PRESIDENT reminded Mr. Rumsey that they were considering the Report at the present moment. The Report from the Committee of last year was to be re-committed.

Mr. RUMSEY wished to say that he did not believe any report returned by this Council within the present session could be such as they would act upon. He contended that this ought to be the work of a small body of thoroughly qualified men acting within the interval between the sessions, and on that ground he supported the principle laid down by Dr. Acland in 1864, though he would not make any motion to that effect at the present time.

Dr. ALEXANDER WOOD was astonished, he said, at this time of day to hear such remarks as those just expressed. There were three courses open to the Council in reference to the matter before them. The first was that the Council itself should take up the subject and deal with it; the second, that the Council should appoint a committee to deal with it; and the third, that the Council should take up the Report of the committee already existing, and deal with that. The natural course of proceeding would be to take up the Report of the Committee previously appointed. Dr. Andrew Wood very properly remonstrated with them against pursuing that course, because the Report itself was of so meagre a character, intimating that from the information that had since come into their possession it was impossible for them to do full justice to the subject by taking up that Report; and accordingly he proposed that the said Committee, in whom the Council had perfect confidence, with their increased means of information, should reconsider the question, and bring before them an amended and full report; and he indicated very generally the nature of the report that might be expected. If that impression should prevail universally in the Council, what would be the result of it? This was the twelfth meeting of the General Council, and they had never yet faced the subject of what preliminary education should be; and there were many gentlemen sitting at that table who would come forward now and ask them again to postpone the consideration of it. And why, forsooth? That it might be considered by a Committee during the interval between the sessions. Had they any faith in a Committee doing that? Did they not know what the lamentable proceedings of such Committees generally were? Having plenty of time before them, postponement after postponement took place, till the Council meeting was close at hand, and then there was perhaps a hurried meeting and a report, which very likely would not be so well digested as one considered by a Committee during the sitting of the Council. This was the first time he had heard that the Committee, which had been constantly in the habit of preparing very important business for the Council, had not done their duty. It was the first time he had heard the Committee told they could not digest the business sufficiently for discussion in this Council. They had been sitting for little purpose during the previous sessions of the Council if those Committees which they had from time to time been in the habit of appointing had not properly considered and discussed the business. The fact was, the real business was done in the Committees. It was in the Committees that the subjects were thoroughly sifted or digested for discussion in the Council, and there was no reason to doubt these Committees. There was no special difficulty about the subject of preliminary education which would require them to deal with it in a different manner from that in which they dealt with any one of the grave questions that had come before them since the Council commenced its sessions. He thought it was a subject which they had all been considering for years; and if they had not been considering it for years they had no right to sit at that table. (Hear, hear.) He held there was not a single man upon the Council who was not disposed to bring his mind to bear upon this subject in Committee, and therefore he did not think it would take long to bring up a first report—a report which would be subject to revision at every meeting of the Council. For this reason, he opposed the obstructive proceeding which would stave this matter off till another session, and gave his cordial support to the proposition.

Mr. CÆSAR HAWKINS said the Report before them contained two points, one of which was very important, and would, he thought, require a great deal more consideration than could be given to it in the short time proposed. The second point, as to what should be the proper subject for the preliminary examination, seemed more easy. That was one thing for this Council to determine, but the other was much more important. If the Council would allow him, he would draw their attention to one subject which he thought had not received sufficient attention from them—namely, the difficulty of determining what body should be recognised by this Council for the preliminary examination. It appeared to him they had not sufficiently called to their assistance the different licensing bodies, as they might be termed. Long before this Council had formed any list of examinations, the body he belonged to had drawn up a resolution, that, after a certain date, every candidate should go through a preliminary examination. They said that in the latter part of 1858, and the moment this Council was appointed they felt this would be one of the first subjects they would have to take up, and the body to which he belonged immediately formed that resolution. Of course, as soon as they did that, it was necessary for them to communicate with all those schools and bodies throughout the world with which they were in communication, and inquire of them what means they had for instituting examinations to satisfy the College of Surgeons of England that they were sufficient for this purpose. And when the recommendation of this Council was first sent round, this was the answer the body he belonged to sent, that they had agreed to receive, as sufficient evidence of the preliminary examinations of those bodies, testimonials of all the educational bodies enumerated in the third recommendation of the Council; but they had also recognised testimonials from several bodies not enumerated in the recommendations, and this list was sent to this Council, and they also said that they had some other applications, chiefly from the colonies, which were under the consideration of the College. Their recognitions included twelve additional bodies, which were not put down in the list of this Council; but this was no want of respect to the Council, because it was begun before they sent out their recommendations, and they were willing to unite in assisting this Council in forming proper rules that might be recognised. The College of Physicians of England had done something of the same kind. He found on the Minutes that on one occasion three educational bodies were sent to this Council as having been recognised by the College of Physicians, but he could not find that any attention had ever been paid to that subject, although he had searched the Minutes for that purpose. He thought, therefore, that when the Committee were endeavouring to settle the subject they should form the minimum of education, they should also take into consideration the examinations of the bodies which were in their own list, and not put down in the *resumé* drawn up by the Registrar; and they should inquire into the examinations recognised by the different licensing bodies to see if these examinations were equivalent to what they required by their own recommendations. It was of importance to get uniformity between the list of this Council and the lists of the different educational bodies, that they might all agree not only as to the subjects of examination, but also as to the bodies that should be recognised. He thought the Committee should take that into consideration, and inquire of the different licensing bodies what educational bodies had been recognised by them.

Mr. Rumsey rose to protest against two accusations that had been made against him. The first was to the effect that he wished to obstruct the business of the Council. He believed the suggestions he made were ——

The President said he could not permit Mr. Rumsey to argue the point. He might explain.

Mr. Rumsey then remarked that the second point was that the Committee would not meet to discuss the subject until just before the Council met. That was a matter of opinion, and he had a precedent for proposing such a course of action in the Pharmacopœia Committee, which sat during the intervals of the session.

Dr. Parkes thought the Report should be referred back to a committee, as all the bodies enumerated on page 297 were not alluded to in this paper on the Preliminary Examinations in Arts. If the Committee had time to do so, he thought it would be desirable to have before them the examinations of other bodies not enumerated on page 297, to see if the list could not be extended. With regard to the minimum which had been laid down by the Committee, he thought it virtually excluded several of the bodies referred to in the list, and therefore it would be necessary for the Committee seriously to consider whether they could enforce that minimum, or what should be the exact standard laid down. The Royal College of Surgeons of Edinburgh demanded a really good preliminary examination in general education, although under the head of "compulsory," there were only three subjects, but two of the "optional" subjects were really compulsory.

Sir D. J. Corrigan said that before the resolution was put he wished to move an amendment. He had been acting on the Committee of Education for many years, and he thought that the Council, after having passed twelve sittings, had come back to the point from which they started, without the slightest prospect, in his mind, of coming to a conclusion. What he was about to propose might perhaps be embodied in the resolution, or, if that were rejected, he should propose it as a distinct amendment. In the original report by Dr. Stokes there was one element of discord which must come out and occupy them for days—namely, that the different licensing bodies in the Profession should altogether give up their right to preliminary examinations. Therefore, in recommitting the Report, there would be an element of discord which would again, in his mind, revive a discussion which would not terminate at the end of this Session. They had been for eight years upon this subject; and he cordially agreed with Dr. Andrew Wood that the time had now come when they should lay down what they conceived to be the minimum of education. There was not a member of the Council who would come there on Monday, Tuesday, or Wednesday with one atom of knowledge more than he possessed at the present moment. He had no objection to the subject being referred back to a committee; but he wished there should be an expression of opinion from the Council as to what they expected that committee to recommend. Dr. Alexander Wood had said that the Committees laboured. He (Sir D. J. Corrigan) knew that as well as most men on the Board. But how did they get on after they had laboured for three years? They recommended certificates of examination to be received as a guarantee of the proficiency of a student desirous of entering their Profession without that examination including Latin and Greek. Were they to go back to that? He said plainly, the time had come for giving an expression of opinion on the part of this Council as to what ought to be the minimum; and with that view he begged to propose an amendment, or, if Dr. Andrew Wood coincided, it could be embodied in his resolution, that this Report on the subject of preliminary examination be referred to a committee. His amendment was this:—"That, after the year 1867, no certificate of examination in subjects of general education be recognised which does not include Latin and Greek, also a knowledge of the elements of geometry, and of the elements of mechanics and hydrostatics; and that a list of the examining national educational bodies authorised to conduct such examinations, and recognised by the General Medical Council, be published from year to year." Now, he should take the sense of the General Medical Council as to this amendment. The only thing he had put in, in addition to the recommendation of Dr. Stokes, was simply Greek; and he must say that, although he had been beaten two or three times on this point, he thought a student who came into their Profession without a knowledge of Greek was utterly incompetent. Were they to continue to get such answers from students as they got now? He remembered on one occasion a candidate being asked what physiology was; and after some hesitation he said he thought it was a fungus. (Laughter.) Could any student take up an English book on almost any subject, or go into botany and zoology, without a knowledge of Greek? And yet it stood in the face of this Council that they did not think it necessary for students to know Greek.

Dr. Leet seconded the amendment.

Dr. Andrew Wood said he had no objection to incorporate Sir D. J. Corrigan's proposal with his resolution. It was hardly an amendment to the motion.

Dr. Alexander Wood said it was a sort of *ὕστερον πρότερον*, if he might quote Greek on this occasion, after the remarks of Sir D. J. Corrigan.

Dr. Paget thought the essence of what Sir D. J. Corrigan proposed was that Greek should be one of the subjects, and he sincerely hoped the time would come when it would be possible for the Council to insist upon that; and if he were a member of the Council at that time he would heartily support it. But he believed that at the present time it was not possible to insist upon a knowledge of Greek before entering upon the Medical Profession. To give Sir J. D. Corrigan some information on this point, he found in the Report of the Board of Examiners on the examinations of candidates for Medical commissions in the Royal Navy in 1860, page 160, paragraph 6, the examiners said, "We regret to have to report that in a very large number of cases indeed the candidates displayed a lamentable ignorance of Latin." Therefore he thought at the present time what the Council had to insist upon was, first, a knowledge of Latin, which was generally regarded as a stepping-stone to Greek. And he might just call attention to the fact that amongst the candidates at the examination to which he had referred there was one who had the double qualification of Licentiate of the Royal College of Surgeons of Ireland, and Licentiate of the Apothecaries' Hall, Dublin, and that gentleman was utterly ignorant of Latin grammar; so that he thought it would be better for them to insist upon Latin before Greek, though he quite agreed that Greek was a very desirable thing for students to be acquainted with.

Dr. Alexander Wood thought a committee should be appointed to quietly and calmly consider the subject, and report to the Council three or four days hence. The first question for them to consider was not whether they were to insist upon Greek, but whether the matter was to be digested by a committee and then brought before the Council. If he voted against Sir D. J. Corrigan's amendment, he protested against being held to be averse to teaching Greek.

Dr. Apjohn supported the amendment.

Dr. Storrar wished before the resolution was put to guard himself against its being supposed that if he voted against the amendment he was putting his veto upon Greek. For the last fifteen months he had been engaged on a commission of inquiry into the state of the public schools in this country, and there was one conclusion he had arrived at, which was this, that the amount of bad education in the country was infinitely greater than he had the least conception of when he ventured to hold up his hand in favour of certain subjects of general education. And from that he concluded that if they, in 1867, required that which was utterly impossible to get, they would not only not get Greek, but they would not get other things. What they wanted to institute was sound education. (Hear, hear.) If it were really necessary, let them begin with English alone, and then proceed from that to Latin. English and Latin, he thought, they could get, and also the elements of mathematics. It was a question in his mind whether, considering the great importance of French to Professional men, that might not be more important than Greek, particularly when they came to consider that at the present time they had a chance of getting French when they had no chance of getting Greek. Therefore, he earnestly desired that Sir D. J. Corrigan would not press his view now, but leave the subject to the consideration of the Committee; and then, should their report be insufficient to satisfy Sir D. Corrigan, he might bring forward his proposition. The Committee might report that, after a certain date, they found it expedient to admit Greek; and if it did not contain that expression, it would then be time for Sir D. J. Corrigan to bring forward his motion.

Mr. **Rumsey** also suggested that Sir D. J. Corrigan should defer his motion till the Committee made their report.

Sir D. J. **Corrigan** said he had no objection to withdraw his amendment, with the understanding that he could bring it forward again if he thought proper after the Committee had brought up their report.

The amendment was accordingly withdrawn, and the original motion was put and agreed to.

The following committee was then appointed:—Dr. Stokes (chairman), Mr. Hawkins, Dr. Acland, Dr. Paget, Dr. Storrar, Dr. Fleming, Dr. Thompson, Dr. Apjohn, Sir D. J. Corrigan, Dr. Quain, and Dr. Parkes.

Mr. **Cæsar Hawkins** moved, "That it be an instruction to the Committee to extend their inquiry to the various examinations which are recognised in the several licensing bodies as sufficient for the examination of Medical students, and which are not included in the list of the Medical Council."

Dr. **Stokes** opposed this motion. All that the Council had to do was to express an opinion as to what ought to be the minimum of education required. They had nothing to do with the character of any body whatever. If they adopted the motion, it would be quite impossible to get through the work of the session.

Sir D. J. **Corrigan** concurred in what Dr. Stokes had said, that if this instruction were given to the Committee it would be impossible to get through the work of the session. There was recognised by the Royal College of Surgeons in London the preliminary examination of the College in Ireland. As a member of the Branch Council in Ireland, he had for the last three months been endeavouring to find out what that preliminary examination was, but had never been able to do so nor to tell what the subjects were; and yet that examination was recognised by the College of Surgeons of England, although it was not one of the bodies recognised by the General Medical Council. He thought this ought to be stopped, and that candidates for examination ought not to receive a certificate of efficiency unless the examination was recognised by the General Medical Council. They knew nothing about the examination, nor had they been able to obtain any information. If that information were supplied to them they would be most happy to receive it, but he thought that the motion now before the meeting would stop the whole proceedings.

Mr. **Hawkins** said that the College of Belfast was established in 1861, before the list was established by the Medical Council. All the Universities, such as at Glasgow, St. Andrews, Aberdeen, and the various Canadian and Indian Universities satisfied the College of Surgeons that their examinations were equal to those of the minimum of the Council.

The motion made by Mr. C. Hawkins was not seconded, and therefore was not put; and Sir D. J. Corrigan's amendment having been withdrawn, the original motion was put to the vote and carried.

The **Registrar** next stated that, in compliance with a resolution of the Council, he had addressed a communication to the Director-General of the Army Medical Department, thanking him for the returns with which he had favoured them of the results of the examinations held in 1864 of candidates for Medical commissions in the army, accompanied by a copy of the regulations for the admission of candidates, and a list of the questions proposed by the examiners. At the same time he applied for similar returns with regard to the Indian service, and requested that in future return columns might be attached similar to those in the returns relative to the examination of candidates for Medical commissions in the Royal Navy, so as to specify in similar detail the number of candidates, and the heads under which the candidates failed to answer. To that communication he had received the following reply:—

"Army Medical Department, November 21, 1865.

"Sir,—In reply to your letter of the 20th April last, requesting to be furnished with a return, on the form which you enclosed, showing the different licenses of the candidates for commissions in the Army Medical Department, and the subjects in which the unsuccessful ones were deficient, I am directed by the Secretary of State for War to inform you, for the information of the Council, that, as a return made on the form required, would have the effect of allowing the unsuccessful candidates to be identified, and thereby bringing upon them individually a stigma which they never supposed, on presenting themselves for examination, they would be called upon to incur, the request contained in the last paragraph of your letter cannot be complied with.

"I am to add that the usual returns hitherto furnished will be continued.

"I have the honour to be, Sir, your obedient servant,
"J. B. Gibson, Director-General."

Sir D. J. **Corrigan** thought the returns, as they were furnished, were worthless, inasmuch as they did not give the necessary information. He would not like to do anything that would be at all disrespectful to the Director-General, but for all their purposes the returns were quite insufficient. No information was given as to the licensing bodies, or the bodies who rejected the students.

Dr. **Parkes** moved—"That the communications from the Director-General of the Army Medical Department be entered on the Minutes, and that the Registrar be directed to apply to the Director-General for the returns promised in these letters." It was not for him to defend the Secretary of State or the Director-General for having decided that it would be undesirable to furnish the information which had been applied for, but he would observe that the Director-General had furnished the returns precisely as they were originally asked for, and as they were then considered to be satisfactory by Dr. Apjohn, he thought they might still be taken to be so.

Dr. A. **Smith** said the additions which the Navy had made to their returns had never been anticipated by the Council. The Director-General of the Army Department had not departed from the original form suggested by Dr. Apjohn, and it appeared that the Navy Board were wrong in giving that general information.

Dr. **Andrew Wood** seconded the motion for placing the correspondence on the Minutes. He thought it very desirable indeed that the public should know precisely what they had applied for to the Director-General of the Army Medical Department, and also the reason why those returns were not furnished. The Council had done all they could in getting information, and he thought that the communication ought to appear upon the Minutes, for the sake of giving publicity to what the Council wished. He also hoped that application would at once be made to the Director-General, so that the information might be presented to them and placed upon the Minutes immediately.

The motion was carried unanimously.

The **Registrar** then read a communication from the Director-General of the Medical Department of the Navy containing information as to the candidates who had presented themselves during 1865 for examination. The number of candidates was twenty-one, of whom twelve were successful, and of these, five passed good, two moderately good, and five indifferent examinations. The majority of those rejected were utterly ignorant of the Latin language, two failed altogether in anatomy and Surgery, and two more were so ignorant of Materia Medica that it would have been dangerous to have passed them as qualified. The inspectors regretted that so much ignorance of Latin should have been displayed by a large proportion of candidates, and expressed their sorrow that many of the manuscripts sent in had given evidence of such an ignorance of orthography and of the most ordinary rules of English grammar and composition as could hardly have been credited in members of a liberal Profession.

Dr. **Paget** moved, Dr. **Stokes** seconded, the following resolution, which was carried unanimously:—"That the thanks of the Council be returned to the Director-General of the Medical Department of the Navy, for his valuable communication relative to the examinations of candidates for Medical commissions in the Navy."

The **Registrar** read a communication from the Under-Secretary of State for War, relating to a resolution passed by the Medical Council, to the effect that they were of opinion that initials indicating the several Medical qualifications which Army Surgeons possessed should be inserted after their names, without distinction or preference to one degree or licence over another, each Surgeon, when he possessed more than one Medical qualification, having only one appended to his name. The Secretary of State wished to know the opinion of the Council as to the particular initials which should be used to designate the several Medical qualifications described in the table appended to the Medical Act, and for which abbreviations were therein laid down.

On the motion of Sir D. J. **Corrigan**, seconded by Dr. **Sharpey**, the following resolution was, after a few remarks, unanimously carried:—"That the communication from the Under-Secretary of State for War be entered on the minutes, and that it be referred for consideration to a Committee, consisting of the following:—Sir D. J. Corrigan (Chairman), Dr. Alexander Wood, and Dr. Embleton."

A letter addressed to the Registrar by Dr. Mackesy, President of the Irish Medical Association, was next read, and also a resolution adopted at a Medical meeting held at the Limerick Junction, stating that in the opinion of the Association the Medical Council had not properly performed all its functions with reference to preliminary education.

Dr. PAGET proposed and Dr. UPJOHN seconded, the following resolution:—"That the letter from Dr. Mackesy, and the resolution of the meeting of Medical Practitioners at Limerick Junction, be entered on the Minutes and referred to the Committee on General Education."

Mr. SYME objected to the letter being entered on the Minutes.

Dr. ALEXANDER WOOD said that if the gentleman who wrote the letter and the gentleman who sent the resolution were respectable members of the Profession, they could not refuse to enter the letter and the resolution on their Minutes, and he thought the least they could do would be to refer it to the Committee.

Mr. RUMSEY thought that Dr. Mackesy's communication was entitled to their most respectful attention. He was the President of the Royal College of Surgeons of Ireland, and was a man who was looked up to by that learned body as their President; therefore he had every reason to be treated with all due respect by the Council. The resolution accompanying the letter had been passed after very careful deliberation by the body assembled, who considered that the Council had not fulfilled the functions which it was intended to fulfil. They did not take the matter up in an impertinent spirit, but in a spirit of free inquiry; and he therefore hoped that every consideration would be bestowed upon the memorial. He thought the matter did not touch the question of preliminary education, and he thought, therefore, that it should be referred to the Committee on Medical Education.

Dr. SHARPEY suggested that it should be stated on the Minutes that a letter was received and read, and that then the resolution should be added.

Sir D. J. CORRIGAN said the resolution gave only a one-sided view of the question, and if they did it in that way they would only be adopting the resolution of the Irish Association; and by the putting it on the Minutes without Dr. Mackesy's letter, they would be pleading guilty to the charges brought against them. The quotation in Dr. Mackesy's letter was from a letter of his (Sir D. J. Corrigan's) which he wrote in defence of the Council. A charge was brought against the Council, which was altogether unfounded. Dr. Mackesy's letter explained how this arose; and having found his error, and that the Council had not the power to do what the meeting thought they had, he now suggested that they should go to Parliament to get that power. A man who had acted in that way, and who had apologised for having led the Association into error, was entitled to their consideration and attention, and he therefore suggested that both the memorial and the letter should be inserted in the Minutes.

Dr. ANDREW WOOD said he thought that the Irish Medical Association had acted hardly respectfully to the Council in sending such a resolution. He recollected that the Medical Council was soundly rated and abused for their interpretation of the Medical Act. He had read the address which Dr. Mackesy delivered to the Association, and, as he thought they were entitled to receive the benefit of the advice which a man of high standing and position in the sister island gave them, he would read a brief passage from it. Dr. Mackesy said:—"The subject first in order, and most interesting to the Profession generally of the United Kingdom, has reference to the working of the Medical Act and the Medical Council, and it is with much reluctance and with deep regret I have to say that the Medical Profession have been sadly disappointed in the practical results of the enactments. I think I give expression to the general feeling of the Profession when I attribute our disappointment to the want of unanimity, action, and firmness on the part of the Medical Council in not having as yet, after the lapse of seven years, made due provision for the preliminary education of students intended for the Medical Profession. If Medicine is to maintain its claim to be ranked as one of the learned professions, and its professors are to hold that social status and position they should do, it is all important that young men, before they enter upon their Professional studies, should be well acquainted with general literature and well grounded in the classics. We have reason to complain, also, that the Council has not drawn up and enforced on the different Medical bodies empowered under their respective charters to examine and to grant licences and diplomas in Medicine and Surgery a uniform system of examination for the United Kingdom, that would accurately test the acquirements, the scientific and practical knowledge of the candidates, and thus prevent uneducated and incompetent persons from being legally qualified to practise Medicine and Surgery. That uneducated and incompetent persons have, unfortunately for the public and the Profession, obtained such qualifications, from the want of a stringent examination, has been abundantly proved by the examination of candidates for commissions in the Medical Department of the Army. All candidates must have a diploma in Medicine and a diploma in Surgery before being admitted to examination, and yet one-third of those competing, who were legally qualified in Medicine and Surgery, failed to obtain the minimum number of marks required in the preliminary examination to qualify them for admission into the service. The examination of candidates for the Medical Department of the Navy was still more discreditable, for some of those competing, also holding legal qualifications in Medicine and Surgery, were so ignorant of the Latin language that they could scarcely translate the Pharmacopœia from which they were expected to prescribe for their patients. Now, all this is anything but creditable to us as a learned body, and must tend to bring the Profession into public disrepute; and its explanation, I presume, is only to be found in the sharp competition that exists amongst the numerous licensing corporations for the fees paid on the diplomas of those they admit to Medical or Surgical practice; and the obvious course to be pursued in order to remedy such incompetency is to adopt a uniform curriculum and course of study by each and all of those bodies granting licenses or degrees, which should be fully enforced by the Medical Council, and, if required, by the Privy Council. A high standard of education in our Profession is the more required at the present time, when it is admitted that the application of Medical science to the health of the community is a matter of primary importance in the prevention of disease, by the removal or diminution of the causes tending to shorten the duration of human life." He hoped he had not tired the Council by reading this extract, but he thought the matter was one of great importance. Dr. Mackesy appeared to be a man of high education, who had a high standard of his own Profession, and he did trust that before the session closed they would be in a position to say that they had the means to prevent effectually illiterate students from entering the Profession by laying down, as they ought to have done long ago, a minimum curriculum of study in regard to preliminary education and by taking measures to see that that was carried out. He felt much indebted to Dr. Mackesy for the kind and gentlemanly manner in which he had written on the subject, but he could not help expressing his regret that the members of a liberal Profession meeting together as they did in Ireland should have spoken of the Council in a manner which was disrespectful to the Council and not creditable to themselves.

Dr. PARKES moved as an amendment, "That the Council pass on to the order of the day."

Mr. SYME seconded the amendment.

Sir D. J. CORRIGAN asked if this was a course consistent with the claims which the gentleman who sent the resolution had upon them. The resolution was passed at a meeting of 217 members of the Profession, who showed their great anxiety upon the matter by being present from all parts of the country. It certainly expressed, perhaps in strong language, what they felt; but he held that a letter coming from the President of one of the largest Associations in the United Kingdom, gathered from every part of Ireland, was entitled to some consideration.

Mr. HARGRAVE said the Association were perfectly justified in using strong language in expressing their anxiety upon this important matter, which was well worthy of the consideration of the Council.

The PRESIDENT said that a member of the Council had acknowledged himself to be the writer of a quotation which appeared in Dr. Mackesy's letter, and he certainly was surprised that any member of the Council, whatever might be his private opinion with regard to the Council in general, should have expressed such a strong opinion and to have published it to the world at large. It seemed to him to be a very strong expression of opinion with regard to the conduct of the Council and with regard to the conduct of the several licensing bodies which were represented in the Council. Although he thought that the opinion of Dr. Mackesy and other Practitioners was entitled to consideration, yet he thought it would not be right for it to be entered on the Minutes. The letter was a very severe criticism, but it was altogether incorrect. The Council had not done as much as they wished to do, nor as much as they ought to have done. They might properly refer the matter to the Committee of General Education, but he thought it would be improper for them to place it upon the Minutes.

Dr. Alexander Wood said he was utterly at a loss to understand the conduct of a member of the Council who had acted in the way in which Sir D. J. Corrigan said he had done. It was a very serious business when a gentleman sitting at the table furnished the materials for an attack upon the Council, but he felt sure it must have been done in ignorance. He did not speak in an unfriendly way of Sir D. Corrigan, for they would be very good friends as soon as they got to the door. He hoped the Council would always do what they thought to be right, and not care what was said about them out of doors; but it was a very different thing when a member of the Council, sitting at the table, and taking part in the discussions, dared to attribute motives to the members of the Council sitting round the table which were totally unworthy of them as gentlemen and as members of the bodies which they represented. He utterly disclaimed any selfish consideration on the part of any members of the Council, but they met there year after year simply to discharge their duty to their Profession, and he would appeal to every gentleman present how little selfish considerations for the bodies they represented had weighed with them when they were considering the interests of the Profession at large. He felt that the author of the quotation in the letter was bound to apologise to them, first for having written the letter, and secondly for having characterised it, as he had just done, as a defence of the Council.

Sir D. J. Corrigan said he believed that whenever in the course of a debate in the House of Commons any member was personally attacked he had the right to reply, and he claimed the same right now. His simple reply was that he endorsed every opinion, every syllable, and every letter of the quotation which had been read, and that those opinions had been repeated over and over again in the Council, and had gone out to the world through the public press. He had often alluded to the state of Medical competition, and there was nothing in the letter which he had not said over and over again at the meetings of the Council. He still adhered to everything which he had said, and he was quite surprised that the gentleman opposite should speak as he had done, especially as he was the representative of a body (the Royal College of Physicians of Edinburgh) who, just before that Council was called into existence, granted their licences without examination at ten guineas each.

Dr. Wood rose to order, but was overruled by the President.

Sir D. J. Corrigan repeated what he had stated, and said it would be within the recollection of every member of the the Council, and that students were entitled to registration without any examination at all. No one could contradict him in this. It really did occur, and he brought forward a resolution on the subject that no licences which were granted without examinations should be entered on the Register, but it was met at the time by an *ad misericordiam* argument by the man who now came forward and charged him with imputing wrong motives. Was there a man at the table who would not endorse what he said? He had a case in which he refused to give a certificate of recommendation for the Edinburgh licence to an incompetent man, and he was driven into a corner to give a reason why he acted so. He called the whole thing a battle of the shops, and he had not said so much in the letter as he had said there at the Council. He had no hope of a better state of things so long as the present disgraceful competition existed. He still affirmed that the letter was his.

Mr. Syme rose to move a vote of censure on Sir D. Corrigan, but the President said he could not then take another amendment.

Sir D. J. Corrigan hoped that no such insult would be offered to Dr. Mackesy, of the Association, as was involved in the carrying out of the amendment.

Dr. Parkes did not consider that the amendment could be regarded as an insult to Dr. Mackesy, inasmuch as the resolution would not have been passed by the Association had they been in possession of all the information.

Dr. Quain said he should be glad if the matter could be referred to the Committee.

Dr. Storrar said that even supposing the resolution was unsound, he thought that any person who would take the trouble to look into the matter would acknowledge that the Council was guiltless of neglect to the extent which the Association had attributed to it. There could be no doubt that the proper position of the Profession could best be maintained by raising the standard of education, and he should be glad for the resolution to appear upon the Minutes and be published, so that the members of the Profession might know what the real state of the case was.

Dr. Paget said he could not consent to the passing of the amendment that the Council should proceed to the order of the day, though he would willingly acquiesce in the letter and the resolution being referred to the Committee without being entered on the Minutes. It would not be respectful either to Dr. Mackesy or to the Irish Medical Association to pass the amendment.

The amendment was then put and negatived.

Dr. Acland moved, and Dr. Andrew Wood seconded, the following amendment:—"That the letter from Dr. Mackesy and the resolution of the meeting of Medical Practitioners at Limerick Junction be referred to the Committee on General Education."

Dr. Alexander Wood again objected to the conduct of Sir D. J. Corrigan, which he said was injurious both to the Council and to himself.

Sir D. J. Corrigan protested against a second attack being made upon him.

The amendment was put and carried by a majority of five, and was then carried as a substantive resolution.

The Council adjourned at six o'clock.

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### Third Day.—Saturday, May 19.

The Council re-assembled to-day at 1 o'clock, in accordance with the resolution passed on Thursday.

The minutes of the preceding meeting having been read and confirmed,

The Registrar said he had to request the Council to direct that the name of William Adams be restored to the Register, it having been omitted through an erroneous report of his death. The fact was his name appeared in the obituary of the *Lancet*, and the report of his death was, for some time, uncontradicted. A letter was sent to his address in accordance with the 14th section of the Medical Act, and no answer being returned for six months or more, and there being no suspicion of his being other than dead, his name was omitted from the Register. It seems he left the St. Ives where he had been residing, and nobody knew where he had gone to. Upon making inquiries it was discovered that he had been living in Stirling, and was now in the army. They had had his signature at the Royal College of Surgeons, so that there could be no reason why he should not be restored to the Register, if the Council would give direction to that effect.

Mr. Hargrave moved, and Mr. Cooper seconded—"That the name of William Adams be restored to the Register," which was agreed to.

The next business was to consider a petition from Mr. Richard Organ (received at the close of the last session).

It appeared that the name of Mr. Richard Organ had been erased from the Register in consequence of his misconduct. From the minutes of June 18th, 1860, which were read, it seemed that the petitioner and his solicitor were called before the Council, and the Chairman stated the charge against him in the following words:—"It is charged against you that you are not possessed of any qualification entitling you to registration under the Medical Act of 1858; that certain of the representations contained in your memorial to this Council, dated 12th January, 1859, are untrue; and that your name has been incorrectly placed on the Register; and, further, that you have been guilty of conduct infamous in a Professional respect, in attempting to obtain by fraudulent means a diploma from the Royal College of Physicians of Edinburgh." Resolutions in accordance with these charges were agreed to, and on June 19th, 1860, it was moved by Mr. Teale, and seconded by Dr. Alexander Wood, "That it having been proved to the satisfaction of the General Council that the entry of the name of Richard Organ has been fraudulently and incorrectly made on the Register, the General Council do by this order in writing direct that his name be erased from the Register."

The Minutes of the 18th June, 1860, also contained a letter from Mr. James Fluker, Mr. Organ's solicitor, addressed to the Registrar, which contained the following paragraph:—It is right I should also give notice that if his name should be wrongfully erased from the Register he will look to the Council for compensation for any damages which he may sustain therefrom, and take such proceedings for this purpose as he may be advised."

At the General Council on the 25th April, 1864, a letter was read from Mr. Organ desiring to be restored to the Register, when the Council declined to accede to his request.

In the present petition, dated April 15th, 1865, Mr. Richard Organ expressed contrition for past misconduct, and hoped the Council would take a merciful view of his case.

This petition with the various minutes of proceedings on the question having been read,

Dr. **Alexander Wood** moved that the petition be dismissed. He regretted exceedingly that the gentleman who originally moved that the name of Richard Organ be erased from the Register was not now a member of the Council, inasmuch as he was thoroughly familiar with the state of feeling which existed in regard to Mr. Organ in the district where he resided. He (Dr. Wood) did not propose this motion on personal grounds, but because he sat at that table representing the body against whom the fraud was committed, and for which Richard Organ deservedly suffered. If the offence had been a mere technical offence like Valentine's, a mere stating his age to be different from what it was, though he did not look upon that as a light offence, he should have been prepared to pardon it; but looking at the case as it was when it first came before this Council, he should be surprised indeed if a majority of those around that table should think the name of Richard Organ should ever be restored to the Register. Richard Organ wrote to the Royal College of Physicians of Edinburgh, requesting that he might be taken on examination for their diploma. A correspondence took place and a gentleman who called himself Mr. Richard Organ presented himself for examination. After coming to Edinburgh he was taken ill, and attended by the then Secretary or Registrar of the College of Physicians through a dangerous attack of pleurisy. He came up for examination in a very indifferent state of health, and was rejected. A short time afterwards a letter of inquiry was addressed to the Registrar of the College of Physicians as to whether he was sure it was really Richard Organ who presented himself, because the "Richard Organ" who was examined was in the habit of writing letters and posting them to a Richard Organ still resident in Yorkshire. This letter was put into the hands of the Procurator Fiscal, the Public Prosecutor for Scotland, who inquired into the case; and, having done so, told them that if they had passed this man he could have prosecuted both, but as it was, no prosecution could lie. It was discovered that Richard Organ had sent a man to personate him at the examination. More inquiry was then made into his Professional history, aud it was found he had already stood a trial for forgery at the York Assizes, and that from a technical error on the part of the prosecution the case was not proved against him. His whole previous character was anything but respectable. Under these circumstances the case came before this Council; and he (Dr. Wood) would recall to the attention of those who were present at the time, how a solicitor appeared at the Council with Richard Organ and bearded and insulted them, and told them what their duty was in this matter. He then dragged them before the Court of Queen's Bench, and did his utmost to assert his legal right and put them in the wrong, and though they gained the case, it put them to a great expense. After that he immediately associated himself with a partner in order that he might practise legally, this man being put forward as his stalking-horse; and he continued to practise, as far as he knew, till this day in the place where he originally settled. This was a question which ought not to be decided by certificates or testimonials, but upon its merits. In the next few days they would be engaged in laying down regulations for Medical education; but if this Council failed in keeping the Register as free as it could from names of dishonest men they could do but very little towards improving Medical education. He, therefore, begged to move that the petition be dismissed.

It was suggested by Dr. **Storrar** and Sir D. J. **Corrigan** whether Dr. Alexander Wood would not propose his resolution in this shape, "That on a review of the case of Richard Organ, the Council declines to accede to his petition."

Dr. **Alexander Wood** said he had no objection, and the resolution in this form was then put and agreed to.

A letter was then read from Dr. Steele, Registrar of the Branch Council for Ireland.

The **President** called attention to the fact that, according to their regulations, the applicant ought to apply to the Branch Council of Ireland, which had power to register students.

Dr. **Aquilla Smith** put the Council in possession of the facts of the case, but his remarks were inaudible to our reporter.

Sir D. J. **Corrigan** thought this question was a very difficult one, and directed the attention of the Council to the proceedings of the Scottish Branch of General Council of Medical Education and Registration of January 12, 1866, No. 37, paragraph 5, in which it was said, "The Registrar (Dr. Robertson) produced a register of Medical students, prepared in accordance with the recommendations of the General Medical Council, and with the instructions received from the Branch Council. He stated that only 68 students had made such applications as entitled them to registration, but that a large number of exceptional claims had been made, including the whole of the Medical students who, in November, 1865, had commenced their Professional studies in the Universities of Glasgow and Aberdeen." And in No. 38 of the proceedings of the Scottish Branch Council, January 26, 1866, a letter was read from the University of Glasgow, dated January 12, 1866, and signed "Thomas Moir, registrar," in which he said, "In transmitting to you the accompanying list, I am directed to state that as, according to the present regulations of the University of Glasgow, Medical students are in certain cases admitted to enter upon their Professional studies previously to their having passed an examination in general education, it has been thought expedient not to adopt the plan of registration recommended by the General Medical Council, and for which you sent the required printed forms, but in the meantime to transmit an authentic list of Medical students who have commenced their Professional studies at this University, and are in the first year of their attendance, with a statement as to whether or not they have passed an examination in general education."

Dr. **Andrew Wood** was extremely obliged to Sir Dominic Corrigan for bringing this matter forward, and he thought his colleagues on the Branch Council of Scotland would bear him out in saying that when this happened he raised his protest against it. He stated in strong words that he felt this ordinance of the Glasgow University was practically in defiance of the Medical Act and the Medical Council, and that unless some means could be taken for getting quit of such an ordinance, he for his part did not care how long he remained a member of the Council or how long the Medical Act remained in existence. But he did not think they were to sit down calmly and deliberately and say that they could do nothing and would do nothing. With regard to the University of Edinburgh, the Council had already done good there; and if they persevered and used the influence they ought to have, and which he trusted they should have, they would succeed in other quarters. He did justice to the Edinburgh University the more because it had been his fate to speak, not against the University itself, but against what he thought was impolitic in that University. He might mention that the University of Edinburgh—and Professor Syme would corroborate him—had applied to the Privy Council for power to put out some of their ordinances, that the Privy Council had granted them the power, and that, in that University at least, whatever might be done elsewhere, for the future no man would be allowed to commence his Professional studies until he had passed his preliminary examination. He was convinced that the influence exercised by the debates which had taken place in this Council had been the means of effecting this change. Now they were bound to go on. And if he held an opinion, as he did hold it—although it would not come well from him—with regard to what the Glasgow University had done on this occasion, he should feel himself bound—and he thought Sir Dominic Corrigan would feel himself bound—to move some resolution condemnatory of what had been done in that University, and condemnatory of what might be done in like manner in any other body whatsoever. He could come here with clean hands, and report that everything the Council had desired had been for some time carried out in the Edinburgh University, and they admitted no man for registration as a Medical student until he had passed his full and not a partial examination upon the subjects of general education. His great desire was to remove any stigma from Scotland, to render it utterly impossible that in any future meeting of this Council it should be truly stated there was anything done in Scotland which would savour in the slightest degree of any endeavour being made to wile away a student from any part of the kingdom by not enforcing regulations which were held to be paramount by other bodies in the country. He trusted Sir D. J. Corrigan would follow up his observations—in which he entirely concurred—with some resolution which would lead the Glasgow and Aberdeen Universities to adopt the same honourable step which had been adopted by the Edinburgh University, and bring themselves under the control of the Council, loyally and truly, as the other bodies had been doing of late years.

After a few words from Mr. **Syme**,

Mr. **Hawkins** said he viewed the report from the Scottish Branch Council with great astonishment, when he saw there were twenty-four different persons—eleven at Edinburgh, ten at Glasgow, and three at Aberdeen—who had not passed their preliminary examination, and were registered as if it had been quite in accordance with the rules of the Council. He was glad to hear that was no longer the case in the University of Edinburgh. The Royal College of Surgeons of England had, since 1861, fully carried out the instructions of this Council, and no one was now admitted to Professional study who had not previously passed his preliminary examination; but they had occasionally been subjected to this difficulty, that persons wished to be registered with them who passed their preliminary examination at other places, and amongst them were some who had come from Scotland. He did not know whether it applied only to the three Universities in Scotland or throughout England, that they divided their preliminary examination into different parts, and allowed a student to pass a portion at one time and a portion at another; and when he had passed a portion he was permitted to register as if he had done the whole. A great number had done so. Persons had come to them for registration of their preliminary examination, and the Secretary of the Royal College of Surgeons of England had been obliged to refuse them because their certificate only applied to a portion of the examination. He did not think there would be any difficulty with regard to the Irish Branch Council's application. It appeared that the student referred to has nothing to call upon this Council for. He passed the preliminary examination in the latter part of January, and, therefore, his entry for the Professional examination must be strictly in the beginning of February.

Dr. **Alexander Wood** said it was important the Council should be in possession of the true facts of the case, which were peculiar. At the same time that the Medical Act passed the Scotch Universities' Act passed, which placed the whole of the Universities under the management of a Commission, which issued from time to time ordinances under which they were compelled to act. Now, one of those Ordinances, which had been frequently referred to in their discussions, stated that it was desirable, "as far as possible," the preliminary education should precede the commencement of Medical study. Those words, "as far as possible," were intended to give some latitude at the commencement of the working of the Act to students who might find a difficulty in accommodating themselves to the changes and expressed stringency of the Medical education. He was bound to correct what Professor Syme had said. He (Dr. Wood) believed the Universities of Edinburgh did, as far as possible, insist upon preliminary education before the commencement of Medical studies. Now, what he wanted particularly to call the attention of the Council to was, that this Commission, in the Report which they presented to her Majesty, embodied all the Ordinances, and they further stated that it was not expedient that any of those Ordinances should be altered by any one University without communication with the other Universities in Scotland. The Ordinances could only be altered—first, by coming before the Senatus Academicus; secondly, by coming before the University Court; and thirdly, a petition for an alteration must be signed by the Chancellor of the University, and then come before her Majesty's Council, who must then decide as to whether the alteration should be effected or not. When the Senatus Academicus took the preliminary step for petitioning that these words, "as far as possible," should be struck out, and of having certain other valuable alterations made, the University Court, before whom it next came, ordered copies of the proposed alteration to be sent to all the other Scottish Universities, and it was made matter of discussion at that Court whether it was fair that a University of Edinburgh should go on with this amendment unless the other Scottish Universities concurred. He was sorry to say that the other Scottish Universities did not concur; but, nevertheless, the Edinburgh University took the unselfish and high course of coming forward irrespective of any personal or pecuniary advantage which it might possess, and wiped away what had always been felt to be a reproach to their fame; and he might also add, from some knowledge of the preliminary examinations which took place in the University, that they were of a very high character indeed, and if a fault could be found with them, it was that, in the present state of the Medical Profession, they were a shade higher than they could expect many of the pupils to attain to.

Dr. **Storrar** said he had been considering how the question, which was a serious one, could be most practically dealt with; and he begged to draw attention to a notice of motion by Dr. Smith, "That a Committee be appointed to consider and to report upon the working of the system of Registration of Medical students, adopted by the General Council last year." Now, he proposed that this Registration Committee should be appointed first, and then the next step would be to refer this question to that Committee, and with that view he had drawn up a resolution in this way, "That the case of students admitted to Registration who have not passed any examination in Arts, or only a portion of such examination, be referred to the Committee on Registration to consider and report upon." By adopting this course they would have a brief analysis of all these cases, and all that could be said in their favour, and when they had such a Report before this Council they would be in a better condition to determine what was to be done than they were at the present moment. Dr. Storrar then alluded with regret to the accidental absence of Dr. Thomson, and hoped nothing would be finally settled in this matter till that gentleman was again at the Council. He suggested, in conclusion, that Dr. Smith should at once move the appointment of the Committee.

There being no objection to this suggestion,

Dr. **Smith** proposed the resolution of which he had given notice of motion, "That a Committee be appointed to consider and to report upon the working of the system of Registration of Medical Students adopted by the General Council last year."

Dr. **Storrar** seconded the resolution.

Dr. **Andrew Wood** thought the Committee proposed was much called for, as he believed that the order instituted for the Registration of Medical students required amendment. The Medical students had been with great difficulty instructed in the method of making application for Registration, and indeed many of them had altogether refused to do it. The fact was, the machinery was cumbrous, and he thought this might be remedied. Suggestions should be obtained from the Registrars themselves. He knew the Registrar of Scotland had made some excellent suggestions with regard to the improvement of Medical Registration, and he hoped before the session closed the Council would so amend the system of Registration as to make it not only easy of application, but efficient.

The resolution for the appointment of a Committee was then agreed to.

Sir **Dominic Corrigan** having been proposed as one of the Committee, the honourable Baronet gave his reasons for declining to act. He said that as the University of Glasgow had declared they would not carry out the recommendations of the Council as to registration, he had no hope whatever that anything they did would produce any effect upon them. If there had been the least chance, that chance was totally removed by the information which Dr. Andrew Wood had given them,—namely, that when the University of Edinburgh applied to the Privy Council for a regulation which would enable them to refuse any student who presented himself for examination without undergoing a preliminary examination, the University of Glasgow said "No." If he turned to Ireland, he found that a student had a right to go to Trinity College under Act of Parliament and matriculate himself, and that College could not refuse his entering upon his Medical studies without any examination whatever. If he turned home to the Queen's Colleges, as the representative of the Queen's University in Ireland, he knew they received students without their having passed a matriculation examination. The Belfast College, finding that the matriculation examination was too hard for Medical students, instituted a little private examination of their own, of which the College had no cognisance whatever. Dr. Andrew Wood had asked him to propose a resolution condemnatory of the Glasgow University, and if he thought any such proceeding would solve this question he would do it; but he considered their labours in this matter would be useless, and therefore he must respectfully decline to do so, or to act on the Committee.

The following Committee was then appointed:—Dr.

Embleton (Chairman), Mr. Hawkins, Dr. Storrar, Dr. Fleming, Dr. Thomson, Dr. A. Smith, Dr. Andrew Wood, Dr. Sharpey, and Mr. Hargrave.

It was then moved by Dr. Storrar, and seconded by Dr. A. Smith, and agreed to:—"That the cases of students admitted to registration who have not passed the Examination in Arts, or only a portion of such examination, be referred to the Committee on the registration of Medical students to consider and report upon."

Sir D. J. Corrigan suggested that Dr. Steele's application with regard to the registration of a student should be refused.

The President reminded the honourable Baronet that Dr. Steele's letter was merely a request for a student to be registered who had passed his preliminary examination. They were bound to register him, and the only question was, whether he should be admitted from the day of the application, which was February 1, or three months afterwards.

Dr. Storrar proposed, "That the letter from Dr. Steele, with an application from a student to be registered, be referred to the Committee just appointed."

Sir D. J. Corrigan seconded the resolution, which was at once agreed to.

The next business before the Council was a notice of motion, by Dr. Fleming, of the following additions to the standing orders and regulations:—

"1. That a Business Committee be elected every session, to act from the close of that session till the close of the next. The election to take place by ballot, by means of marked lists.

"2. That the Committee consist of five members, exclusive of the President.

"3. That the constitution of the Committee and the mode of election be as follows:—Two members to be first chosen from the whole body of the Council, and then one member from the English, the Scottish, and the Irish Branches of the Council respectively.

"4. That the members of the Committee meet before the close of the session during which they have been elected, and appoint one of their number as chairman.

"5. That the chairman summon the Committee to meet previous to the commencement of the sessions of the General Medical Council, in order to prepare and arrange, as far as practicable, a programme of the business which they consider should be submitted to the Council during its sittings; in addition to which, during the sessions of the Council, programmes of subjects to be brought forward and of notices of motions be prepared by the Committee and distributed as often as they may consider necessary. In all programmes, business brought forward by the Committee to be distinguished from business introduced by individual members.

"6. That the Committee have full power to regulate the order of business, and to fix what days, or part of days, be appropriated to business introduced either by themselves or by individual members.

"7. That the remuneration to the members of the Committee while engaged in preparing and arranging the business previous to the meetings of the Council, be on the same scale as for attending the meetings of the General Council."

He said his motion was simply to endeavour to expedite the mode of conducting the business of the Council, and if it were carried out it would save a great deal of valuable time, and prevent much unnecessary discussion. At its institution this Council had great difficulties to contend with, and although he was not a member at the outset, he could quite appreciate the trouble which must have been experienced in putting a very imperfect and complicated Act of Parliament in motion. (Hear, hear.) It could not have been expected that a body of 24 gentlemen from different parts of the United Kingdom, who were comparatively unknown to each other, with conflicting opinions and representing various interests, would at once settle down to business in that methodical way which facilitated the proceedings of similar bodies of much older constitution. If, however, any man whose name was on their Register could only look back to a few years before this Council was in existence, and remember how the Profession was agitated from one end of the kingdom to the other because there was no central body, when the licensing bodies were in antagonism one with another, and now thought of the harmony that existed, he must be satisfied the General Council had done a great amount of good. (Hear, hear.) It was only by experience they came to approve of systems by which their proceedings could be carried on in the best way; and he thought they ought to avail themselves of such experience as they had acquired, and see whether by adopting the additions he proposed, or similar ones, they would not greatly facilitate the conduct of public business. He then went through the proposed additions *seriatim*, and explained what he conceived would be their advantage in bringing about the desired result.

Dr. Embleton seconded the proposition, remarking that he believed if it were adopted it would tend to shorten the sittings of the Council by two or three days each session.

Dr. Smith thought the proposition did not propose to do anything more than could be done at the present time by the Executive Committee. He considered it would be very objectionable to introduce extra machinery into the Council. They should be very cautious in complicating matters by a Business Committee, which would have power during the long interval between one session and another.

Dr. Andrew Wood said he thought at first there was something of greater importance in the proposed additions than now appeared to be the case. A very large amount of the business of the Council was not known till they had been assembled two or three days, when it cropped up in the course of other business. His idea was, that it was the duty of the Executive Committee during the intervals of the sessions to watch the progress of events, especially the Branch Council Minutes, and it was clearly their duty to meet a day or two before the assembling of the General Council and act as a Business Committee, in order that they might put in shape enough business to occupy them the first day or two; so that if the Executive Committee would only do what he conceived to be their duty, the proposed committee would be unnecessary. He hoped Dr. Fleming would withdraw his proposition.

Dr. Alexander Wood said that at the commencement of the session he suggested what had been found of so much advantage: of allowing the Executive Committee greater latitude, and he thought nothing more was required. If Dr. Fleming's resolution became law, there would be a little danger of creating an *imperium in imperio*. It was impossible to arrange the business in the methodical way indicated.

Mr. Syme was understood to say that the duties assigned the Executive Committee did not embrace what was contemplated by the motion, and therefore it would be necessary to enlarge their powers if Dr. Fleming withdrew his resolution.

Dr. Fleming said that as the feeling of the meeting seemed against his proposition, he would withdraw it if the Council would enlarge the powers of the Executive Committee.

The resolution was accordingly withdrawn.

The Registrar next read a copy of the agreement with Messrs. Spottiswoode for printing and binding a new edition of the British Pharmacopœia.

Sir D. J. Corrigan complained that he had never seen a proof copy of the Pharmacopœia, so as to give him an opportunity of making suggestions. Would the work be sent to press without being submitted to the members, in accordance with a resolution of the Council to that effect?

The President: Certainly not. The Pharmacopœia Committee are prepared to make a report and give the Council an account of the state of progress of the work, and the Council may act upon that report as they think proper. The Pharmacopœia Committee have no idea of publishing the work without complying with the order of the Council.

Dr. Quain, chairman of the Pharmacopœia Committee, said the work was not ready, but he had no doubt it would be before the close of another year.

The President thought the consideration of this subject should be deferred till the Pharmacopœia Committee brought up their report.

The subject then dropped.

Dr. Stokes laid upon the table the report of the Committee on General Education, which he hoped they would be able to discuss on Monday.

Dr. Andrew Wood moved, and Dr. Acland seconded,—"That the report of the Committee on General Education be received and entered on the Minutes," which was agreed to.

It being now four o'clock, the Council adjourned till Monday.

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### Fourth Day.—Monday, May 21.

The Council re-assembled at 2 o'clock on Monday, the President in the chair.

The Registrar read the Minutes of the last meeting, which, after a few corrections had been made, were confirmed.

The following report from the Committee on General Education was then presented:—

"REPORT ON GENERAL EDUCATION.

"The Committee have given their best attention to the resolution of the Council of May 18, wherein they were 'instructed to take into consideration and report upon the examinations in general education at present conducted by the various National Educational and other bodies recognised by the General Medical Council.' The Committee, having had before them the digest, prepared by the Registrar, of the preliminary examinations in Arts recognised by the General Medical Council, are of opinion that any further analysis of those documents already before the Council would be unnecessary. The Committee are of this opinion, inasmuch as they are prepared to state to the Council what appears to them to be the smallest list of subjects for examination through which a qualifying body can ascertain whether a youth has attained the accurate mental training necessary for entering with advantage upon Professional studies. The subjects of examination that the Committee recommend are as follow:—*Compulsory*.—1. English language, including grammar and composition. 2. Arithmetic, including vulgar and decimal fractions; algebra, including simple equations. 3. Geometry: first two books of Euclid. 4. Latin. *Optional*.—One of the following: Greek, as far as Xenophon or Lucian; French; German; natural philosophy (mechanics, hydrostatics, pneumatics). The Committee recommend that certificates of proficiency be received from all the chartered educational and licensing bodies in Great Britain and Ireland which bear evidence that the candidates have been examined and approved in the above subjects. In the case of certificates received from similar educational and licensing bodies in other parts of the empire and foreign countries, satisfactory evidence must be given to the Medical Council (or Branch Councils) that such certificates are equivalent to those given in the United Kingdom. The Education Committee, having considered the letter and resolution of the Irish Medical Association forwarded by Dr. Mackesy, and referred to them, recommend that the resolution be entered on the Minutes. The Committee further recommend the forwarding this resolution to Dr. Mackesy. "W. STOKES, Chairman."

Dr. QUAIN proposed, and Mr. HARGRAVE seconded, that the report should be considered paragraph by paragraph. This resolution was carried, and the first paragraph was, after some discussion, adopted. Certain amendments and alterations were introduced in the second and third paragraphs, after which they read as follows:—

"The Committee, having had before them a digest, prepared by the Registrar, of the preliminary examinations in Arts recognised by the General Medical Council, consider that an analysis of this document would be unnecessary."

"The Committee beg to suggest to the Council what appears to them to be the minimum amount of subjects for examination through which a qualifying body can ascertain whether a student has undergone the mental training necessary for entering with advantage upon Professional studies."

On the fourth paragraph, relating to the subjects of examinations recommended by the Committee,

Sir D. J. CORRIGAN proposed the following amendment:—"That Greek be included in the compulsory subjects of examination after the year 1869." He believed Dr. Stokes, who was chairman of the Committee, would not object to his stating that they had a very long discussion on this matter at the Committee, and that different views were then taken of the subject. He had undertaken, as a member of the Committee, to convey the opinion of some at least of the members of that Committee to the Council. For his own part, he should have preferred altogether omitting the list of optional subjects, so as to have confined themselves simply to the subjects which they thought absolutely necessary, leaving it to the students to offer themselves for examination in any other subjects if they pleased. The general opinion, however, was in favour of including the optional subjects upon the list, and therefore it only remained for them to include Greek among the optional subjects. He had a strong opinion upon the matter, and was very much supported in it by several of his fellow members on the Committee. He had prepared an amendment to move on Friday last, providing that Greek should be included among the compulsory subjects after 1867, but in conversation he found that several members of the Committee were prepared to support that amendment on condition that he altered the date from 1867 to 1869, which he had now done, in order to give students a fuller opportunity of learning Greek. He held very strongly to the opinion that Greek ought to be included, and he thought that two years of preparation for it would be quite sufficient. With regard to the importance of the language, he did not think it necessary to say one word. He did not at all desire that a man on presenting himself for a preliminary examination should profess to be an accomplished classical scholar, or that he should be capable of being examined in the merits of erudite criticisms upon high Greek authors; but he thought it highly important that he should have such a fair knowledge of Greek as to be at once capable of understanding the names which were made use of in the practice of the Profession, or of taking down a lexicon and finding out what they were, and of being able to meet learned men in their own rank of life. The only question was as to the time which should be allowed. From the very useful and valuable analysis which had been made by Dr. Hawkins, he had ascertained that the number of licensing bodies granting certificates was twenty, and that of these nine at the present moment required Greek, while eleven did not. It was plain, therefore, that those who required it and those who did not were pretty nearly equally divided; and he thought that if the Council ignored Greek, as they did last year, they would be really, though not intentionally, allying themselves with those bodies who adopted the lowest standard of requirements. If nine of the licensing bodies required Greek as compulsory, he considered that the Council ought to lean to that side, which was really the side of better education. The Apothecaries' Hall of Ireland had required Greek for nearly the last sixty years, and if they now ignored it they would be doing a very injudicious thing. If it were not asked for by any bodies, the Council might say that it was not required, and that it did not become them to introduce any new element into the examinations; but when nine out of twenty did require it, it was their bounden duty to stand by their side, and not to lower the standard which had existed in some of the bodies for nearly half a century.

Dr. STOKES suggested that the amendment might be embodied in the Report by stating that after 1869 Greek would be compulsory.

Dr. CHRISTISON said his objection to the amendment was that the Committee had made a very proper selection of subjects, but if they once began to alter the list the difficulty was to know where to stop, because it really was difficult to decide which of the optional subjects was the most important. The next subjects in the list were French and German. There were two reasons why they required these subjects to be studied. One was for the purposes of general cultivation in life. He hoped that no one would seek to overrate the importance of Greek in this respect, but no one could say that the cultivation of French, and especially of German, was equally suitable, whilst, if they came back to the simple object of preparing a student for the cultivation of his Profession, both as a student and as a Practitioner, there could be no doubt that, practically, French was of far greater importance. The next subject was that of natural philosophy, and as a means of general cultivation he did not think that any man who had tried this in his youth could fairly say that it was not necessary, and when they considered the importance of it to students in studying their Profession, no one could say that it was immaterial. As a teacher, he had far more pleasure in seeing students coming up to be examined in natural philosophy than in other subjects, and he thought that Sir D. J. Corrigan ought to be satisfied with having got Greek on the optional list, especially as in Edinburgh and in other places at the present time there was a much larger number of students acquiring a knowledge of Greek than at any former period.

Mr. HARGRAVE urged the necessity of a knowledge of Greek, and supported the amendment.

Dr. ALEXANDER WOOD said it was quite true that the Council had before it what the various examining bodies required from the students for examination, but they had not before them another very important set of documents, which, in discharging part of the functions of the Medical Council, he had recently had occasion to examine—namely, the results of those requirements. (Hear, hear.) They had not the returns to the requisitions before them, and they were not, perhaps, in a position fully to understand how little of what was professed to be required of them the students were able at present to perform. He confessed that while he would be the very last to undervalue any mental discipline, or any subject that was essential to a Medical student, he should be satisfied at present, till he had some further experience, with less profession, if he could get a great deal more practice. He should like to know what sort of papers in English and in arithmetic those bodies got which required Greek. He had lately had occasion to examine some of the examination papers of a body which required Greek, and he found those papers were sadly defective in English grammar, and even of English spelling. He had frequently revised such papers himself, and all he could say was that, if the students had cultivated the Greek language, they certainly had not the English. He thought that their great object—sitting at that table—was not to elevate the standard too high, if they could not secure that standard being reached, but to insist for the next few years on a proper examination in those branches in which they had some chance of getting a perfect and thoroughly efficient examination. For these reasons he was perfectly satisfied with the Report of the Committee, and he should be very glad indeed if they could get the subjects which were down in the compulsory list properly examined in, and the students properly qualified in them. If they could do that, those who succeeded them at that Council in after years might insist on Greek and other languages; but he did not want them to attempt more than at present they could perform; and, above all, he did not want them to deceive the public by holding out to them that they insisted on Greek when they knew that they could not even get English.

Dr. Storrar seconded the amendment, and said he hoped it would not be considered that the gentlemen who were in favour of it were trying to practise on the credulity of the public. They were just as anxious to have the education of gentlemen entering the Profession improved as any others could be, but their opinion was that in the year 1869 Greek might safely be included in the compulsory subjects, and they put this out as an intimation to all the schoolmasters in the kingdom that the Medical Council did consider Greek to be an important element of Professional education. He had seen a great deal of examinations during the last few years, and had remarked that there appeared at the present time to be a great spirit of competition among boys in the various schools to go in for some kind of examination. To such an extent did this spirit of competition prevail amongst British schoolboys at the present time that if they required Greek in 1869 he felt sure they would get it. He quite agreed in the opinion that if they wanted it at the present time they would not be able to get it, or if they did it would be in such a disgraceful form that it would not be worth having, and would be a bad precedent to set; but in the year 1869 he felt that they might very safely ask for it. He would particularly call attention to the great efforts which had recently been made in other professions to improve education. This was especially the case with the law, and so anxious was the Association of Solicitors in London to encourage the advance of preliminary studies that they offered a special advantage to every man who was able to appear in the first division of matriculation examination of the University of London. They did not ask the Council to require Greek at the present moment, but to give the schoolboys and schoolmasters notice that they should ask for it in 1869. Dr. Christison had referred to natural philosophy, and he (Dr. Storrar) fully felt the importance of that branch of study, and would not give it up, but what he said was, that natural philosophy, although most valuable, was not such a school study as Greek. He wanted them to go to school till they were seventeen years of age, and if they went to effective schools, and took advantage of them, they would have no difficulty in the way of providing either Greek or natural philosophy. He recollected it was stated last year in the report that the Council viewed with satisfaction the fact that many of the students had made a great advance in such studies between the period of their preliminary examination and the time of their entering on their more Professional studies. There could be no doubt that Greek could be taught much more effectually at schools than natural philosophy could, and what they wanted was to give the students the power, inasmuch as several of the names came from the Greek, and which they could not otherwise understand, of picking words to pieces and seeing what they were made of. Another thing which had weighed upon his mind, though it had not been pressed before the Council, was that by the system of indifference to general education which prevailed in the Profession, they not only got young men of good abilities coming into the Profession insufficiently prepared for Professional study, but they also got all the waste of the schools. Boys who were worth nothing at school were often turned into the Medical Profession, because there a classical education was not necessary. This was no fiction, but he had seen such cases over and over again, where men put their first son, who had taken his degrees at the university, into the profession of the law; while the other, who was a puzzle to his father to know what to do with him, was turned into the Medical Profession, though he knew but very little Latin, and certainly no Greek at all. He thought it would raise the character of the Medical Profession, and certainly it would raise the character of the young men who came to study in it, if they demanded a real and substantial advance in their education, and on this ground he cordially seconded the amendment.

Dr. Andrew Wood was not disposed to yield to any man in the high opinion he held of a liberal education, carried out to the utmost in the way of preliminary studies, for young men, but there were two considerations, as it appeared to him, which they ought to keep in view in that discussion. It was a very good thing to have men highly trained in a large number of subjects of general education, men who by the training which they had been enabled to go through had fitted themselves for the higher qualifications of the Profession, such as taking degrees at the Universities and other high positions; but there was another consideration, and they must take care that, whatever their individual opinions upon the importance of general education might be, they did not pitch their requirements so high that either they would not be carried out in practice or that the public would be deprived of a sufficient supply of Practitioners of Medicine and Surgery. Far was it from him to say that any illiterate man should enter the Profession, and he said this with more boldness, because he felt proud to be able to vindicate the College which he represented, and to state that it was one of the first bodies which did establish a preliminary education examination long before the Medical Act was passed, but it did appear to him that they were going in a wrong direction when they reduced to such a minimum the number of optional subjects. He believed that even in the competitive examinations for the Civil Service of India, and also, if he was not mistaken, in the examinations for the Army and Navy there are several subjects that were left optional, and, as he thought, for a very good reason—namely, that the minds of young men were not all framed in the same mould nor bent in the same direction. He had seen men of the greatest ability, who would have done honour to the Profession in any point of view, who had great difficulty in compassing geometry and algebra; and yet, if they were taken in Greek and some other subjects, it would be found that they would make most magnificent scholars. They ought not to make a kind of bed of Procrustes and put every man down to the same level, but should carry out some means by which the classical man should be enabled to choose classics to a certain extent, and the geometrical man geometry to a certain extent. Even at Oxford and Cambridge there were men of the most brilliant abilities in geometry and the sciences akin to it, but who in the classics made no great appearance, while on the other hand, there were some of the most brilliant classical scholars who were unable to solve even a simple problem in Euclid. It did appear to him that it was wrong for them to lay down too stringently the subjects in which they would have candidates examined. He did not wish to reduce the amount, but he thought it would be far better to make more of the subjects optional, so that men might choose exactly those subjects which they were able by their abilities to compass, and then they would not exclude from the Profession many men who would be a great honour to it, but who, if they adopted one common standard, and applied it to everybody, would not be able to enter it with any credit to themselves. The object of their examination in general education was not to ascertain whether a man knew the meaning of a particular word, but to ascertain whether he had had a liberal education, whether his mind had been trained in such a way as would enable him, when he entered the Profession, to grapple with its difficulties, and if a man could give him a certificate that he knew a certain number of the subjects on the list, leaving the rest to his option, he should be quite satisfied that the man had received such a liberal training as fitted him for entering the Profession. He would stand up for Greek as much as any man, because it was a language that he loved, and always had loved; but to tell students that Greek was compulsory was, in the present state of education, entirely out of the question. He agreed with what Dr. Alexander

Wood had said, that they ought first to make sure that their students were acquainted with their own language. He did not know how it was on other Boards, but he was not ashamed to say that a great many students came forward to the examinations with which he was mixed up who were so utterly ignorant of their own language that they could not even spell it, and his friend Dr. Parkes would corroborate him to a great extent in this. If they threw upon the students at this time of day too many subjects, and made those subjects compulsory, there was a risk that the students might neglect the more simple matters of English and arithmetic and Latin in their desire to make an appearance in Greek. He was happy to say, for Sir D. J. Corrigan's information, that in Scotland many of the students were now including Greek in their examinations, but he did say that if now, or even two years hence, they introduced this bed of Procrustes, they would be depriving the Profession of many most useful Practitioners who, apart from such high attainments as were now sought to be required, were well calculated to supply the wants of the country. Looking at the miserable returns which many members of the Profession received in country parts, in Scotland at least, if not in England, he thought it would be extremely difficult for those parts of the country to be properly attended by Medical men if they pitched their preliminary requirements too high; and yet during the last 15 or 20 years, and he believed Dr. Christison and Mr. Syme would bear him out in this, many of the men supplying those country districts had been able to vie, as members of the Profession, with many of their metropolitan brethren. He would, therefore, caution the Council against pitching their requirements so high as to keep such men out, inasmuch as there were many men who were not Greek scholars, but who would make most excellent Physicians and Surgeons. He felt very strongly upon this subject, and he only wished the Council to keep the observation in view that they might fail in obtaining the end they desired if they endeavoured to fix their requirements too high.

Mr. **Cooper** said he could not give a silent vote on the occasion. There was much good sense in what had fallen from Dr. Andrew Wood, and he also entirely fell in with what was said by Sir D. J. Corrigan as to the great importance of the Greek language to any gentleman who wished to have a competent knowledge of their art. All their terms were derived from the Greek, and they could not get a clear and comprehensive knowledge of those terms unless they knew something of that language. He knew it had cost him a deal of time and trouble at a period when he might have been studying his Profession, and, therefore, he should like to see the students come up for examination with a very fair knowledge of Greek, inasmuch as it would greatly help them in the acquirements which they might afterwards attain. If, however, there were already so many failures in the subjects for examination, where could they find men for the country districts, and for the army and navy and volunteers, if they increased the number of compulsory subjects?

Dr. **Leet** said he had had some difficulty in adopting that portion of the Report of the Committee, because if they adopted the educational system proposed they would seriously interfere with what the Council was anxious to have carried out. The Apothecaries' Hall of Ireland had demanded Greek for 50 years, and the Edinburgh College of Surgeons also required it, and hence there was a serious objection to exclude Greek from the papers.

Dr. **Apjohn** considered that a certain amount of Greek was indispensable, but he thought that a small amount of it would suffice, and that what we wanted could easily be acquired. In several recent examinations the appearance of the students in Greek had been of the most satisfactory kind. He thought it was perfectly practicable to state, if Greek were made compulsory, what amount of it would be required. On the Committee, he proposed that a certain book should be selected, and he suggested one of the gospels, but that was objected to. He thought that a proper test ought to be established.

Dr. **Parkes** said that it had occurred to him that they should be in a much better position to judge of this subject two or three years hence than they were now, and he therefore thought that it would be undesirable to take any action in the matter at the present time. In two or three years they would see the results of the present examinations, and would then be able to decide more fully whether Greek might be included with advantage. He would, therefore, suggest that the deliberation on this question should be deferred for three years, and that no motion should be made till they had before them the reports of the examinations in preliminary education.

Mr. **Rumsey** said this was a subject on which he had previously addressed the Council. He regretted that a report should have been issued from so learned a body as the Committee on general education, containing certain decisions on very important subjects, without stating their grounds for those decisions. (Hear, hear.) He should like to be informed as to the grounds on which certain subjects were included and others excluded from the preliminary education of Medical men, and on which some were made compulsory and others optional. He admitted that there was not sufficient time to enter so fully and satisfactorily into these subjects as might have been wished, and he would, therefore, attribute the meagreness of the report in that respect to want of time on the part of the Committee, who were most competent to give their reasons for what they had done. He should also like to know the bearing of preliminary education upon Professional duties and social relations, which was a most important matter for the Council to consider, and they needed a report on this subject to satisfy the learned part of the public as well as the Profession. The Universities and other learned bodies in the country wanted to know why they had adopted certain subjects and why they had omitted certain others. He confessed that he had always supported the insertion of Greek as a compulsory subject, and he was supported in this view not only by the arguments which had been adduced by others, but also by his own observation in the matter. They must have men educated fully equal to the clergy of this country if the Profession was to maintain anything like an equality with other professions. He had known two or three instances of what had been already referred to, where boys of inferior abilities had been put into the Profession, and in one case a boy who, though very clever, was the greatest scamp, and had learned nothing, was selected to go into the Medical Profession, because it was said that he could do so without knowing Greek or Latin. As to the importance of Greek, he hoped the Council would not consider it an impertinence if he read an extract from one of the greatest authorities on Medical education on the Continent. Lancisi, who wrote at the beginning of the last century, said, in his "De Recta Medicorum Studiorum Ratione Instituenda," Dissertatio 1:—"Non moror earum linguarum necesitatem quibus Ars ipsa principium debet; Græcæ imprimis, et Latinæ; Græca sunt enim omnium fere corporis partium, naturæ operum et morborum, atque harbarum, et medicamentorum nomina, *quorum qui significationes tenet*, *earundem quoque rerum adumbratas habet definitiones*. Græcus est preterea Principum medicorum sermo, e quibus aphorismorum oracula, observationes certas, et Pharmacorum exploratam vim, medendique methodum haurire debemus." A modern writer, too, in the *Saturday Review*, in speaking of the education of the liberal professions, instanced the Medical Profession as one which particularly required the study of Greek as a preparation for its practice. When a journal like the *Saturday Review*, which represented the intellect of the country, spoke in this way, they ought not to run counter to such a suggestion, coming from outside the Profession. It was a demand of the public rather than of the Profession that they should be supplied with learned and thoughtful men. He did not admit the validity of the argument that because a certain number of Medical men in the country must always be badly remunerated, they were not therefore to be well educated. They had an instance of the very reverse in the curates in the country parishes, many of whom had taken their first and second class degrees at the Universities, and all of whom had reached a standard far higher than any which had ever been demanded of a Medical student. He asked them to give Medical men such an education as would enable them to associate with curates who got £80 a-year. He believed that the difficulty of obtaining students who knew Greek had been greatly overrated. He had conversed with the head masters of some of the principal schools in the country, and they assured him that if the Medical Council required Greek in three or four years' time, they would be able to have an abundance of it, and that they only had to create a demand, and a supply would soon be found. Since Sir D. J. Corrigan had altered his motion, he could now support it, though he could not have done so as it originally stood.

Dr. **Aquilla Smith** supported the amendment. He did not believe that a high standard was at all necessary, but he considered a moderate knowledge of Greek to be of the highest importance.

After some remarks by Mr. **Syme**,

Dr. **Paget** said he had very great difficulty indeed in forming a judgment upon this matter, and that difficulty was very much increased by the way in which the Committee had put both Greek and natural philosophy as optional subjects. His own opinion was, that natural philosophy ought, at some period or other in the course of study to be made compulsory upon Medical students. Dr. Christison's argument was a very weighty and unanswerable one, that comparing the two subjects natural philosophy was of more importance to the Medical student than Greek. He did not agree with Dr. Andrew Wood's remarks about differently constituted minds. At Cambridge there was no difficulty whatever in getting a classical man to pass his examination in mathematics, and *vice versa;* in fact, a classical man was not allowed to show his brilliancy until he had a considerable knowledge of mathematics, and there was no doubt that a man was better educated, and his mind better balanced by taking the two things. The argument as to the low remuneration of Medical men might be met in this way. If the Medical Council required such qualification as that the number of men would be decreased, the remuneration would be at once increased, and this was strikingly proved years ago in Paris, where, after a higher standard of requirements was introduced, the number of Medical students decreased from 3800 to 800. The public would also benefit by it, because the worst men would be excluded. Dr. Storrar's remark was a weighty one, and he hoped would receive due attention, as to Medical students remaining longer at school.

Sir D. J. **Corrigan** said he thought the discussion had cleared the ground to a very great extent. He would remind the Council that the report of the Committee referred only to school days and school education, and however anxious they might be to insert natural philosophy, they thought that that could not be so well included in school studies, but had better be left to the time of Medical studentship. Another thing was, that they did not want to enforce Greek at the present moment, but were only proposing to make it compulsory at the end of three years; and if there was any man who, between 1866 and 1869, could not get as much Greek as they wanted, the sooner he left the Profession the better. No books had been named in which students were to be examined, because it was thought best to leave that matter entirely to the various examining bodies themselves. He believed that he agreed with Dr. Christison in principle; but he also believed that the object of securing a good education could be best attained by supporting his amendment. Dr. Alexander Wood had stated that the students who came up in Greek were very bad English scholars, and he implied that if they had not studied Greek they would not have neglected English. He at once turned to the reports of the deputation, of which Dr. Alex. Wood was a leading member, but he could not find there any report on any preliminary examination, which was all that they were now dealing with. He did not agree with Dr. Andrew Wood's observations about different minds being differently constituted, because their object was not to open a door for every variety of mind, but to qualify their students to pass their examinations as Physicians and Surgeons. The former examinations were not found by the Government authorities to be high enough, and therefore the Army and Navy Medical Departments had been obliged to take them into their own hands, and he thought that by raising the standard they would be doing the greatest service in the world, both to the social status of the Profession and to the men themselves. Dr. Parkes and Dr. Paget had suggested that action in this matter should be postponed for the present, as they did not know how it would work; but he would remind them that it had already been demanded in some bodies for fifty years, and that nine bodies out of twenty had now pronounced in its favour. He quite agreed that natural philosophy was of immense importance, and should be made compulsory at some time or other; and when they came to deal with Professional education he intended moving that it should be made compulsory; but he did not think they ought to enforce it on a boy of 17. He had taken up this matter in all seriousness, and he earnestly commended it to the Council. If an advanced education was now required of solicitors, why should it not also be required of Medical men? Sir D. J. Corrigan then altered his amendment as follows:—"That Greek be transferred to the list of compulsory subjects after the year 1869."

The amendment was put, and carried by 14 against 9. The **President** was about to put it as a substantive motion, when Dr. **Andrew Wood** said he had an amendment to propose upon it. With regard to not taking any notice of preliminary examinations by visitation of the Universities and Colleges, he was not responsible for what might have been done by others; but if Sir D. J. Corrigan had glanced at page 30 of the Reports of Deputations, he would have found not only that preliminary examinations had been most particularly, but that they had been most circumstantially attended to. On page 31, they would find that, on April 4, 137 students appeared for examination. There seemed to have been examined in English 77, of whom 52 passed, and 15 were rejected; in Latin 74, and of these 55 passed, and 19 were rejected. Then came a curious fact as showing something of the genius of the Scottish mind—in arithmetic there were examined 69, and of these only 3 were rejected. In Mathematics 69 were examined and only 7 rejected. In Greek 45 were examined, and of these, 22 passed and 23 were rejected. In French there were 48 examined, of whom 29 passed and 19 were rejected. In German 6 were examined, of whom 3 passed and 3 were rejected; in the higher mathematics 6 were examined, of whom 5 passed and 1 was rejected; in natural philosophy 27 were examined, and of these 23 passed and only 4 were rejected; in logic the number examined was 52, of whom 31 passed and 21 were rejected; and in moral philosophy 25 were examined, of whom 15 passed and 10 were rejected. This showed that Sir D. J. Corrigan was wrong in supposing no attention had been paid to preliminary examination in Scotland. He thought there was room for improvement in the curriculum which they had laid down for their students, and that there should be compulsory and optional subjects, and he believed that natural philosophy should be taken completely out of the category of preliminary education, and made compulsory as one of the subjects of Professional education. (Hear, hear.) That was the case in the College of Surgeons long before the Medical Act was brought into operation, and they had no difficulty at the age of twenty-one, when young men came up for examination in Professional subjects, of getting from them a certain amount of knowledge of natural philosophy. He would therefore move that natural philosophy be removed from the preliminary education altogether, and that it be transferred to the Professional education. No man could learn physiology properly without a knowledge of natural philosophy, and on that ground he thought no student should be allowed to enter the Profession who had not been educated and tested in that subject. He was anxious that English, geometry, and Latin should be compulsory.

The **President**: Do you leave out algebra?

Dr. **Andrew Wood** said he would not leave it out, but put it amongst the optional subjects. By what he proposed he was not reducing the amount of general knowledge, but rather a modification of the way in which it was demanded, and he believed it would be found to work well, and give that scope to differently constituted minds which, in spite of what Sir D. J. Corrigan had said, he still believed in. In conclusion, he moved as an amendment, "That the curriculum for preliminary education shall be as follows:—First, compulsory, English language, including grammar and composition; arithmetic, including vulgar and decimal fractions; geometry, first two books of Euclid; and Latin. And that two of the following subjects be optional by the student:—First, algebra; second, Greek; third, French; and fourth, German." He did not, he said, want to get rid of natural philosophy, but would afterwards move that it be taken at a later period.

Dr. **Acland** said that if the Council attempted to lay down a rigid rule with regard to ante-Professional education it could only do so safely, he respectfully submitted, simultaneously with its consideration of what it meant to require in the Professional studies. This was a real difficulty, and one to which he did all in his power to draw the attention of the Council in 1864. Speaking generally, he believed that the Medical student ought to be educated in the same way as any other English gentleman. He said nearly 20 years ago at Oxford, and he would say the same now, that it was desirable that every person passing an Arts examination should also pass in some subject of physical science, but he made an exception in the case of a Medical student. If they eliminated from their optional list natural philosophy, it would only be on the distinct understanding that it was to come into and form part of the Professional studies. If Dr. Andrew Wood was to eliminate algebra the Council ought to have some understanding that it was to be required at a later period.

Dr. **Storrar** thought Dr. Andrew Wood appeared to [illegible]

Greek altogether. The resolution was that Greek should be admitted in 1869, and, therefore, Dr. Wood should bring forward a proposition touching that question, unmixed with anything else.

The President ruled that Dr. Andrew Wood's amendment was quite in order.

Dr. Acland suggested that they should take each subject on the list separately.

Dr. Andrew Wood said he had no objection, and proposed "That each item of the proposed plan of the Committee as to the subjects of general education be put separately to the Council."

Dr. Parkes seconded the resolution, which was carried *nem. con.*

Dr. Andrew Wood then moved, and Dr. Parkes seconded, —"That the first of the compulsory subjects be English language, including grammar and composition," which was agreed to.

Dr. Storrar next proposed, and Dr. Thomson seconded,— "That the Committee's recommendation that arithmetic, including vulgar and decimal fractions, algebra, including simple equations, stand as one of the compulsory subjects, be adopted."

Dr. Fleming remarked that, as a member of the Committee who had this subject under discussion, when he commenced the consideration of it he was inclined to make the optional subjects more numerous; but he saw reason to alter that opinion. There were two points to be borne in mind,—the first was, they must educate a student in particular subjects pertaining to the Profession; and the second, discipline his mind so as to render him able to grapple with the various difficult subjects which would come before him in the study of Medicine.

Dr. Andrew Wood moved, as an amendment,—"That the words 'Algebra, including simple equations,' be omitted." By putting algebra amongst the optional subjects, it would enable a man, if he chose, to take Greek or French. He proposed this amendment with the view of afterwards moving that algebra be included amongst the optional subjects.

Dr. Acland seconded the amendment *pro formâ.*

As the feeling of the Council seemed to be against the amendment, it was withdrawn, and the resolution was agreed to.

On the motion of Dr. Storrar, seconded by Dr. Shorter, the third compulsory subject—"Geometry, first two books of Euclid"—was agreed to.

Dr. Shorter moved, and Sir D. J. Corrigan seconded,— "That Latin be one of the compulsory subjects."

Dr. Andrew Wood considered an examination in Latin a perfect sham unless the student was examined in the construction of the language. In English they included "Grammar and Composition," but now they proposed simply "Latin;" and the consequence would be students would come up for examination, thinking they had nothing to do but translate a sentence, and in most cases they could do that, and yet be entirely ignorant of the construction of the language.

Dr. Storrar quite agreed with Dr. Andrew Wood. He had over and over again lifted up his voice against the way in which Latin examinations had been conducted. In bygone times he had been considered violent in his denunciation of the Royal College of Surgeons in this respect, for they kept Cæsar's Commentaries staring the students in the face from year to year. He thought when they put down simply "Latin" they might leave it to the public educational bodies to determine what should be the degree of Latin required, and what form the examination should take, and he still thought that was sufficient.

Mr. Hawkins explained that the Royal College of Surgeons did not always examine in the same Latin book. They each year issued a subject for the following year. In one year it might be a passage from Cæsar's "De Gallico Bello," and another from something else.

Dr. Storrar said he did not object to Cæsar's "Commentary," but to the fact that the examination always seemed to be in the first book.

Dr. Sharpey assured the Council that, from what he had seen, if they restricted Latin to mere translations from books, it would be no test whatever of the student's proficiency.

After some further discussion,

It was proposed by Dr. Storrar, and seconded by Sir D. J. Corrigan, "That the fourth recommendation of the Committee should stand thus—'Latin, translation, and grammar.'"

And as an amendment, Dr. Fleming proposed, and Dr. Alexander Wood seconded, "That the recommendation should stand thus:—'Latin, including translation and parsing.'"

The amendment having been put and carried, was put as a substantive motion, and agreed to.

It was then agreed that Greek should be one of the optional subjects.

Sir D. J. Corrigan moved what had already passed as an amendment as a substantive resolution, namely, "That Greek be included in the list of compulsory subjects after 1869."

After the amendment had been seconded,

Dr. Alexander Wood asked whether it was competent for them to accept the resolution. He thought it should be an instruction to the Council of 1869 to take it into consideration.

Dr. Thomson rose to propose an amendment. He acknowledged that he attached great value to Greek as a means of training in connexion both with general and scientific education, and he hoped at no very distant date to see Greek introduced into the list of compulsory subjects, but he did not think they were in a position to decide at present even for 1869. In Scotland very great progress had been made. While some six or eight years ago they could not have ventured upon this subject, they might now do so with safety in several of the institutions that granted degrees. It would be more easy for the Council to take a middle course, and therefore he proposed, as an amendment, "That the Medical Council, while fully aware of the importance of a knowledge of the Greek language as a means of training in connection with general and scientific education, and most desirous of seeing it included in the list of preliminary subjects for examination for a Medical qualification, are of opinion that it is expedient to defer for the present the introduction of Greek into the compulsory part of the curriculum."

Dr. Andrew Wood seconded.

Sir D. J. Corrigan thought this could not be received as an amendment. It said it was not expedient to introduce Greek into the curriculum at present, and his resolution did not say it was.

Dr. Andrew Wood said Sir Dominic Corrigan's motion tied down the Council to a course of action three years hence; but Dr. Thomson's proposition left the matter open, so that it might be discussed next year or the year after. He did not think the Council should pledge themselves to anything that was to happen three years hence.

Dr. Acland thought it would be a dangerous thing for this Council to issue any declarations which were at all likely to be withdrawn. Nothing could be more unfortunate for them than to endeavour to enforce that which it was very doubtful they would ever get thoroughly accomplished. Some years ago he collected opinions from experienced masters on this point; and one of the most experienced that he knew said that the necessary consequence of their forcing Greek upon every member of the Medical Profession would be that they would have an inefficient and discreditable examination, because it was impossible out of the average mass of any profession to compel the students in the present state of knowledge to acquire Greek. Sir D. J. Corrigan's motion was an instant injunction to schoolmasters who were preparing young men for the examinations that they must teach Greek. But it so happened that one of the points upon which the ablest and best schoolmasters had been most pressed was to give up a great deal of classical work in order that they might press into the average mind other subjects; and were these poor men to have both their ears boxed at once? He knew a young schoolmaster who had lately taken one of the higher classes of grammar schools; he was an accomplished scientific man, and was bending his whole energies to a high class of education for the upper middle classes; and if his opinion were asked upon this subject, he would say by all means let Greek be optional, because he was doing his utmost to train the mind in the most fundamental manner he could in the pursuit of scientific study. Therefore he (Dr. Acland) thought that unless they were prepared to compel all the schoolmasters immediately to turn their attention in an opposite direction to that in which it had been turned for the last few years, they had better wait another year or two before pressing Greek.

Dr. Storrar wished to reply to Dr. Acland, who had said that some of the schoolmasters in the country, and some of the most valuable of them, were giving up Greek——

Dr Acland: No; I must not have saddled upon me what I did not say.

Dr. Storrar asked to be allowed to complete the sentence —were giving up the use of Greek as a means of training the average mind.

Dr. Acland: That is not what I stated.

Dr. Storrar was most anxiously desirous of not misrepresenting Dr. Acland or any other gentleman. He was ready to admit there was a certain section of the middle classes —that section of young men who were going into merchants' offices or various other pursuits in civil life—amongst whom it was becoming the practice to give up the study of Greek, and to put in its place German, French, or mathematics, or some of those educational subjects which, while they served the purpose of intellectual discipline, could be brought more usefully to bear upon their future pursuits in life than Greek. If that was what Dr. Acland intended to say he perfectly agreed with him. But what he wished to represent to the Council was this—that according to the schemes they had hitherto published they had contemplated detaining young men at school until they were 17 years of age, and they laid down that it was of the greatest importance for the comprehension of physiology, and many of the scientific terms—anatomy, chemistry, natural history, in fact, all the circle of the sciences, that some knowledge of Greek should be acquired. They were, therefore, of opinion that before the age of 17, assuming a boy to be gifted with average mental powers, and subjected to ordinarily good means of training, that it was possible for him to acquire a knowledge of Greek.

Sir D. J. Corrigan remarked, with reference to what Dr. Acland had said about his motion binding the Council, that it was only following a practice that had always obtained in the Council in regard to preliminary and Professional education. If it were found injudicious to press it in 1869, then it would be in the power of the Council of that year to rescind it, and it was much better it should come out now as a warning.

The amendment was then put, and there were for, 9; against, 11. It was, therefore, lost. The resolution, that after the year 1869 Greek should be one of the compulsory subjects, was put, and carried by 12 against 7.

It was proposed by Dr. Parkes, and seconded by Dr. Storrar, and resolved, "That French be one of the optional subjects."

German, as one of the optional subjects, was also agreed to.

It being now nearly six o'clock,

The President said that as the other recommendations were likely to meet with some discussion, he thought it better to adjourn the consideration of the Committee's Report.

Dr. Andrew Wood then laid upon the table the Report of the Committee on the Draft of the Medical Acts Amendment Bill, and moved that it be received and entered on the Minutes. As this subject was the order of the day for to-morrow, he said it would take precedence of the adjourned debate on the subject of general education.

Sir D. J. Corrigan referred to Standing Order No. 5, which distinctly stated that the adjourned business should have the precedence.

After some discussion, Dr. Andrew Wood moved that the Standing Order be suspended, which was seconded by Dr. Parkes, and agreed to.

The Council adjourned at the usual hour.

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The Admiralty have, during the last week, granted to the Seaman's Hospital Society the *Belleisle*, to be used as a floating Hospital for the reception of any cases of cholera that may apply for admission on board the *Dreadnought*. The *Belleisle* was fitted for a Hospital ship in the late war, and was sent to the Baltic. She is, therefore, in every respect well suited for this purpose, and the *Dreadnought* Committee may be congratulated in that so good a ship is placed at their disposal.

St. Bartholomew's Hospital.—Examinations, 1865-6. —Senior Scholarship in Medicine, Surgery, and Midwifery: 1, W. Square; 2, H. C. Upton. Senior Scholarship in Anatomy, Physiology, and Botany: 1, W. D. Butcher; 2, E. B. Crowfoot. Junior Scholarship, 1865: 1, E. B. Crowfoot; 2, W. Thurston; 3, L. Newton. Bentley Prize: F. H. Haynes. Practical Anatomy, sen.:—Foster Prize: W. W. Saul; 2, L. Clapham; J. T. Hickman and J. Kirkman, equal; 5, J. T. Williams; 6, J. O. Sankey; 7, T. W. Lee. Wix Prize: T. Cole. Practical Anatomy, jun.:—Treasurer's Prize: A. F. Field; 2, Examiner's Prize: E. A. Brickwell; 3, T. H. Hendley; C. Bennett and J. T. Hartill equal; 6, J. Rouch F. J. Glencross and E. Groves equal.

## ORIGINAL COMMUNICATIONS.

## ON THE NATURE OF VITAL FORCE.

By W. MOXON, M.D. Lond.,
Pathologist and Curator of Museum to Guy's Hospital.

The controversy between Drs. Odling and Beale is in such able hands that it would be presumption in a third person to interfere. But the question mooted, which concerns the nature of vital force, is of such paramount importance that now it is under agitation it may be allowable to introduce a phase of it which appears to me not yet to have received the notice that is due to it.

When Dr. Odling affirms that the powers at work in the living organism are correlated with the physical forces, he affirms that which with the widest meaning of the term "physical force" is probably true; and it seems to me that Dr. Beale in no way invalidates his opponent's position when he shows that the mechanical arrangements by which the chemist on the one hand and living substance on the other respectively produce a given result are most widely different; for, even if the powers acting in living matter be never so unlike physical forces in manner of action and in the nature of their external manifestations, yet they may be as much correlated with heat as heat with mechanical motion, or as light with sound,—for what can be more different than the key of C major and the solar spectrum?

Let it be, then, as Dr. Beale graphically shows, that the proceedings in living matter are conducted in a manner whose simplicity contrasts very strikingly with the complexity of the chemists' procedures; and let it be that these differences in the methods argue like differences in the causes governing those methods; yet all this will only show the vital force to be another phase of manifestation of the general store of physical forces equivalent to heat, or light, or chemical attraction, and differing from each of these after the same manner in which each of these differs from the other.

On the other hand, Dr. Odling, in regarding the powers evidenced in the phenomena of living structures as only varieties of general physical force, or physico-chemical force, appears to me not to yield sufficient importance to the peculiar characters of certain forces now included amongst these, and brought with them under the dominion of the law of "correlation and conservation of physical forces."

Dr. Carpenter has shown, by reasonings of the same nature with, and as conclusive as, those adduced by the exponents of the law of correlation of the physical forces, that the same law must be extended to the nervous force, concerning which he says:—"But in animals we find an additional power, termed nervous agency, nothing analogous to which exists in plants. This power, related on the one hand to the conscious mind, to which it communicates impressions derived from the external world, is also related in a very remarkable manner to the vital endowments of the organism in general, particularly to the contractile tissues" (*Phil. Trans.*, 1849, p. 736), and "nerve force thus generated" (by the agency of nerve-cells) "is not merely *expended in arousing mental activity on the one hand*, or in exciting muscular contraction on the other, but it has an intimate relationship (there can be no doubt) with all the *other* manifestations of vital force which the animal organism exhibits." (*Loc. Cit.*, p. 740. The italics are mine.)

If, then, mental activity is to be classed under manifestations of nerve-force, as a correlative of the physical forces, there should be fair account made of the importance of this member of that group. I do not think it too much to claim on its behalf that the title "conservation of physical forces" should be raised to that of "conservation of psychico-physical forces." And, allowing its due weight to the psychical element, we may consider that, on the whole, Dr. Odling casts no slight on the dignity of the vital force by limiting its efficiency to the exertion of psychico-physical powers. Since all he advances may equally be applied to mental activity, along with the rest of the phases of the vital force, and, indeed, in saying that vital force is but a correlate of physico-chemical force, he is saying what is consistent with the belief that vital force is of the nature of consciousness or mind.

In truth, if we consider the wonderful phenomena of development and growth, and compare them, as effects, with mechanico-chemical causes on the one hand, and with rational causes on the other, (by the term "rational cause" I mean a cause endowed with reason, such a cause as man is,) does it not appear certain that the phenomena of development are not such as to result from causes simply mechanico-chemical, but rather that they evince the effects of rational causes? For if, with an able author, we explain the steps of the growth of leaf-buds by external pressure, we have then to show how that pressure itself always takes such and such definite determinations; and, having come to regard the leaf as cast in a mould, we yet want to know how the mould came to be made. This must be as complex as the object moulded, and we gain nothing by passing our consideration from the one to the other.

One step in the recent progress of philosophy appears in this part of the argument to be of great importance as tending to bridge over the bottomless abyss which now separates mental from physical science. I allude to the urging by Mr. Mill ("Examination of the Philosophy of Sir W. Hamilton," p. 215) of the distinct relations borne by the subject and object of a sensation to the sensation itself, so that "the immediate correlatives are not the pair subject-object, but the two pairs subject-sensation subjectively considered and object-sensation objectively considered." That the mind should dwell on this distinction between the sensation in relation to the subject and the sensation in relation to the object will, I believe, ultimately lead to a union of the sciences of physiology and psychology much closer than at present seems probable, for when we have come to regard the object and objective sensation as separate from the subject and subjective sensation, we shall, I think, find plenty of evidence that objective sensations do exist apart from subjective sensations to an extent wholly beyond our present capacity for belief. I know how difficult it is to conceive objective without subjective sensations when we appeal only to our own minds, in which the operations of consciousness always include both the relation to the object felt and that to the subject we call self; for the constancy of this association of subject and object, *whenever we are conscious of our sensations*, naturally grows up into a sense as of their necessary connexion—a sense so abiding that nothing is more difficult than to conceive a sensation unfelt.

And yet this very difficulty is itself as surprising even as it is constant, when we reflect that in any night's sleep we experience sensations of which we are not subjectively conscious, and that in young infants we get evidence of objective consciousness long before any subjective consciousness is displayed. Further, the manifestations of sensation, and even of some approach to reason, which are shown by very low creatures, such as infusoria and rotatoria—as, for instance, their discrimination between substances fit and unfit for their food, the knowledge they show of the neighbourhood of their own species, and the like; all these things, if we can overcome the usual ignoration of them, bear well a construction which regards them as purely objective sensations.

Suppose, then, that we should have to conclude that objective consciousness is no more peculiar to the nervous centres than is heat or mechanical motion to the body, and that the consciousness which is centred and manifested in an animal's brain is in its relation to force at large comparable with the heat which is set free in his body; the essential similitude being obscured by the fact that heat is a manifestation which causes within human control can readily educe, and which we at once recognise by simple sensation; whilst, on the other hand, consciousness cannot be educed by any mechanism we can ourselves build up, and can only be found out by inference, and not by simple sensation, an intermediate relation being held to those extremes of heat and consciousness by galvanism, which we have now become able to call forth by means of appliances we well know.

In the phenomena of growth and development, such an astounding adaptation of means to ends is shown, and all so utterly beyond the province of physical and chemical forces as elsewhere experienced—only imitable in the faintest degree when the reasoning mind of the chemist guides the process—that it seems not unreasonable to attribute the causation of those phenomena to something rather akin to consciousness—such an objective consciousness as those above alluded to, as evidenced in dreams, in infants, in worms; yet simpler, and yet more remote from subjective consciousness; so that the choice of one combination of composition or shape is due, not to such a preference as leads sulphuric acid to soda, but to such a preference as leads a vorticella to swallow one microscopic particle rather than another, this being an excessively low manifestation of the preference which operates as motive in higher beings.

This is not so very absurd as it seems at first sight: any one who will take the pains to sit and watch a group of infusoria, and think how much he can make out of the half-conscious, half-mechanical phenomena they show, will be prepared to deal with the conception of separate objective consciousness as a by no means fanciful but very real thing.

However, it is far from my wish to urge such a theory of vital causes; my intention is only to advance it in the hope of showing that the subject which Drs. Beale and Odling are discussing is wider than at first appears, and that the affirmation of Dr. Odling, that vital force is one of the correlatives of the physical forces, is not contradictory of Dr. Beale's view of the paramount importance of the living thing as a transformer, seeing that its correlation with the physical forces does not show that it is not a thing so paramount as mental activity.

6, Finsbury-circus.

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# Medical Times and Gazette.

SATURDAY, MAY 26.

◆

## GENERAL MEDICAL COUNCIL.

THE admirable address delivered from the chair at the opening of the present session of the General Medical Council is not only, as we have already termed it, clear and businesslike, but it is also highly suggestive, and suggestive in some directions that were, we suspect, hardly intended. In the latter part of it practical suggestions were put forth "for the improvement of the efficient working" of the Council, which well deserve, and will doubtless receive, very careful consideration; but the earlier part of the address reads, to our mind, very like a delicate satire on the proceedings of the last year's session. It would, perhaps, be scarcely respectful to suspect the President of an intention—"not to put too fine a point on it"—to "chaff" the Council about the magnificent amount of work they had accomplished; and yet, on reading his "brief survey of the more important labours of the Council during the last session," such a suspicion is all but irresistible, for what does his *resumé* amount to? "A Select Committee was appointed to report upon the subjects of general education to be inquired into in the preliminary examination of Medical students," and it made a report, but at so late a period of the session that "the Council were of opinion that they could not then consider the important questions brought forward in the report." In 1864 the Council had invited the several licensing bodies to favour them with observations and suggestions upon various points connected with Professional education, and many reports, "drawn up with great care and replete with valuable suggestions," were last session sent in for the use of the Council; but "this mass of useful information has hitherto not been brought under the consideration of the Council, and certainly has not been utilised." The visitation of the examinations of the different licensing bodies by the several branch councils was agreed upon, a report was received from the Committee appointed to take steps for the preparation of a new edition of the "British Pharmacopœia," and "the

Council afterwards thought fit to pass a resolution which may have led members of the Council" and the Profession to suppose that a proof copy of the new edition would be in the hands of the members one month before this meeting of the Council; but that was an error; the work was not to be got through with so fast as that.

And that was all!—all that seemed worthy of being included in a *resumé* of "the more important labours" achieved by the Council last year—the seventh year, be it remembered, of their costly existence. Perhaps, however, we ought rightly to include in the list of labours the special "duty assigned to the Executive Committee" of communicating with the Government in regard to the Bill for amending the Medical Acts, inasmuch as that duty devolved on the Committee in consequence of insuperable obstacles having intervened to defeat the efforts of the Council to effect the work for which they had been so early brought together—viz., the passing of an Amended Medical Acts Bill last year. If we get one this year, we shall owe it to the energy and persistence of the President of the Council in urging the subject on the attention of the Government. Looking at the business already before Parliament, it is indeed difficult to discover grounds for even a faint hope that we may get an Act passed: still, "hope springs eternal in the human breast," so let us hope for success on this point, as also that the present session of the Council may be more fruitful of what is generally understood by the phrase of "work done."

A considerable part of the first day's sitting was consumed, it would be rude to say wasted, in discussing a motion of Dr. Acland's founded on a memorial from the Sub-section of Physiology of the British Asso ciation, suggesting that the Council should, "by pecuniary grants and the appointment of suitable persons, undertake investigation into the physiological action of medicines." Sir D. J. Corrigan carried by a very large majority an amendment to the effect that such investigations did not come within the province of the General Medical Council, and that they had no power to expend money on such objects. Dr. Acland means to bring the matter again before the Council by a motion to refer the question to their solicitor for a legal opinion. It seems a pity that he could not have in some other way ascertained the general feeling among his colleagues, and so have saved the time occupied by the first discussion.

An attempt made by Dr. Alexander Wood to get a Saturday half-holiday for the Council at the expense of the mornings of the London members, was met by a kind of half-way compromise, a resolution being passed that on Saturdays the Council should meet at one and rise at four. This will allow the country members who, according to Dr. Alexander Wood, "suffer from breathing an air they were not accustomed to, when their sessions extended over a Saturday," to escape from the mephitic and oppressive atmosphere of the West End, and breathe some pure country air till the Monday, when they may return to their labours with renewed vigour—not of lungs, we hope, but of thought.

On Friday the report of the Committee on the subjects of general education, deferred from last Session, was received, and was ordered to be re-committed, with an instruction to the Committee "to take into consideration and report upon the examinations in general education at present conducted by the various national and other bodies recognised by the General Medical Council." The result we shall report further on. The Council then proceeded to consider communications from the Medical Departments of the Army and the Navy. An application had been made by the Council to the Director-General of the Army Medical Department in April, 1865, for returns of the results of examinations, held in 1865, for Medical commissions in the army and in Her Majesty's Indian Service, and the request was made that the returns might, like the returns received from the Navy Department, "specify in similar detail the number of the candidates, and the heads under which the candidates failed to answer." In May the Director-General returned a reply promising the information asked for, but in November he informed the Council that the Secretary of State for War objected to furnish "a return, showing the different licences of the candidates for commissions in the Army Medical Department, and the subjects in which the unsuccessful ones were deficient," on the ground that such a return "would have the effect of allowing the unsuccessful candidates to be identified, and thereby bringing upon them individually a stigma" which they had never supposed they could receive. It would be difficult, perhaps, to avoid this risk if the list of candidates were a very small one, but in such a list as the Army Medical Department has to present it would surely be easy so to arrange it as to make it impossible for any one outside the Examining Body to spot any of the individual candidates, and the information sought for is of such special value in showing the weak points in education, and in the present system of examinations for diplomas, that we greatly regret it should be withheld. The return from the Director-General of the Naval Medical Department tells a most pitiful story,—twenty-one candidates presented themselves for examination in the year, only twelve of whom were successful, five passing good, two moderately good, and five indifferent examinations; "the majority of those rejected were utterly ignorant of the Latin language, two failed altogether in Anatomy and Surgery, and two were so ignorant of Materia Medica that it would have been dangerous to have passed them as qualified;" and the Examiners add that "many of the manuscripts sent in by the candidates have given evidence of such an ignorance of orthography and of the most ordinary rules of English grammar and composition as could hardly have been credited in members of a liberal Profession." It is difficult to remember while reading such a return that every one of the candidates held a diploma; the great majority, indeed, held two, one (rejected deficient in Anatomy, Surgery, and Latin; manuscript indifferent) held three different licences; and one, who "passed an indifferent examination," was possessed of four, including the licence of the London College of Physicians and an M.D. degree. That a gentleman who possessed only the licence of the Royal College of Surgeons of England should be rejected as "deficient in chemistry, Materia Medica, Midwifery, and botany" is not to be wondered at, as the College does not stoop to those subjects; but it is sad to find that when he succeeded, on a second trial, he should have passed "a good examination in all branches *excepting Surgery*, which was fair." Now, no one will take this list as anything like a fair specimen of the average kind of men who succeed every year in entering our Profession; what the return most forcibly evidences is the deplorable state of the Navy Medical Department. These candidates are all it can show for a whole year, and of these five only pass a good examination; no words can more powerfully depict the unpopularity of the service. But the return should also be a valuable lesson to teachers and to examiners; it is most lamentable, to use a mild expression, to find that men so ignorant of all that they ought to know, as were some of those diplomaed candidates, could have gained admittance to the Profession through any portal whatever.

In 1865, the Council sent to the Secretary for War a recommendation that in the Army List "initials, indicating the several Medical qualifications of Army Surgeons, should be inserted after their names, without distinction or preference to one degree or licence over another," and that each Surgeon should be allowed to display only one Medical qualification. Lord De Grey now very naturally asks for a list of *initials*—what *initials* are, for instance, to be used to indicate a "Licentiate of the King and Queen's College of Physicians of Ireland?" and "suppose, for illustration, a Licentiate of the King and Queen's College of Physicians, Dublin, is also an M.D. of Edinburgh or a Member of the London College of

Physicians, or a Licentiate of the Society of Apothecaries, which of these Medical qualifications is to have the precedence, and by whom is this to be decided?" A Committee was appointed to consider the matter; we do not envy them the task of working out the initials. Will they rank the qualifications according to a principle of seniority, or will they leave the choice in the hands of the happy owner of a multiplicity?

A letter from Dr. Mackesy, President of the Royal College of Surgeons of Ireland, and of the Irish Medical Association, enclosing a resolution adopted at a very large meeting of the latter body, stating that in the opinion of the Association the Medical Council had not properly performed all its functions with reference to preliminary education, gave rise to a very warm discussion. Some members of the Council thought the letter and the resolution very important, and wished that both should be entered on the Minutes; others found them very impertinent, and desired that the Council should pass on to the order of the day; and others, again, would enter only the resolution on the Minutes. The conduct of one of the members of the Council was very freely commented on, and the tails of an Irish coat were most defiantly trailed across the floor of the Council chamber. Eventually, the letter and resolution were referred to the Committee on General Education, which, when reporting on the matter at a later date, recommended that the resolution should be entered on the Minutes. It was hardly worth while making such a disturbance about the matter, for even the President in defending the Council could only say that they "had not done as much as they wished to do, nor as much as they ought to have done;" and we strongly suspect that outside the Council the verdict will be in favour of the peccant resolution, and pithily expressed against the Council in the old phrase of "served them right." Besides, as the Council have now agreed on what shall be the minimum amount of subjects required in the preliminary examination, they may feel that they have an excellent answer to any criticisms on their former proceedings, or non-proceedings, in the matter, and can afford to receive them with entire composure.

The Report of the Committee on the subjects of general education was taken into consideration on Monday, and much of it adopted. For the details we must refer our readers to the published Minutes, and content ourselves with stating here what subjects the Council had determined on as part of the "minimum amount," when the debate was adjourned. "*Compulsory.*—1. English language, including grammar and composition. 2. Arithmetic, including vulgar and decimal fractions; algebra, including simple equations. 3. Geometry, first two books of Euclid. 4. Latin, including translation and parsing; and 5. One of the following *Optional subjects*—Greek—French—German."

On the motion of Sir D. J. Corrigan, seconded by Dr. Storrar, it was also resolved, "That after the year 1869, Greek shall be one of the compulsory subjects."

The debate was then adjourned, there remaining for discussion the position that Natural Philosophy should occupy in the Educational scheme—whether it should rank among the optional subjects of the preliminary or the compulsory subjects of the Professional examination. We shall reserve our remarks on the whole subject till we can place the completed scheme before our readers, but we must congratulate Sir D. J. Corrigan on his success with the Greek question; he has fought it with courage, perseverance, and skill. We do not think that any amount of teaching in Greek—or in anything else—could make anything but a blockhead of his young gentleman who "hesitatingly thought Physiology was a kind of fungus," but we do think that it is not too much to require some knowledge of Greek from every student who wished to be entered for one of the learned and liberal Professions. To those who really fear that in the middle of the 19th century this is demanding too high a degree of education, we recommend a study of the speeches of Sir D. J. Corrigan and Dr. Storrar on the subject.

The proceedings of the Council during Saturday's sittings do not demand much notice here. A very important question came before them as to how they should deal with the fact of students having been permitted to commence their Professional education at Glasgow before passing the preliminary examination, but as the whole matter was referred to a Committee to examine and report upon, it will come before us again.

A Mr. William Adams, once of St. Ives, and now in the army, prayed that his name might be restored to the Register, its having been omitted through an erroneous report of his death. His prayer was of course granted.

A rather pathetic petition from Mr. Richard Organ to be allowed to present himself at one of the Examining Boards, was peremptorily, and we think rightly, rejected.

Tuesday's and Wednesday's sittings were occupied almost entirely by the discussion on the Medical Acts Amendment Bill, but it will be impossible for us to give the Minutes or the speeches of those days till next week.

## THE LONDON SURGICAL HOME AND THE TESTIMONIAL TO ITS FOUNDER.

Reports of Medical charities are not usually amusing reading, but there are exceptions, and we have recently lighted upon one. We have lately seen a series of these papers having reference to a certain special Surgical institution at the West-end of London, which are certainly as good in their way as that racy chapter of "Martin Chuzzlewit," in which the Lady Interest and the Gentlemanly Interest vie with each other in doing homage to the talents and virtues and disinterested benevolence of the great Mr. Pecksniff. The chapter referred to may be entitled the Pecksniffian Apotheosis, the reports to which we invite attention, the Brunonian. The hero of the latter, however, takes a much more active part in the proceedings they detail than did the celebrated architect on the occasion of laying the foundation-stone of the grammar school. That great genius could only reply to the cheers which greeted him by telling the crowd how much he was affected, and by paternally blessing them; but the founder and Surgeon of the institution we write of eclipses Mr. Pecksniff—at least, in self-composure and presence of mind. Like lesser persons, he has a taste for adulation, but he far surpasses the vulgar herd in his capacity for it. He is one of those representative men in whom no bashfulness limits the power of swallowing; no misgiving disturbs digestion. The greasiest and most rancid butter seems to sit easily upon his placid stomach. His mental organisation may be compared to that of a self-supplying patent digester, for when other people have exhausted themselves in praising him, he immediately takes up the parable and begins to praise himself.

Are our readers sceptical on the subject of disinterested philanthropy? do they need convincing that the genius and intelligence of the present era of Surgery are equal to the cure of any and every disease? do they want to know where the best skill our Profession can give is to be found? and are they curious as to the department of Medicine which is specially under the Divine guidance, and as to who may be its chief apostle? then verily let them procure the Reports and Proceedings published by the London Surgical Home during the last half-a-dozen years, when all their doubts will be settled and all their inquiries answered.

These and many more wonderful things the benighted outside Profession will find in these pages; but it was not for us that the speeches were made and these mysteries revealed. Fair faces hung on the lips of the speakers, and doubtless in many a boudoir their touching appeals and the singularly unvarnished reports which illustrate them, have stimulated alike the curiosity and compassion of the gentle occupants. This, we think, is a new feature in the machinery of Medical charity. Medicine used to be a reticent science. There was a time when the goddess was veiled to all but her immediate worshippers, when her mysteries were reserved for the initiated, and the infirmities of poor humanity were safe in her keeping. But a new era has dawned. Surgical Homes and Brunonian discoveries have changed all this. The goddess is not only unveiled but unpetticoated. Lady patronesses are presented with printed reports in which lists of female maladies, from rupture of the perinæum to hypertrophy of the clitoris, are paraded as piquant excitants to almsgiving; and the benevolence of the wives and daughters of Westbournia, like the Protestant horror of martyrdom in Lord Macaulay's country rector, is kept at a white heat by the very natural reflection of—

"How very bad it must feel."

It were unfair to deprive our readers of the topics for amusement and reflection which these Reports have afforded ourselves: we therefore offer them a few extracts. We select a pamphlet entitled "Proceedings at the Third Annual Meeting of the London Surgical Home for Diseases of Women." This *brochure* contains the Annual Report of the Committee, and a short-hand writer's transcript of the speeches made by various orators who addressed the meeting. The Report of the Committee is of a highly cheerful and congratulatory character; it informs the world that the "reputation" of the Institution "increases day by day, and all the Medical journals now include the London Surgical Home amongst the recognised Medical Institutions of the metropolis." A few lines further on, we are told that "many delicate and difficult operations have been performed, in cases which required an extraordinary combination of Medical skill with the most careful nursing." We then read that of sixty-nine cases of cure enumerated, twelve were cases of patients "who suffered from one of the most distressing and annoying diseases to which the sex is liable;" and a little further on "The extraordinary instances of complete restoration to health after years of hopeless suffering, which the past year has witnessed, must be attributed, under God, in the first instance, to the skilful treatment and careful attention of the Medical officers." The Report is followed by a tabular statement of patients admitted, arranged according to their diseases; of these there are six-and-twenty specified, nearly all being affections of the pelvic viscera, and most of them of the reproductive organs. We pass over the speeches of the reverend gentleman who occupied the chair, and of another minister who spoke on the occasion. In whatever cause religious motives are appealed to, they at least demand our respect, and although religion degenerated into pietism has forfeited much of its claims, there is more than enough worth extracting in the remaining speeches to fill our allotted space. Mr. J. F. Clarke rose to move the congratulations of the meeting to the founder of the Institution on its continued prosperity, and to offer its best thanks to him for his constant and invaluable services in promoting the efficiency of the Institution. The speaker thought that the "thanks of the Profession" to which he belonged "were deeply due to the distinguished Surgeon." He went on to say "that the cases which have been received into this Home, and which have been cured and relieved, were cases that were turned from the doors of "the great and magnificent" London "Hospitals." "All honour to the man who has devoted himself to the cure and relief of a class of diseases most lamentable, most distressing, and most difficult of cure," with much more in the same exalted strain. Then followed a Mr. Holt, who professed to represent the general public on the occasion. He was certain that "the success which has attended the London Surgical Home is due to Mr. Brown." "Mr. Brown's friends are all well acquainted with his Professional skill, his kindness, and the success which has always attended his operations."

Then came the speech of the day. Most men, under the circumstances, would have disclaimed thanks, but the founder, with charming honesty, confessed that he looked forward to being thanked with pleasure. He said he found the toils of his Profession and the gratitude of his patients together "almost too much for his buoyant disposition and for the natural elasticity of constitution which God, in his mercy, had given him." He then tells his audience that the great problem he is engaged in working out is "that all that is considered incurable shall, by God's blessing, be cast away from our scientific Profession, that there shall be no such thing as incurability, but that every case that comes before us shall receive the blessed antidote by the skill and science of man, guided and directed by God." Further on he informed them that 168 perfect cures had been made in the year. "Now recollect," he says, "that a very large majority of the number were considered perfectly incurable, and would not have been cured if we had not this Institution or some similar one to receive them." The patients "meet with the best skill which our Profession can give them." Even the nurses turned out by the Surgical Home are superior to all others. "We train them up in a way in which they can be trained nowhere else." The great point, however, in the speech is the foreshadowing of some sublime discovery which, although its nature is not absolutely specified, we take to be none other than that of the new operation for epilepsy. Our readers will bear in mind that "the founder" is addressing an audience described by one of the clerical speakers as "dear Christian ladies." . . . . "We can say in this Institution we take the most difficult problem in the world to solve, and we do solve it here. We are glad and thankful, therefore, to be able to rank as high as other people who are working in the great field of progressive work. During the last few weeks a fact has come to my own knowledge of such vast extent that I shall not even allude to it here. But another year I shall be able, I believe, firmly to say that such an astounding fact has come before me, and has been demonstrated, as will startle mankind when they hear it. A great scientific fact, calculated to benefit thousands and thousands of those who are affected with the most distressing sufferings that can possibly be brought before us—sufferers who are in their separate Asylums, cut off and excluded from the face of man and every loved one. I believe we shall see that even these come under the scientific skill of the Surgeon, and that God will bless and cure them." The modest oration ends thus:—"Allow me to say that as long as God gives me health and strength I will devote myself as earnestly as I have done, *and more so I cannot*, to the elucidation of truth, to the establishment of health, and to the benefit of every one who comes into this Home under my care."

We can only mention a speech of the Physician to the Institution, who told the "dear Christian ladies" that he had frequently seen disastrous failures in operations undertaken by others which Mr. Brown performed with such great success, and further dilated on "Mr. Brown's admirable skill and dexterity;" but there is one quotation from an after-speech by the latter gentleman which is really too good to omit, as, with what has preceded, it may give a sceptical Profession some idea of the great mental effort required to have evolved the operation for epilepsy from the inward consciousness of "its discoverer," and the scarcely inferior effort which it and similar proceedings need for their performance:—"Thursday is our operating day. . . . Every one's brain is stretched almost beyond the power of endurance, and the exertions of every one are almost superhuman." The proceedings terminated by the reverend Chairman pronouncing the Benediction. We hope we shall not be deemed irreverent if we suggest the following quotation from Sheridan's *Critic* as a form of prayer to be used on future occasions for the staff whose brains are thus "stretched:"—

"Assist them to accomplish all their ends,
And sanctify whatever means they use to gain them."

We do not feel ourselves called on to pronounce on any grave question of morality. We are only censors of good taste and Professional propriety. There are certain unwritten laws current in our Profession which have hitherto had the effect of keeping desire for notoriety within due bounds amongst its members. But it would now seem that to laud one's own Surgical talents, to boast of cures of diseases, boldly stating them to have been incurable by other members of the Profession, to publish lists of disgusting diseases for the perusal of innocent women—as long as all this be done under the form of a Report of a self-originated Hospital, and with an unctuous reference to the Divine blessing, is a certain passport to Professional fame and a claim on Professional gratitude. It may be so. The age is a progressive one, and old-fashioned ideas of good taste and of the responsibilities and duties which the Profession of Medicine imposes on its followers may be as behind the time as are living within one's income and being contented with three per cent. But surely these Reports are a sufficient testimonial to the virtues, talents, and public services of the founder of the Surgical Home without the Profession being called on to furnish any other. What in the way of laudation can any testimonial express which has not been testified by the clerical and Medical orators who have met to do honour to the "distinguished Surgeon," or which the "distinguished Surgeon" has not testified of himself? Can the force of puffing any further go? For ourselves, if the Profession respond to the appeal that has been made to them and fill the subscription list of the founder of the London Surgical Home, we shall be tempted to accept the views held by the Rev. Dr. Cumming, for we remember that a sign of the latter day is to be that for brass men shall bring gold.

## THE WEEK.

PARLIAMENTARY.—THE CATTLE PLAGUE IN IRELAND—THE NUISANCES REMOVAL BILL—METROPOLITAN WORKHOUSE INFIRMARIES—THE CHOLERA AT LIVERPOOL.

On Thursday, May 17, in the House of Lords the Contagious Diseases Bill was read a third time and passed.

Mr. Herbert asked the Chief Secretary for Ireland whether he had been informed that the cattle plague had been introduced into Ireland by a drover from England, and, if so, whether the Government was prepared to forbid English drovers entering Ireland during the continuance of the plague in this country.

Mr. C. Fortescue could afford the House no further information respecting the cattle plague in Ireland. The hon. gentleman might be sure that the Government would put in force the full powers granted to them by law, but he could not for the moment give any definite answer to the question of the hon. gentleman.

Mr. Knatchbull-Hugessen obtained leave to bring in a Bill to amend the Nuisances Removal Act.

On Friday, in the House of Lords, in answer to a question by the Earl of Carnarvon, Earl Granville said that some of the Reports as to the condition of the Metropolitan Workhouse Infirmaries, ordered by the President of the Poor-law Board, had already been furnished to that Board, and it would be the duty of the Government to lay them before Parliament.

In the House of Commons, in answer to some questions by Mr. Laird, as to the removal of 200 emigrants from the *Helvetia*, a ship infected with cholera, to the Government Emigration Depôt at the Birkenhead Docks,

Mr. Bruce said that the Government was informed by an officer in the employ of the Emigration Commissioners that the emigrants in the *Helvetia* were removed to the Birkenhead Depôt by order of the Mayor of Liverpool. The depôt was not the property of the Government, but was occasionally used by them for their emigrants. It consisted of a large dormitory upstairs capable of holding 400, and of a mess-room downstairs. Four hundred emigrants, who were to sail on the 9th, were confined to the dormitories, and the 200 emigrants from the *Helvetia* were placed for the night in the mess-room. He was unable to say whether the Birkenhead authorities were communicated with. The cholera broke out among the passengers of the *Helvetia* soon after their arrival at the depôt; but he had no reason to think that any of the 400 emigrants who left the depôt on the 9th had suffered. He was happy to say that no new cases were reported since yesterday, and that no case had occurred among the inhabitants of Birkenhead. The Government have no intention of using the depôt for a considerable time. Their emigrants would be shipped from other ports.

## THE CHOLERA AT LIVERPOOL.

*(From a Correspondent.)*

(Continued from page 528.)

*Deaths from Cholera in the Liverpool Workhouse.*

| Date. | No. of emigrants. | Nationality. | Age. | Male. | Female. | Observations. |
|---|---|---|---|---|---|---|
| 1866. | | | yrs. | | | |
| Brought over from page 528 | 6 | — | | 3 | 3 | |
| May 16 .. | 1 | Irish .... | 32 | — | 1 | Two days' illness. |
| „ 17 .. | 1* | „ | 36 | 1 | — | Entered the house on the 16th |
| Totals.. | — | — | — | 4 | 4 | |

* Stoker on board the *Helvetia*.

*Deaths from Cholera on board the Helvetia and Jessie Munn, in the River.*

| Date. | No. of emigrants. | Nationality. | Age. | Male. | Female. |
|---|---|---|---|---|---|
| Brought over from page 528 | 20 | — | | 15 | 5 |
| May 14 .. | 1 | Irish .... | 22 | 1 | — |
| „ 14 .. | 1 | German | 24 | 1 | — |
| „ 14 .. | 1 | „ | 29 | 1 | — |
| Totals.. | 23 | — | — | 18 | 5 |

*Deaths in the Town.*

| When and where died. | Sex. | | Age. | Profession. | Cause of Death. |
|---|---|---|---|---|---|
| | M. | F. | | | |
| May 14; 152, Vauxhall-road .. .. .. | — | F. | (?) | Shopkeeper .. | Asiatic cholera. |

Referring to this last case, the Medical Officer stated at the Health Committee that immediately after receiving intelligence of the circumstance he visited the residence of the deceased, and saw her daughter and the doctor who attended her. He found from the statements of the daughter that her mother had been for years subject to periodical attacks of very severe purging; that about a year since she suffered from a fall and injury of the skull, which at the time endangered her life, and afterwards left her a weakly invalid; that the symptoms of purging and the appearance of the evacuations were in no respect different in the last than in the former attacks of sickness, and that the evacuations were coloured, and not like rice-water. The Surgeon stated that he had not seen any of the evacuations; he had found her sinking on his visit; she had had no purging for eight hours before death—that is, from 2 a.m. to 10 a.m. Dr. Trench mentioned to the Committee that he did not consider the case one of decided Asiatic cholera, although he directed the necessary purification of the house and clothes to be adopted.

During this meeting of the Health Committee the Medical Officer was asked about the death of a priest from cholera, as mentioned in the *Times*. He stated that he had not heard anything which could have given rise to the rumour. He did not believe the truth of the report.

KILLED BY A GAME COCK.—An inquest was held last Saturday, by the Coroner for Middlesex, on the body of Charles Winter, aged three years, who died from the attack of a game cock. He was attacked by the bird, which pecked him severely about the face and head on Tuesday, and he died on the following Monday. Mr. R. Meldola, M.R.C.S., said that the deceased died from effusion of serum on the brain caused by the shock to the system, arising from the attack and pecks of the game cock, as well as from the fright.

## REVIEWS.

*Symptoms and Treatment of the Cattle Plague, with a Sketch of its History and Progress.* By ARTHUR WYNNE FOOT, M.D. Pp. 69. Dublin: McGlashan. London: Longmans.

DR. WYNNE FOOT adapted his book for "the instruction of the landowners, graziers, and cattle dealers of Ireland," but without any sacrifice of scientific diction or detail. His description of the early symptoms of Rinderpest is quite a word picture: the dismal shake the diseased animal gives to its head, and the cattle inspector listening for the periodic rattle of the stall head chains, is quite a touch of art. We quote a few of his remarks. In Rinderpest the inspiration is jerky and expiration ends in a *groan*, not a *grunt*, as in pleuro-pneumonia. "It is, in fact, most distressing to hear the *groaning* of a number of plague-struck cattle." Along the spine especially there is subcutaneous emphysema, the air rushing out with a "*fizz*" when the skin is punctured, a mode of relief which is only temporary. One Norfolk farmer thinks he cured a cow by long scored incisions upon the back. Dr. Wynne Foot describes the skin eruption as dirty yellow scabs, which, being raised, show on their under surface and the corresponding surface of the skin a white, pulpy, sodden appearance, in which he could observe no true formation of pus; this spot is not depressed, and he does not think it characteristic of cattle plague; neither is it necessarily a bad symptom. He passes on to the incubation of the disease; the symptoms in sheep and goats; the "modifying circumstances," which are but *two*, viz., "calves take the Rinderpest sooner than older animals, and Dutch cows are more amenable to treatment and succumb less readily than English cows." With these exceptions, neither age, nor sex, nor breed, nor mode of feeding seems to make any difference." It is curious that, as in the early epidemics of cholera people thought the wells were poisoned, so when this plague broke out in Mrs. Nichols' dairy on July 4, 1865, the same impression prevailed, and portions of the viscera and specimens of the water were sent to the Royal Veterinary College for analysis, when Professor Simmonds at once said there was no other poison in the case than that of a new cattle disease which had come into the country. "No carnivorous animal has been affected with the disease." "A pregnant cow does not necessarily slip her calf," and "a four months' calf taken from a Rinderpest dead cow showed no signs of the disease." On the skeleton map of England and Scotland, kept in the Privy Council Office, there were, when Dr. Wynne Foot examined it, 12,000 *red marks*, indicating the centres of infection; these showed that the Rinderpest has no tendency to follow the courses of rivers; and as to atmospheric conditions, it is worse in cold and wet, and better in warm and dry weather.

The author gives a clear description of the morbid changes of tissue, taking each organ by itself. He then describes the treatment and preventive measures in the various countries which have been attacked, also inoculation, vaccination, and how to perform them; he quotes Dr. Ballard's papers on the Predisposing Causes of Rinderpest, gives a history of the disease, and winds up with what is "unpleasantly true, that as a general rule treatment is worse than useless." However that may be at present, we would hope that some rational and scientific treatment (we do not believe in "*cures*") of Rinderpest will be arrived at in time, after such acute observers as Dr. Wynne Foot have further considered the subject.

## GENERAL CORRESPONDENCE.

### THE FEE FOR CLITOROTOMY.

[To the Editor of the Medical Times and Gazette.]

SIR,—A patient of mine was induced by perusing the last report of the London Surgical Home to apply for admission. She was informed by the Surgeon that the Home was intended only for those unable to pay for Medical advice, and recommended to come to London to have her clitoris removed.

Some time after the operation she asked the fee, and was more surprised than pleased to find that she was expected to pay one hundred guineas. This seems a large sum for such an operation, and it is to be regretted that the patient was not previously told the amount.

I am, &c., F.R.C.S.

### MR. BAKER BROWN'S OPERATION.

LETTER FROM DR. CHARLES WEST.

[To the Editor of the Medical Times and Gazette.]

SIR,—I beg leave to state that the Surgeon who performed the operation for the removal of the clitoris in the circumstances related at p. 663 of my "Lectures on Diseases of Women," and to which you refer in your review for May 5 of a work on "The Curability of Certain Forms of Insanity, Epilepsy, etc.," was Mr. Isaac Baker Brown.

I saw the lady whose history I have detailed for the first time on Sunday, February 2, 1862, in consultation with Mr. Paget, of St. Bartholomew's Hospital, and Mr. Barnes, of King's-road, Chelsea.

I refer to those gentlemen in corroboration of the truth of my statement. I am, &c.

61, Wimpole-street, May 22. CHARLES WEST.

P.S.—I did not see the review until the latter part of last week, or should have forwarded this statement in time for the *Medical Times and Gazette* of May 18.

## NEW INVENTIONS.

### MAGNETO-ELECTRIC APPARATUS BY MESSRS. WALLS AND CLOSE.

WE have tried the magneto-electric apparatus of Messrs. Walls and Close, of Bow-lane, and find it a remarkably compact, cheap, and efficient instrument. It is supplied with handles for administering the currents conveniently to any part of the body. Practitioners who are not within reach of Dr. Althaus or Mr. Harry Lobb should possess one of these machines for restoring limbs that have been paralysed by disease of the nervous apparatus or by the inaction consequent on compound fracture, etc.

## MEDICAL NEWS.

**ROYAL COLLEGE OF SURGEONS OF ENGLAND.**—The following gentlemen, having undergone the necessary Examinations for the Diploma, were admitted Members of the College at a meeting of the Court of Examiners on the 22nd inst., viz.:—

Richard Morgan, Aberdare, S. Wales; Thomas Franklin Lloyd, L.S.A., Finsbury-circus; George Birch, L.S.A., Kingsland; George Jesse Barnabas Stevens, Southgate-road; and Charles Handasyde Carver, L.S.A., Nottingham, students of Guy's Hospital. Alfred Hutchison Smee, Finsbury-circus; John Horsfall, B.A. Oxon., Leeds; Julius Lawrence Levy, Westbourne-terrace; Michael Perry, Haswell, Berks; and John Charles Galton, M.A. Oxon., Exeter, of St. Bartholomew's Hospital. David Roberts Pughe, L.S.A., Aberdovey; and Edward John Adams, Charlton, Kent, of St. Thomas's Hospital. Campbell Fair, Outerrard, Co. Galway; and Gordon Archdall, Bundoran, Co. Donegal, of the Dublin School. John Rees James, Llanelly, Carmarthen, of the Middlesex Hospital. Berkeley Murray, Barbadoes, of King's College. Georg Friedrich Julius Schott, M.D., Göttingen, Frankfort-on-the-Main. Thomas Lansome, Birmingham; and David Johnston, Magherafelt, Co. Derry.

The following gentlemen were admitted Members on the 23rd inst, viz.:—

Edward Cruikshank Malloch, M.D. McGill College, Montreal, Ottawa, Canada West; Julian Augustus Michael Evans, Pinner, of University College; and Leander Van Ess Parker, M.D. New York, Nova Scotia.

At the same meeting of the Court, Dr. James Middleton, L.R.C.S. and M.D. Edin., of the Royal Hospital, Greenwich; and Dr. George Russell Pickthorne, M.D. Aberdeen, of H.M.S. *Challenger*, Sheerness, passed their examinations for full Surgeons in the Royal Navy.

It is stated that out of the twenty-eight candidates who offered themselves for examination for the Diploma of Membership, seven failed to acquit themselves to the satisfaction of the Court, and were consequently referred back to their Hospital studies for six months.

**APOTHECARIES' HALL.**—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, May 17, 1866:—

Alderson Newsam, Totnes, Devon; Thomas Silvester Gell, Stafford; Arthur Griffith Evans, Narberth, Pembrokeshire; Edward Roberts Smith, Dudley; John Dearden Bush, Newcastle-on-Tyne; James Campbell Macaulay, Leicester; James Milward, Cardiff.

The following gentleman also on the same day passed his First Examination:—

Richard Careless Sanders, London Hospital.

### APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Bryan, E., has been appointed Assistant House-Surgeon to the Public Hospital, Sheffield.

Ellis, Edward, M.D., has been appointed a Physician for Out-Patients to the Samaritan Free Hospital for Women and Children.

Fogge, H. W., M.R.C.S.E., has been appointed House-Surgeon to the Royal Free Hospital.

Kealy, John Robert, M.D., M.R.C.S., has been appointed a Medical Officer of the Portsmouth, Portsea, and Gosport Hospital.

Leared, A., M.D., M.R.C.P., has been appointed Honorary Physician to St. Mark's Hospital for Fistula and other Diseases of the Rectum.

Wilkinson, J. S., F.R.C.S.E., has been appointed an Assistant-Surgeon to the Central London Ophthalmic Hospital.

Workman, Charles J., M.D., has been appointed one of the Visiting Physicians to the Infirmary for Consumption and Diseases of the Chest, Margaret-street, Cavendish-square.

### BIRTHS.

Ashenden.—On May 16, at 41, High-street, Hastings, the wife of C. Ashenden, M.R.C.S., of a son.

Ashley.—On May 21, at 28, Labroke-square, the wife of W. H. Ashley, M.D., of a daughter.

Burke.—On May 13, at Bighi, Malta, the wife of Dr. John Page Burke, F.R.C.S. Eng., of a daughter.

Craigie.—On May 14, at Doddington, Kent, the wife of J. Craigie, M.R.C.S., of a son.

Kelson.—On May 16, at 130, St. Paul's-road, Camden-square, the wife of G. Kelson, M.R.C.S., of a daughter.

Longmore.—On May 20, at Hamble Netley, the wife of Deputy-Inspector-Longmore, Army Medical Staff, of a daughter.

Phelan.—On May 19, at Kilmaganny, Co. Kilkenny, the wife of W. B. Phelan, L.R.C.P., of a daughter.

Seccombe.—On May 18, at Terrington, King's Lynn, the wife of J. T. Seccombe, M.D., of a son.

Smith.—On May 22, at 9, Finsbury-pavement, the wife of Abbotts Smith, M.D., of a daughter.

Sumner.—On May 18, at 15, Wellington-terrace, St. John's-wood, the wife of W. A. Sumner, M.R.C.S., of a son.

### MARRIAGES.

Fotherby—Engshöm.—On May 22, at Allhallows Church, Tottenham, H. J. Fotherby, M.B., 40, Trinity-square, Tower, and Louth, Lincolnshire, to Louisa Mary, only child of Charles F. Engshöm, Esq., Her Britannic Majesty's Consul at Gottenburg, Sweden.

Leathem—Newman.—On May 12, at All Souls, Langham-place, James Leathem, M.D., to Mary Matilda, daughter of A. Newman, Esq., Mortimer-street.

### DEATHS.

Cannon, A., M.D., at 15, Cambray-place, Cheltenham, on May 15, aged 79.

Harday, R., M.R.C.S., L.S.A. (Vice-President of the London Obstetrical Society), at Hull, on May 12, aged 63.

Hare, H. C., M.R.C.S., at Cawood, Yorkshire, on May 15, aged 39.

Rose, Thomas Fraser, on May 12, on board the steam-ship *Helvetia*, in the Sloyne, Liverpool, from cholera, aged 34.

## POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

### RESIGNATIONS.

*Lincoln Union.*—Mr. R. S. Harvey has resigned the Eleventh District; area 9528; population 1921; salary £20 per annum.

*Williton Union.*—Mr. Wright has resigned the Williton District; area 16,602; population 5670; salary £79 per annum. Also the Workhouse; salary £35 per annum.

### APPOINTMENTS.

*Edmonton Union.*—Ernest Ringrose, M.D. St. And., M.R.C.S.E., L.S.A., to the Cooper's-lane District.

*Ellesmere Union.*—Alfred Eyton, L.F.P. & S. Glas., L.R.C.P. Edin., to the Overton District.

*Isle of Thanet Union.*—George R. Lawrence, M.R.C.S.E., L.S.A., to the Minster District and the Workhouse.

*Leigh Union.*—William Hoyle, M.R.C.S.E., L.S.A., to the Atherton District.

*Tenterden Union.*—Nathaniel E. Creswell, M.D. St. And., M.R.C.S.E., L.S.A., to the Biddenden District.

*Wincanton Union.*—James J. Luce, M.D. St. And., L.R.C.P. Edin., M.R.C.S.E., L.S.A., to the Wincanton East District and the Workhouse.

*Worksop Union.*—Alfred Beckett, M.R.C.S.E., L.S.A., to the Blyth District.

Cambridge.—At a Congregation held on May 17, the following degree was conferred:—*Ad eundem:* William Daniel Moore, M.D., Dublin.

Dr. Barnes has been elected an Honorary Member of the University of Charkow, in Russia.

Dr. William H. Harvey, F.R.S., Professor of Botany in Trinity College, Dublin, and Keeper of the University Herbarium, who had long been ill, died of phthisis on the 15th inst. at Torquay.

The cholera has shown itself at Nantes. On the 19th inst. twelve cases were reported. The disease, however, seems not to have taken great hold, and to be already on the decline.

The British Association.—At a meeting of the Nottingham Town Council on Thursday, it was unanimously resolved, on the motion of Dr. Tindal Robertson, to invite their Royal Highnesses the Prince and Princess of Wales to honour the town with their presence on the occasion of the visit of the British Association. A deputation, consisting of the Mayor, Town Clerk, and Dr. Robertson, were appointed to wait upon their Royal Highnesses.

Testimonial.—Mr. Frederick Haze Watts on being obliged to resign his appointment of Resident Medical Officer of Middlesex Hospital from ill health, received from a quarterly court of the governors on their accepting his resignation, an unanimous vote of thanks for his services, and was presented by his colleagues, past and present, with a handsome silver ewer, from Lambert's, Coventry-street, of the value of twenty guineas, with the inscription engraved—"To Fred. H. Watts, Esq., from friends and colleagues on leaving Middlesex Hospital May, 1866," as a recognition of his uniform kindness and courtesy to them, and as a mark of their friendship and esteem.

Chipping Norton, Oxfordshire.—A testimonial was presented to J. Farwell, Esq., F.R.C.S., of Chipping Norton, on the 8th of May, by eighty-two of his patients residing in the neighbourhood of Chipping Norton, consisting of a miniature brougham and fittings complete, a pair of horses, with double and single harness. Mr. Farwell's attendance on his out-town patients being interrupted last winter by a long and severe illness, they took this opportunity of showing their appreciation of his kind and unremitting attention and skill during a practice extending over a period of more than thirty years. The total amount subscribed was £258 5s.

The Mecca Pilgrims.—From information received by the Board of Health of Alexandria, it appears that the sanitary condition of Mecca has not this year been at all affected by the arrival of pilgrims in that city, and that a party of devotees were about to return to Suez on the 7th inst., perfectly free from cholera. The pilgrims were subjected to examination upon their embarkation at Djeddah, and up to the present time their general state of health has been completely satisfactory.

The London Sick Poor.—The Guardians of St. George's, Hanover-square, are calling a conference of all the London guardians at St. James's Hall, "with a view to procure the fullest information necessary to determine the proper action to be taken in relation to the resolutions submitted to the Right Hon. C. P. Villiers, the President of the Poor-law Board, by Lord Carnarvon and others, members of an Association for the Improvement of Workhouse Infirmaries." The resolution to be submitted to this meeting is as follows:—"That the removal of paupers from the control of parochial management, and placing them under a central or Imperial authority, would be subversive of the principles of local self-government, and that the collecting together of the sick paupers in large Hospitals containing 1000 beds each would not be conducive either to the cure or the well-being of the inmates."

The Scottish Universities.—The Vice-Chancellor and Professors of the University of Edinburgh have transmitted a petition to Sir William Stirling Maxwell for presentation to the House of Commons, praying that two members may be granted to the Scottish Universities instead of one, as proposed in the Redistribution of Seats Bill. The petition sets forth that the constituency which would be entitled to vote in the election would be above 4000, independent of the stimulus to registration which the grant of representation would give. The constituency of London University, to which it was proposed to give one member, was about 1800, and that of the Queen's University in Ireland, which to get another, was probably not half so many. To group Edinburgh University with St. Andrew's would give a constituency of 2700, while Glasgow with Aberdeen would furnish a constituency of 1600. On these grounds, and considering that Oxford, Cambridge, and Trinity College had each two members, the petitioners solicit that the Universities of Scotland should have two. A similar petition has been sent by the Principal and Professors of St. Andrew's University. The proposed constituency are the resident graduates, a body organised for the first time by the Universities Act of 1858, and forming a General Council in each University, which meets twice a year to discuss questions concerning the government and general interests of the University.

INFANTICIDE.—At the meeting of the Harveian Society, held on May 17th, it was proposed by Mr. Curgenven, and seconded by Dr. Hare, "That a Committee be formed consisting of the following members:—Dr. Tyler Smith, the President; Mr. J. Brendon Curgenven, and Dr. Charles Drysdale, the Honorary Secretaries; Dr. Hardwicke, Deputy-Coroner; Mr. Ernest Hart; Dr. Sanderson, Medical Officer of Health for Paddington; Mr. Benson Baker, and Mr. Sedgwick; with whom will be associated Dr. Lankester, the Coroner for Central Middlesex, to draw up a report on infanticide, with the object of suggesting the best means of checking the crime; and to report on the causes of death of young children, the best means for preventing excessive infant mortality, and to suggest some plan for the care and rearing of illegitimate children other than the present workhouse system." Communications on these subjects are solicited by the Committee, and should be addressed to Mr. Curgenven, 11, Craven-hill-gardens, W.

ARMY MEDICAL DEPARTMENT.— The annual general meetings of the Army Medical Officers' Friendly and Benevolent Societies were held at the Ship Hotel, Charing-cross, on Saturday, the 19th inst. The Friendly Society was established in 1816 by the late Sir James McGrigor, Director-General of the Army Medical Department. It is strictly a reversionary annuity society, and intended to secure annuities to the widows of Medical officers by the payment of a small annual subscription. At the present time there are 105 widows receiving annually £22 or £44, according to the class to which their husbands subscribed. The funds are in a very flourishing condition,. the capital of the Society being upwards of £78,000, and according to the quinquennial examination just completed, it is confidently believed that there is a considerable surplus of assets over liabilities. Notwithstanding this success, it is much to be regretted that in spite of every effort of the Committee, very few of the young Medical officers of the present day join the Society, for it is felt that it was intended for the benefit of the whole Department, and not merely a few of its members. The Benevolent Society was also established by Sir James McGrigor in 1820, and is quite distinct from the Friendly Society. It is essentially a charitable institution for the purpose of granting pecuniary aid towards educating those orphans of Medical officers left unhappily in distressed circumstances, and it supported chiefly by donations and subscriptions from members of the Medical Department. The Society now possesses a capital of upwards of £16,000, the interest of which, together with subscriptions, is annually distributed among cases that require assistance. At the present distribution the sum of £565 was voted in various sums between twenty-five families, and it must be gratifying to the Department to know that so much real good is annually effected towards relieving the necessitous condition of the orphans of their deceased brother officers.

THE following are the last week's Cattle Plague Returns.

| Census Divisions. | 1. Attacked. Week ending May 12. | Week ending May 5. | Week ending April 28. | 2. Result of reported Cases from the Commencement of the disease. Attacked. | Killed. | Died. | Recovered. | Unaccounted for. |
|---|---|---|---|---|---|---|---|---|
| 1. Metropolis . . | 10 | 14 | 47 | 7969 | 3483 | 3715 | 818 | 453 |
| 2. South Eastern Co. . | .. | .. | 1 | 4853 | 1681 | 2537 | 465 | 170 |
| 3. South Midland Co. | 221 | 242 | 313 | 19739 | 7766 | 10052 | 1534 | 887 |
| 4. Eastern Counties . | 80 | 74 | 92 | 11205 | 5191 | 4830 | 788 | 396 |
| 5. South Western Co. | .. | 1 | — | 1685 | 617 | 791 | 206 | 71 |
| 6. West Midland Co. . | 247 | 275 | 357 | 13734 | 5261 | 6070 | 1417 | 986 |
| 7. North Midland Co. | 446 | 433 | 608 | 17486 | 9494 | 6229 | 1211 | 552 |
| 8. North Western Co. | 490 | 541 | 818 | 62698 | 16791 | 34773 | 6991 | 4143 |
| 9. Yorkshire . . | 146 | 203 | 203 | 34066 | 7445 | 18335 | 5920 | 2366 |
| 10. Northern Counties. | 129 | 119 | 131 | 8446 | 4741 | 2613 | 974 | 118 |
| 11. Monmouthshire & Wales . . | 81 | 37 | 88 | 8093 | 953 | 5789 | 1051 | 300 |
| 12. Scotland . . | 62 | 77 | 107 | 46579 | 5997 | 28067 | 10688 | 1827 |
|  | 1912 | 2007 | 2765 | 236553 | 69420 | 123801 | 31563 | 11769 |

*Note.*—9 Inspectors who reported cases last week have not reported in time for this return—viz., for the county of Buckingham, 1; Chester, 1; Durham, 1; Essex, 1; Lincoln, 1; Worcester, 1; York, 2; and for Scotland, 1. These inspectors returned 32 cases last week.

CATTLE PLAGUE IN IRELAND.—The cattle plague, which was thought to have been "stamped out" at Drennan, has reappeared beyond the "cordon," which is now to be extended so as to include the entire county of Down. The disease is supposed to have been introduced by the clothes of some graziers who had returned from England. The disease is reported to have made its appearance in the counties of Sligo and Waterford. The counties of Down, Antrim, and Armagh have been proclaimed by Privy Council under cattle plague regulations. No further cases are reported in the county Down, and rumours of the appearance of the disease elsewhere are unfounded. We have heard on good authority that two deaths occurred on last Saturday in Dublin under most anomalous circumstances. In one case death resulted in twelve, in the other in twenty hours, the only symptoms being rapid prostration, failure of circulation, and the pouring out of great effusions of blood in and under the skin. The cases bore great resemblance to that of a Medical student whose death we recorded some six weeks ago. We understand that the features of the disease were so unusual that the Physician who attended one of the cases could only compare it to the "Black Death" of the sixteenth century. We hope in our next to be able to place before our readers a full report on the subject.—*Dublin Medical Press.*

## NOTES, QUERIES, AND REPLIES.

◆

**He that questioneth much shall learn much.**—*Bacon.*

*Ab Initio.*—Write to the American Minister.

*To C. G. L., High-street, Coventry.*—We believe the person referred to is a great rascal.

*Bolton, Wilberfoss, York.*—It is not the function of a Medical journal to give advice gratis on Medical or Surgical cases. If the patient has been duped and plundered by quacks, let him lay his case before the most eminent Medical man in his neighbourhood, and do implicitly what he advises.

*A New Use of Chloroform.*—The *Cleveland Herald* describes how a condemned murderer, who behaved with such violence that the sheriffs could not approach him, was conquered. Two large syringes were procured and filled with chloroform, and the contents of one of them discharged into the cell. The prisoner was somewhat taken aback by this novel procedure, and told them to come on with their doctors' stuff, but they would never subdue him in that manner. A second discharge of the chloroform-laden syringe, however, did the work. In little less than four minutes from the time of the first injection of the chloroform, the raging man was quiet, and sank down on the floor perfectly helpless.

*B. B., Wolverhampton.*—Before despairing of a cure for *prurigo senilis*, get Dr. Balmanno Squire's Series of Photographs of Skin Diseases; you will there find a definite and perfectly reasonable theory of the disease, viz., that it depends on the *pediculus corporis*. Now, this is either true or not true. If true, it gives you at once a guide to the successful treatment. If not true, you will have lost one happy illusion, and you can but try some more of those "fortuitous compounds of brimstone, quicksilver, iodine, arsenic, sarsaparilla, corrosive sublimate, glycerine, vitriol, cod-liver oil, carmine, and rose water," wherewith, as you allege, some skin doctors charm away the local and constitutional symptoms of their patients.

*Erratum.*—*Med. Times and Gazette,* May 12, 1866, p. 507, *for* "Ovid's Metamorphoses" (lib. xx.), *read* ("lib xv.")

### THE OPERATION FOR THE CURE OF EPILEPSY.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Please to publish the following *bon-mot* relative to the proposed mutilation of our nymphs:—"Abraham circumcised his males; but Isaac says, Go to, let us circumcise our women."

I am, &c., FREDERICK J. BROWN, M.D.

Rochester, May 22, 1866.

### GRIFFIN TESTIMONIAL FUND.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—The following subscriptions have been further received on behalf of the above fund:—W. B. Irving, Esq., Newark (second), 1s.; Thos. Robinson, Esq., Alton (second), 5s.; H. J. Mathew, Esq., Horsham, 10s. Amount previously announced, £136 6s. 8d. Received at *Lancet* Office, £13 11s. 6d.

I am, &c.,

ROBERT FOWLER, M.D., Treasurer and Hon. Sec.

145, Bishopsgate-street Without, May 23, 1866.

### POOR-LAW MEDICAL REFORM AND VACCINATION.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I shall feel obliged by your giving insertion to the annexed letter, addressed to the Poor-law Board, but to which I have not as yet received a reply.

I have been in correspondence with members of the Select Committee on Vaccination, and have forwarded my opinion on the Government Bill to the Committee. Mr. Bruce, the chairman, has written to a Member of Parliament as follows:—"Should the Committee on the Vaccination Bill decide upon taking evidence, I will not fail to bear in mind your desire that Mr. Griffin should be examined."

Since the last list of subscriptions was published, I have received the following:—Eaton, F., Grantham, 10s.; Hulme, J. D., Blaby, 5s.; Garlick, F. S., Halifax, 20s.; Crowther, T., Halifax, 10s.; Nowell, W., Halifax, 10s; Mackinder, D., Gainsborough, 5s. I am, &c.,

RICHARD GRIFFIN.

12, Royal-terrace, Weymouth, May 21, 1866.

"12, Royal-terrace, Weymouth, May 17, 1866.

"My Lords and Gentlemen,—On February 3 last I forwarded to your honourable Board the draft of a proposed Bill 'for the better regulation of Medical relief to the poorer classes in England and Wales,' which was acknowledged in these words:—'I am to inform you that the provisions contained in the Bill shall receive the considerations of this Board.'

"My object in now writing is to ask you to do the Poor-law Medical officers the favour to receive a deputation from them in order that they may urge upon your honourable Board the desirableness of sanctioning some, at least, of the propositions named by them in their proposed Bill, and that you will recommend them to Parliament for adoption, either as a distinct bill or as part of the intended Poor-law Continuance Bill. Any day after next Saturday week that the Board may fix to receive a deputation will give time for me to communicate the fact to the Poor-law Medical officers through the medium of the Medical journals, provided the reply be received on or before next Tuesday; otherwise I must ask for the postponement of the deputation until the following week.

"I have the honour to be,
"My Lords and Gentlemen,
"Your obedient servant,
"RICHARD GRIFFIN,
"Chairman of the Poor-law Medical Reform Association.

"The Poor-law Board."

### THE ARMSTRONG TESTIMONIAL.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Several Medical men in this neighbourhood have subscribed to the fund now being raised for the purpose of defraying the expenses incurred by Dr. Armstrong in the late trial of Rudman *v.* Armstrong. I enclose you a cheque for £5 5s., the amount of the subscriptions, and shall be much obliged by your inserting the names of the subscribers, as annexed, in the *Medical Times and Gazette*:—

Dr. Parker, 10s. 6d.; Dr. Vinen, 10s. 6d.; Dr. Cuolahan, 10s. 6d.; Dr. Dixon, 10s. 6d.; Dr. Lucey, 10s. 6d.; H. H. Button, Esq., 10s. 6d.; Chas. White, Esq., 10s. 6d.; Thos. Blakeley, Esq., 10s. 6d.; N. F. Hall, Esq., 10s. 6d.; E. Phillipps, Esq., 10s. 6d.

I am, &c., H. CUOLAHAN.

9, Grange-road, Bermondsey, May 23, 1866.

The following subscriptions have also been received:—Joseph Toynbee, F.R.S., £1 1s.; Dr. Andrew Clark, 10s.

### RECOMMENDATIONS OF COMMITTEE ON ARMY AND NAVY MEDICAL OFFICERS AND THE DUKE OF CAMBRIDGE.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—It has been stated on reliable authority that the long-hoped-for Warrant has been deferred to the Greek kalends, or, as His Royal Highness the Duke of Cambridge expresses it, to this day twelve months. The lively interest His Royal Highness takes in the well-being of the Medical Departments of the public service must be particularly gratifying to the gentlemen who succeeded in obtaining Medical commissions at the last Chelsea examinations, and the course he advises the Government to pursue with reference to the recommendations of the Committee must be as satisfactory to them as it will be encouraging to others. Jesting apart, I dearly love economy, and admire it vastly in public functionaries, and as a Royal marriage is a matter of less public importance than the efficiency of a great public service, I should be glad to know if His Royal Highness recommends, on economic grounds, that the payment of the dowry of his sister be deferred "to this day twelve months." I am, &c.

London, May 21. VIGILANS.

BOOKS RECEIVED—

Dr. Balmanno Squire's Second Series of Photographs of Skin Diseases—No. 1. Rupial and Lupoid Syphilide; No. 2. Ringed Herpoid Syphilide; No. 3. Prurigo Senilis.

NEWSPAPERS RECEIVED—

The Sunday Gazette.

## VITAL STATISTICS OF LONDON.

*Week ending Saturday, May* 19, 1866.

### BIRTHS.

Births of Boys, 970; Girls, 949; Total, 1919.
Average of 10 corresponding weeks, 1856-65, 1796·9.

### DEATHS.

| | Males. | Females. | Total. |
|---|---|---|---|
| Deaths during the week .. .. .. | 778 | 689 | 1467 |
| Average of the ten years 1856-65 .. .. | 603·1 | 552·3 | 1155·4 |
| Average corrected to increased population.. | .. | .. | 1271 |
| Deaths of people above 90 .. .. .. | .. | .. | .. |

### DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

| | Population, 1861. | Small pox. | Measles. | Scarlatina. | Diphtheria. | Whooping-cough. | Typhus. | Diarrhœa. |
|---|---|---|---|---|---|---|---|---|
| West .. | 463,388 | 2 | 8 | 3 | — | 5 | 3 | 3 |
| North .. | 618,210 | 8 | 12 | 7 | — | 25 | 10 | 1 |
| Central .. | 378,058 | — | 8 | 1 | 1 | 17 | 5 | 4 |
| East .. | 571,158 | 7 | 14 | 8 | 2 | 24 | 21 | 4 |
| South .. | 773,175 | 6 | 17 | 11 | — | 28 | 13 | 2 |
| Total .. | 2,803,989 | 23 | 59 | 30 | 3 | 99 | 52 | 14 |

## METEOROLOGY.

*From Observations at the Greenwich Observatory.*

| | |
|---|---|
| Mean height of barometer .. .. .. .. .. .. .. | 30·070 in. |
| Mean temperature .. .. .. .. .. .. .. | 48·1 |
| Highest point of thermometer .. .. .. .. .. .. | 68 8 |
| Lowest point of thermometer .. .. .. .. .. .. | 34·5 |
| Mean dew-point temperature .. .. .. .. .. .. | 38·8 |
| General direction of wind .. .. .. .. .. .. .. | Variable. |
| Whole amount of rain in the week .. .. .. .. .. | 0·00 |

### BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, May 19, 1866, in the following large Towns:—

| Boroughs, etc. | Estimated Population in middle of the Year 1866. | Persons to an Acre. (1866.) | Births Registered during the week ending May 19. | Deaths. | | Temperature of Air (Fahr.) | | | Rain Fall. | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Corrected Average Weekly Number.* | Registered during the week ending May 19. | Highest during the Week. | Lowest during the Week. | Weekly Mean of the Mean Daily Values. | In Inches. | In Tons per Acre. |
| London (Metropolis) | 3067536 | 39·3 | 1919 | 1400 | 1467 | 68 8 | 34·5 | 48·1 | 0·00 | 0 |
| Bristol (City) . . | 163680 | 34·9 | 109 | 73 | ‡158 | 72·9 | 36·9 | 51·5 | 0·00 | 0 |
| Birmingham (Boro') | 335798 | 42·9 | 246 | 163 | 189 | 72·6 | 32·6 | 50·5 | 0·09 | 0 |
| Liverpool (Borough) | 484337 | 94·8 | 369 | 281 | 364 | .. | .. | .. | .. | .. |
| Manchester (City) . | 358855 | 80·0 | 245 | 203 | ‡178 | 76·8 | 35·7 | 50·4 | 0·00 | 0 |
| Salford (Borough) . | 112904 | 21·8 | 75 | 57 | 66 | 72·8 | 33·8 | 49·4 | 0·00 | 0 |
| Sheffield (Borough) . | 218257 | 9·6 | 175 | 115 | 158 | 72·6 | 31·5 | 46·8 | 0·00 | 0 |
| Leeds (Borough) . | 228187 | 10·6 | 212 | 116 | 180 | 73·0 | 30·8 | 48·3 | 0·00 | 0 |
| Hull (Borough) | 105233 | 29·5 | 86 | 49 | 51 | .. | .. | .. | .. | .. |
| Nwcastl-on-Tyne, do. | 122277 | 22·9 | 127 | 65 | 75 | 62·5 | 35·0 | 47·2 | 0 05 | 5 |
| Edinburgh (City) . | 175128 | 39·6 | 118 | 84 | 81 | 57·7 | 36·0 | 49·1 | 0·00 | 0 |
| Glasgow (City) . . | 432265 | 85·4 | 398 | 252 | 246 | 71·5 | 31·8 | 48·1 | 0·00 | 0 |
| Dublin (City and some suburbs) . | 318437 | 32·7 | 153 | †156 | 167 | 64·9 | 33·0 | 48·0 | 0·06 | 6 |
| Total of 13 large Towns . . . | 6122894 | 34·4 | 4232 | 3014 | 3280 | 76·8 | 30·8 | 48·9 | 0·01 | 1 |
| | (1863) | | | | Week ending May 12. | Week ending May 12. | | | | |
| Vienna (City) . . | 560000 | .. | .. | .. | 360 | .. | .. | § 57·0 | .. | .. |

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 30·070 in. The mean daily reading was above 30 in. on every day after Sunday. The pressure of the atmosphere was 29·70 in. on the morning of Sunday, and it rose to 30·25 in. on Wednesday.

The general direction of the wind was variable.

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* The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.

† Registration did not commence in Ireland till January 1, 1864; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in that city were the same as the averages of the rates in the other towns.

‡ The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

§ The mean temperature at Greenwich during the same week was 51·7°.

## APPOINTMENTS FOR THE WEEK.

### *May* 26. *Saturday (this day).*

*Operations* at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free Hospital, 1½ p.m.

### 28. *Monday.*

*Operations* at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.

### 29. *Tuesday.*

*Operations* at Guy's, 1 p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; St. Peter's Hospital for Stone, 3 p.m.

ROYAL INSTITUTION, 3 p.m. Professor Ansted, "On the Application of Physical Geography and Geology to the Fine Arts."

### 30. *Wednesday.*

*Operations* at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m. Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.

HUNTERIAN SOCIETY (Council, 7½ p.m.), 8 p m. Dr. Barlow, "The Pathology of Cholera."

### 31. *Thursday.*

*Operations* at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.

ROYAL INSTITUTION, 3 p.m. Professor Huxley, "On Ethnology."

### *June* 1. *Friday.*

*Operations*, Westminster Ophthalmic, 1½ p.m.

ROYAL INSTITUTION, 8 p.m. Professor Roscoe, F.R.S., "On Opalescence of the Atmosphere."

WESTERN MEDICAL AND SURGICAL SOCIETY, 8 p.m. Annual Meeting. Dr. Blandford, "Some Cases of General Paralysis of the Insane."

### BONUS YEAR—SPECIAL NOTICE.

# CLERICAL, MEDICAL, AND GENERAL

## LIFE ASSURANCE SOCIETY.

ESTABLISHED 1824.

The **Eighth Bonus** will be declared in January, 1867, and all **With-Profit Policies** in force on the 30th June, 1866, **will** participate, **so that Persons who complete such Assurances before June 30th next, will share in that Division, although one Premium only will have been paid.**

Tables of Rates, and Forms of Proposal, can be obtained of any of the Society's Agents, or of

13, St. James's-square, London, S.W. GEORGE CUTCLIFFE, Actuary and Secretary.

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# Pulvis Jacobi ver, Newbery,

*FRAS. NEWBERY & SONS,* 45, *ST. PAUL'S CHURCHYARD.*

Prices for Diſpenſing, 1 oz., 9s.; ¼ oz., 3s. 4d.

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# LIEBIG'S FOOD FOR INFANTS & INVALIDS.

Prepared strictly from the Formula of Baron Liebig, by

## HOOPER,

OPERATIVE CHEMIST,

TRADE MARK

Sold in Tins, 1 lb., 1*s.*; 3 lb., 2*s.* 6*d.*; 6 lb., 5*s.*, by all Chemists and Druggists, and direct from Mr. HOOPER's Establishments,

**7, PALL MALL EAST,**
**And 55, GROSVENOR STREET.**

Wholesale of Barclay, Edwards, Newbery, all Patent Medicine Warehouses, and Wholesale Druggists.

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# THE PANCREATIC EMULSION,

## A NEW REMEDIAL AGENT.

Originated by **Dr. DOBELL,** Physician to the Royal Infirmary for Diseases of the Chest.

*Vide* THE LANCET, *Nov.* 11*th* and 18*th*.—"A third report of cases of consumption treated with Pancreatic Emulsion at the Royal Infirmary for Diseases of the Chest."

**This Preparation is now made on an extensive scale, and the Price is therefore considerably Reduced.**

N.B.—The TRUE PANCREATIC EMULSION has an acid reaction, and is readily miscible with water or milk. Preparations in IMITATION of it have an alkaline reaction, and are not miscible with water or milk.

PREPARED ONLY BY

## SAVORY & MOORE, New Bond-street,

CHEMISTS TO HER MAJESTY THE QUEEN, HIS ROYAL HIGHNESS THE PRINCE OF WALES, HIS IMPERIAL MAJESTY NAPOLEON THE THIRD, AND HIS MAJESTY THE KING OF THE BELGIANS.

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## DR. DE JONGH'S

*(Knight of the Order of Leopold of Belgium)*

# LIGHT-BROWN COD-LIVER OIL.

MEDAL OF MERIT PRESENTED BY THE KING OF THE BELGIANS
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SELECT MEDICAL OPINIONS.

**Sir HENRY MARSH, Bart., M.D.,** Physician in Ordinary to the Queen in Ireland:—"I consider Dr. de Jongh's Cod-liver Oil to be a very pure Oil, not likely to create disgust, and a therapeutic agent of great value."

**Dr. BARLOW,** Senior Physician to Guy's Hospital:—"I have been well satisfied with the effects of Dr. de Jongh's Cod-liver Oil, and believe it to be a very pure Oil, well fitted for those cases in which the use of that substance is indicated."

**Dr. LANKESTER, F.R.S.,** late Lecturer on the Practice of Medicine, St. George's School of Medicine:—"I consider that the purity and genuineness of this Oil are secured in its preparation by the personal attention of so good a Chemist and intelligent a Physician as Dr. de Jongh, who has also written the best Medical Treatise on the Oil with which I am acquainted. Hence I deem the Cod-liver Oil sold under his guarantee to be preferable to any other kind as regards genuineness and medicinal efficacy."

SOLE CONSIGNEES AND AGENTS,

**ANSAR, HARFORD, & CO., 77, Strand, London, W.C.**

# GENERAL MEDICAL COUNCIL.

## FIFTH DAY.—TUESDAY, MAY 22.

The Council again assembled at 2 o'clock.

The minutes of the preceding day were read and confirmed.

Mr. HARGRAVE moved, and Mr. COOPER seconded, "That the Report of the Committee on the draft of the Medical Acts Amendment Bill, transmitted from the Home Office, be read."

The Bill and Report were then read.

### REPORT.

"The Committee according to the resolution of the Council have carefully considered the Medical Acts Amendment Bill as drafted at the Home Office, which is to the following effect:—

### "MEDICAL ACTS AMENDMENT BILL.

*Draft of a Bill to Amend the Acts relating to Practitioners in Medicine and Surgery.*

"Be it enacted by the Queen's most excellent Majesty, by and with the advice and consent of the Lords spiritual and temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:—

*Preliminary.*

"I. The Acts described in the schedule to this Act, and this Act shall be construed together as one Act; and for that purpose the expression 'this Act,' when used in the Medical Act (of the Session of 1858), shall include the present Act; and the Acts described in the schedule to this Act and this Act may be cited together as 'the Medical Acts,' and are comprised in that expression when hereafter used in this Act; and this Act may be cited separately as the Medical Acts Amendment Act, 1866.

"*Members of Council.*

"II. Section 7 of the Medical Act (1858) shall be read and have effect as if the words 'qualified to be' were omitted therefrom.

"*Registration.*

"III. Where, under the authority of the Medical Acts, the General Council or any Branch Council direct the erasure of the name of any person from any Register, the name of that person shall not be again registered in any Register except by direction of the Council which directed the erasure, or by order of a Court of competent jurisdiction.

"IV. If the General Council think fit in any case they may direct any Registrar to restore to his Register any name erased from him therefrom, and the Registrar shall restore the same accordingly.

"V. Section 14 of the Medical Act (1858) is hereby repealed, but this repeal shall not affect the past operation of that Section, or anything already done under it, or invalidate any existing Register, order, or regulation kept or made under it, or affect any proceeding or thing commenced under it, or the power of the General Council to make any order in relation thereto; and every such proceeding or thing may be carried on and done as if the said section had not been repealed.

"VI. Each Registrar shall keep his Register correct in accordance with the provisions of the Medical Acts and the general regulations and special directions of the General Council (whether made or given before or after the passing of this Act).

"VII. Each Registrar shall erase from his Register the name of any person deceased.

"VIII. Each Registrar shall from time to time insert in his Register any alteration in the address or qualification of any person registered.

"IX. In the execution of the aforesaid duties, each Registrar shall act on such evidence as in each case appears to him sufficient, subject to any regulations of the General Council.

"X. Each Registrar may erase from his Register the name of any person who has ceased to practise; and in order to the better execution of that duty, each Registrar may send by post to any person registered in his Register a registered letter, addressed to that person according to his registered address, inquiring whether or not he has ceased to practise, and if the Registrar does not, within three months after sending such as letter, receive any answer thereto from the person to whom it is sent, he may, within fourteen days after the expiration of the said period of three months, send by post to that person another registered letter, addressed to him according to his registered address, referring to the first letter and stating that any answer thereto has not been received by the Registrar, and if the Registrar does not within three months after sending such second letter receive any answer thereto from the person to whom it is sent, that person shall, for the purpose of the present section, be deemed to have ceased to practise; and the name of any person shall not (without his consent) be removed from the Register on the ground of his having ceased to practise, except in pursuance of the provisions of the present section. Provided that a person whose name has been erased from the Register with his consent, on the ground of his having ceased to practise, shall not be liable to any penalty under this section by reason of his being engaged gratuitously in the cure or treatment of any disease or injury.

"XI. Every person shall be entitled to be registered under the 'Medical Act, 1858,' who is qualified as follows:—

"*First.* Is at the time at which he applies to be so registered legally possessed either of one of the qualifications described in Schedule (B) (a) of this Act, or of some other Foreign or Colonial Diploma, obtained in the opinion of the General Council after such course of study and such examination as guarantee to their satisfaction the possession by the applicant of sufficient knowledge and skill for the efficient practice of Medicine and Surgery.

"*Secondly.* Has resided in the United Kingdom for a period of not less than twelve months immediately previous to making his application.

"*Thirdly.* Has not been guilty of any offence which, according to the laws of the country to which he belongs, would disentitle him to practise Medicine and Surgery, or which, according to the 'Medical Act, 1858,' would enable the General Council to strike his name off the Register.

"XII. If it appears to the Privy Council, on the representation of the General Council, that any qualification other than those described in Schedule (A) to the 'Medical Act, 1858,' and in Schedule (B) to this Act is granted by any University, College, or Body in the United Kingdom or elsewhere, after such a course of study and such examination as guarantee to the satisfaction of the General Council and Privy Council that any person to whom such qualification has been granted possesses the requisite knowledge and skill for the efficient practice of Medicine and Surgery, it shall be lawful for the Privy Council (in the case of any qualification granted by any University, College, or Body in the United Kingdom) to direct by order that every person holding such qualification shall be entitled to be registered under the 'Medical Act, 1858,' in the same manner and with the like effect as if the qualification were described in the Schedule (A) to the 'Medical Act, 1858,' and (in the case of any qualification granted by any University, College, or Body elsewhere than in the United Kingdom) to direct by order that every person holding such qualification shall be entitled to be registered under the 'Medical Act, 1858,' in the same manner and with the like effect as if the qualification were described in the Schedule (B) to this Act.

"XIII. The provisions contained in sections 20, 21, and 22 of the 'Medical Act, 1858,' shall apply to any qualification which, in pursuance of this Act, entitles persons to be registered under the 'Medical Act, 1858.'

"XIV. The degree of Bachelor of Surgery conferred by the University of London shall, for the purpose of enabling any person to be registered under the 'Medical Act, 1858,' be deemed to be one of the qualifications described in Schedule (A) of that Act.

"*Unregistered Persons.*

"XV. Section 40 of the Medical Act (1858) is hereby repealed; but this repeal shall not apply to or in respect of any offence committed before the passing of this Act, or affect any proceeding pending at the passing of this Act.

"XVI. If any person practising Medicine or Surgery, or engaged in the cure or treatment of diseases or injuries, not being registered under the Medical Acts, takes or uses any of the designations enumerated in Schedule (A) to the Medical Act (1858), as amended by Schedule (B) to this Act, or by any other of the Medical Acts, or the designation of Physician, Surgeon, Doctor of Medicine, or Apothecary, or any other designation used by or used to distinguish duly qualified Practitioners of Medicine or Surgery, or any class thereof, or the designation of Professor of Medicine or of Professor of Surgery, he shall for every such offence be liable, on summary conviction, to a penalty not exceeding twenty pounds.

"*Saving.*

"XVII. Nothing in this Act shall prejudicially affect any occupation, trade, or business, rights, privileges, or employment expressly saved from the operation of the Medical Act (1858), or affect the rights or interest of any person or class of persons expressly exempted or protected by any provision of any of the Acts described in the schedule to this Act.'

[⁂ We omit the Report, as the purport of it will be gathered from the discussion, and an amended version will be found at the end of the debate of May 23.]

Dr. ANDREW WOOD said he need hardly recal to the attention of the Council the fact that during the last session they discussed at great length the proposed Bill for amending the Medical Acts which the Council themselves drew up. During those discussions there were several subjects incidentally introduced which he trusted would not be introduced on the present occasion. The clause to which he particularly referred was that for giving the Medical Council larger powers in regard to the great question of education. It might be in the recollection of the Council that this subject was discussed again and again, and the final conclusion of a considerable majority of the Council was, that it was better their powers with regard to it should be allowed to stand as hitherto. It might also be recollected that one great object—*the* great object, he might say—of going to Parliament at all for an amended Bill was that of amending clause 40, which had proved notoriously inefficient in its power. They had also a long discussion upon that clause. Various amendments were suggested, but the conclusion at which, by a large majority, the Council arrived was to prepare the clause which stood now in the proposed draft Bill with very little modification as No. 16. He need not read the clause itself, but the Home Office had made one important alteration by the introduction of the words "Doctor of Medicine," instead of "Doctor," as in the Council's draft Bill. If the Bill should be passed with this alteration, he saw ample means of all unqualified men continuing to practise as hitherto, without incurring the penalties of the Act. Before turning to the new matter, which formed the important part for discussion, he would allude cursorily to the registration clause. The Home Office Bill, as the Committee mentioned, adopted the registration clause, drawn up for the purpose of facilitating registration, substantially, with only two modifications. The first of these modifications was that in clause 3 of the preliminary Bill the words "or by order of a court of competent jurisdiction," had been added. He believed those words were put in in order to remove all doubt, and that this addition would be taking no power from the Council; and even if it did he did not think they would have any objection to be relieved so far from the great responsibility which they incurred in erasing a name from the Register from a feeling that there was no power of appeal to the courts of justice. Then, the only other alteration that had been made in the registration clause was with reference to the notice to be sent to persons whose address could not be found. Instead of sending two letters, as the Council's clause suggested, within six months, at intervals of three months, the Home Office clause enacted that if within three months after sending the first letter the Registrar did not receive any answer thereto, he should send a second letter within fourteen days of the expiration of the three months, and if at the end of six months no answer was received, the person's name should be erased. There was another point before coming to the new matter, which was that the preamble introduced by the Council had been left out in the Home Office Bill. There might have been valid reasons for doing so, but if there were no such valid reasons it appeared to him they would be able to justify their application for the insertion of the following words:—"Whereas the Medical Act, 1858, has been found ineffectual to enable persons requiring Medical aid to ascertain who are qualified Practitioners," etc. If this was not put in, it did not give Parliament or the public the means of knowing why it was, after the lapse of eight years, they were going again for an amendment of the Act. The new matters introduced might be reduced to two. The first was that the degree of Bachelor of Surgery of the University of London was to be included in Schedule (A) of the Medical Act. Last year, they might recollect, they had a division upon this point, and it was decided that the degree of Bachelor of Surgery should not be placed in Schedule (A). He thought it due to himself to explain why he voted against that proposition, which was simply this, that he did not think the Council had the legal power to make additions to Schedule (A), and he was more than ever confirmed in his opinion that that was the proper legal interpretation. He still held that in refusing to put new qualifications in the Medical Act he was acting in a legal manner. But now the thing had been legally affirmed, he could not see on what ground he could refuse the registration of Bachelor of Surgery of the University of London, which he believed was granted after a full education and a full examination, when all other Universities in the kingdom had been allowed to register a similar qualification. He now came to the most new and, as the Council he had no doubt would consider, the most important introduction in the Bill—he meant the introduction of the power in the Council of registering foreign and colonial diplomas and degrees. It was thought necessary when the Medical Act was first introduced that, with a view of obviating hardship, power should be placed in the Council of registering these colonial and foreign degrees which had been obtained previously to the passing of the Medical Act, provided the Council were satisfied that these degrees and diplomas had been properly obtained. But there the power of the Council ceased, as regarded such qualification, because it was also provided that in the case of any diplomas and degrees granted by foreign and colonial bodies after the passing of the Medical Act, the Medical Council should have no power. Now, he did not think this Council *proprio motu* would have moved in this direction, but from the statement made by the President in his very able address at the commencement of this session, and from various papers which had appeared from time to time in the Minutes of the Executive Committee, it appeared that under strong pressure the Home Office felt that they were not at liberty to deny to foreign and colonial qualifications all right of being registered as Medical Practitioners in this country. And he must honestly confess that he had come to the conclusion that there was an injustice as regarded our great colonies in the fact that all those who had obtained qualifications in Great Britain, and had registered under the Imperial Act, were entitled when they went to the colonies to practise there without being submitted to colonial legislation. He thought when such was the case that there certainly should be, at least, some degree of reciprocity in this matter. If it were the case that there were not the means of educating and testing duly qualified men in our colonies, then he thought it would be necessary for this Council to oppose any attempt to introduce such qualification into the Medical Act. But they knew that in the colonies—Canada, for example—there were several first-rate Universities—Universities which, to the best of their knowledge (and they had looked into the matter), had ample staffs of teachers, and had instituted preliminary and Professional examinations which appeared, at all events, to come up to the minimum which they had established in this country. And therefore he thought it was a graceful and proper act that they should as much as possible get every facility from the Home Office of registering degrees and diplomas from Canada. There was another part of our great empire in which Universities had started within the last few years,—he alluded particularly to Calcutta, Madras, and Bombay,—which Universities, young as they were, had already obtained very high repute, had been established, and from them many men highly qualified in every respect came here year by year in order to take the British qualification, but who, in consequence of the charters which had been conferred upon those Universities, might be able to obtain high degrees and high diplomas there, and therefore ought, according to the law of reciprocity, to be entitled to be registered without further examination when they arrived in this country; so that, as regarded Canada and India, it seemed to him there was no difficulty. Then, with respect to Australia, it was well known that Universities were rising both in Melbourne and Sydney; that very splendid buildings had been erected for the purpose of Universities, and he believed that gradually staffs of teachers were being formed, if they had not been already completely formed. The Committee would have been inclined to have recommended that the recognitions of degrees and diplomas granted there should also have been carried out, but they had found on inquiry no means of testing whether they were deserving of recognition. But, supposing the Council agreed to the introduction of colonial degrees and diplomas, it was quite evident that leaving them out at present would be no material injustice, because clauses in the Bill enabled the Council from time to time, if they saw fit, to make representation that those diplomas and degrees should be recognised if they could obtain the consent of the Privy Council. Then, in regard to foreign diplomas and degrees, perhaps there might be more difficulty in coming to a resolution to register them, for this reason—that those Universities and degrees were altogether beyond British control, and that they had no means by visitation, supervision, or otherwise, of ascertaining exactly how far those were qualifications they ought to recognise. But they could not ignore that there were some Universities and schools abroad of such high repute that they knew for a fact that the qualifications granted there were quite as high, if not higher, than many of those that were granted in Great Britain; and in all of those they would be inclined to recognise the qualifications which at all events were higher than their own. Such Universities as those of Paris, Berlin, Vienna, Copenhagen, which was very high, and Stockholm, they had had no difficulty in specifying; but there was another class of foreign Universities and bodies—those in the United States—regarding which the information of the Committee was hardly so full as they could wish. At the same time, it was quite clear that if they adopted the principle at all of recognising foreign diplomas and degrees, they might almost afford a *casus belli* to the United States if they were to exclude them from the recognition which they gave to other nations. Now, he trusted the Council would be inclined to entertain the proposition of the Home Office, and adopt the principle of recognising such foreign and colonial degrees and diplomas as approved themselves to the Council as worthy of recognition, because it was quite evident, from what was stated by the President on the first day of this session, that if they refused to adopt that principle they thereby stated that they refused the Bill. He understood that the Home Office would not support the amendment of the Medical Act unless they introduced into that Bill clauses recognising, to the extent to which they might see fit, and which they might approve of, foreign and colonial degrees.

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(a) Schedule (B) includes the Diplomas of certain eminent Foreign and Colonial Schools of Medicine.

The PRESIDENT thought Dr. Wood should qualify this statement somewhat, because they had upon their Minutes a letter from Sir George Grey, expressing his opinion exactly as he intended it to be expressed.

Dr. ANDREW WOOD proceeded to say that in regard to foreign and colonial degrees and diplomas, the Home Office had requested this Council to prepare a Schedule (B), which was to include those diplomas and degrees, foreign and colonial, which they deemed worthy of recognition. He could say for the Committee and himself that to be called upon within a short time to go over all the qualifications in in the world, and to be able to say which were worthy of recognition and which were not, was a peculiar task for which they held themselves very little qualified; and they doubted very much whether it was desirable to have a Schedule (B), because if they once put any bodies, foreign and colonial, in a Schedule (B) it was quite obvious that it would be an extremely difficult thing afterwards to remove them in case the Council should see reason to do so. But the Committee had advanced an alternative which he thought they felt disposed to recommend the Council to adopt—namely, that without fixing definitively Schedule (B), the Council should be empowered or commanded annually to prepare and publish in the *Medical Register* and in the *Gazette* a list of those bodies, foreign and colonial, which, with the consent of the Privy Council, they considered ought to be recognised. If this were done, it was evident that every year it would be one of the duties of the General Council to revise this list; to add to it at times those rising universities and bodies in our colonies, and others, perhaps, abroad, who might make application and satisfy them that they deserved to be recognised; or it might be to recommend that any of those bodies, because they had not been found to keep up the requirements which they might have had when the Council originally recognised them, be represented to the Privy Council with the view of having their names taken off the list or the registration suspended. It now remained for them to determine whether they would support the Bill of the Home Office in its present shape, whether they would have a Bill at all, or whether they would amend it so as to bring it into conformity with their own views. What appeared to him to be the best plan of putting it in proper shape would be to read the Bill clause by clause, and at the same time that a particular clause of the Bill was read to read that clause in the Report which commented upon it, and then it would be competent to move the adoption, amendment, or rejection of any particular clause. He then moved—"That the draft Bill be now read clause by clause with the corresponding clause in the Report of the Committee."

Dr. Christison seconded the motion, which was agreed to.

The President remarked that, with reference to the omission of the preamble adopted by the Council last year, he did not think it had been intentionally left out by the Home Office, but that it was a mistake.

Dr. Andrew Wood proposed, and Dr. Parkes seconded—"That it is desirable that the preamble clause of the draft Bill of the Council, which is as follows: 'Whereas the Medical Act, 1858, has been found ineffectual to enable persons requiring Medical aid to ascertain who are qualified Practitioners, etc.,' be inserted before the words, 'Be it enacted.'"

Sir D. J. Corrigan considered the preamble proposed to be inserted by Dr. Andrew Wood one of the most objectionable parts of the Bill, because it gave to unqualified Practitioners what they never possessed until the Medical Act was introduced, a statutory right to practise. He thought it desirable to have the preamble omitted.

After some discussion, the resolution was carried, by 8 votes against 7, with the words, "if there be no legal objection," added.

Clause 1 was then read, and on the motion of Dr. Andrew Wood, seconded by Dr. Parkes, was agreed to, as also was clause 2.

Clause 3 was read in connection with paragraph 1 of the Committee's Report, and adopted on the motion of Dr. Andrew Wood, seconded by Dr. Parkes.

Clauses 4, 5, 6, 7, 8, and 9 were also adopted, the latter in conjunction with the second paragraph of the Committee's Report.

With regard to clause 10, as to the erasure of a person's name from the Register, there was some slight discussion, and it was resolved, on the motion of Dr. Andrew Wood, "That the consideration of clause 10 be postponed, and that Mr. Ouvry be consulted in regard to it."

Clauses 11, 12, and 13 were taken together.

On the motion for the adoption of clause 11, which was proposed by Dr. Andrew Wood and seconded by Dr. Parkes,

Mr. Cæsar Hawkins moved, "That the nomination clause inserted in Schedule (B) be postponed till after the remaining clauses of the Bill have been considered."

Dr. Alexander Wood said that no separate motion was required.

Sir D. J. Corrigan thought there were serious objections to the clause as it stood. He had no objection to gentlemen within our own empire being recognised, but he did feel that they were going very far when they proposed to admit foreign or colonial diplomas. If an Englishman took a degree at one of the highest Universities in England and then went abroad, that degree was not recognised, and he thought they were going too far in taking diplomas from all foreign countries, without any reciprocity. He therefore moved, as an amendment, that the word "foreign" be omitted from the clause.

Dr. A. Smith seconded the amendment.

Dr. Alexander Wood said he was very much disposed to support the amendment on account of the experience he had when he was Chairman of the Committee on Foreign Communications. There were certain universities and colleges abroad about the teachings and examinations at which there could be no doubt whatever, but there were certain others—and he referred particularly to America, where universities sprang up like mushrooms—in which the course of study was such that they could have no security whatever that the persons who went through it and received degrees were properly educated. But they were placed in a very peculiar position, and it was in view of that peculiar position that he was led to support the original motion rather than the amendment. The original Bill, as drafted by the Council last year, contained no provision of this kind whatever; that Bill was sent to the Home Office and had now come back from the Home Office with these clauses most elaborately prepared and introduced, and he thought they might make up their minds, from all that they could gather from the course which the Committee had taken, that if they did not accept some clauses of that sort they would get no Bill at all. The only question, therefore, was whether they would accept the clauses or whether they would give up the Bill altogether, and have no Bill at all. He did not believe, however, that they were placed in such very dangerous circumstances as Sir D. J. Corrigan would lead them to believe, because they would only admit diplomas from certain bodies who were mentioned in Schedule (B). But, better than this, the Committee, at his instance, had that morning suggested that there should be no schedule at all, because while the schedule was going through the House of Commons and the House of Lords it would be quite competent for any member of either House to propose some other body—such as the Homœopathic University of Ohio, and unless they were prepared to checkmate such a movement as that, they might find a very heterogenous mass of bodies thrust into the schedule. But if they could get the Home Office to consent that instead of a schedule being appended to the Act the Medical Council, in communication with the Privy Council, and by the authority of the Privy Council, should annually prepare a list of such bodies as, so far as they could judge from their printed regulations and the knowledge they could get of them, were fit to be recognised, he did not see why they should refuse to agree to that if it was to be the price which they were to pay for getting a Bill. He did not think they need trouble themselves much about reciprocity or free trade. If England had waited to institute the free trade movement till other countries initiated it, they would have had nothing of the kind even up to the present time, and in this movement he thought the best plan was to show a liberal disposition, and to trust that foreign countries and Universities would follow their example. He did not attach much weight to the argument, but he thought that if the alternative plan suggested by the Committee were adopted by the Council and assented to by the Home Secretary, there would be no difficulty whatever in so regulating the clause that they would not be in danger of having admitted to their Register unqualified persons.

Dr. Parkes suggested that the clause should read,—"Is at the time at which he applies to be so registered legally possessed of a foreign or colonial diploma."

Dr. Christison though it would be advisable to separate altogether the colonial qualifications from the foreign ones. He was afraid the effect would be to introduce a large number of foreign diplomas.

Mr. Syme said it seemed that the Bill would not be accepted by the Government if they made these alterations, and he believed this was in consequence of certain applications which had been made to the Government.

Dr. Quain said he knew from his own personal knowledge that these views were entertained by the Government a very long time ago, and long before what was referred to by Mr. Syme.

Dr. Andrew Wood thought there would be some weight in Dr. Christison's suggestion if it were not for the conditions contained in the clause. They could not form a clause with less stringent conditions, and he did not know that they required more stringent ones, especially if Dr. Parkes's suggestion were carried out. When they came to the next clause Dr. Christison could object to registering any large number of foreign diplomas, because none of them expected to do that; but he felt satisfied that if they excluded the word "foreign" from the Bill altogether they would not get any Bill whatsoever. What Dr. Quain had stated was very important, that the Government had long been impressed with the opinion that there ought to be reserved a power, whether exercised or not, of registering foreign and colonial degrees and diplomas; and that the Government must have had some such feeling was quite clear from the fact that in the original Act provision was made for registering these foreign and colonial degrees and diplomas which had been acknowledged previous to the passing of the Act. He did not care, therefore, whether it had been pressed upon the Government from certain quarters or not, but he looked to the justice of the case, and to what was the policy of the Council. When they were offered a Bill which they believed was calculated to do good service to the Profession, should they refuse to take it because they had been asked to register foreign and colonial degrees and diplomas, provided they were fully satisfied with them in every respect? The Council were to intimate the names of the bodies whose degrees they would register, and there was a guarantee that the thing would be done completely in the fact that, although the Council would intimate those names they would also have to receive the sanction of the Privy Council. It was so fenced and guarded that he did not think they would run any risk, because he had no doubt that the Council, whenever a foreign qualification was presented to it for registration, would exercise the greatest jealousy in registering it, and then they would not register unless they were perfectly satisfied that they could do it justly and properly towards the Profession at home. If he imagined that they were going to enable a man who could not get a qualification in this country to go abroad to some foreign University and there obtain a qualification on easier terms and come back and demand registration, he would rather give up the Bill altogether; but it was their duty to see, in recognising foreign diplomas, that the conditions for obtaining those diplomas were up to their minimum, and even above it. So fenced and guarded, and with the consent of the Privy Council being necessary, he did not think they ran any very great risk in adopting the clause.

Dr. Christison said he would withdraw his suggestion, as he thought it would be an unfortunate thing for the Government to suppose that the Council were adverse to recognising all foreign qualifications whatever.

Dr. Paget reminded the Council that in some countries a diploma did not give the right to practise.

Dr. Christison said that was the case in Prussia, where, before a man was entitled to practise, he had to undergo another examination besides that at the University.

Mr. Rumsey said that both in France and Germany the license to practise was a different thing altogether from the qualification for a diploma, and the body which conferred the diploma was not the body which gave the license.

Dr. Paget said the clause only mentioned "foreign diploma," and though a person who applied might have a diploma, he might not have a license to practise.

Dr. Alexander Wood said it sometimes happened in foreign countries that there were political reasons why a man who was properly qualified did not apply to the State for a license to practice, but he did not see why they should refuse him if in other respects he was properly qualified.

Mr. Cæsar Hawkins said the clause applied equally to all colonial degrees. Although their registration nominally gave them a right to practise in all parts of her Majesty's dominions, it was not so in fact, but they must also be registered in the several parts of those dominions. In Canada a law had twice been attempted to be brought in, providing that diplomas granted in England should not exempt persons holding them from a second examination in Canada, and he had got this law altered by the Secretary of State, but they still retained the right to require fresh registration.

The President thought the Council was attaching more importance to the clause than it merited. The Government were anxious to remedy a defect in the present Medical Act, which had been pointed out by many members of the Council—namely, that they no longer possessed the power they once had of admitting to their Register the graduates of foreign and colonial Universities and Colleges. It was the opinion of her Majesty's Government and of many members of the Council, that there should be some power created in the Medical Council of admitting to the Register distinguished foreigners and colonial graduates who might reside within the United Kingdom. The only question was how that power should be exercised. If the Council were to express an opinion that they coincided with her Majesty's Government in that view, he thought there could not be much difficulty in carrying the matter out in connexion with the wishes of the Council. For his own part, he certainly thought that the suggestion made by the Committee in their report was a far preferable mode of carrying out the object to the clause as drawn up by the Home Office. It would be much better if they had power from year to year to name and revise the list of the foreign or colonial bodies whom they deemed entitled to the distinction. He thought it was never intended by the Government that the privilege proposed should be accorded largely as had been supposed. He thought the Council might adopt the clause with safety, reserving, of course, the power to fill up Schedule (B), and taking care to insert in that schedule no foreign or colonial Universities or Colleges of whose respectability and character they were not fully satisfied. If the Council admitted the principle, he thought the Government would be content with the insertion of a small number of bodies, and that nothing would be forced upon them.

Sir D. J. Corrigan said he had listened very attentively to this discussion on his amendment, to which amendment he still adhered. Dr. Alexander Wood said they ought not to adopt that amendment because the Government had stated that unless this clause were accepted they would not pass the Bill. He thought the subject of such consequence that if it were before them in that way, that if they did not consent to this clause they would get no Bill, they ought to reply that they would have no Bill rather than have one which contained that clause. He was persuaded that nothing could be more ruinous, and that they would be flooded with applications from the holders of foreign diplomas, and then they would be placed in a very difficult position. A single member of the Council, acting under certain influence which might be brought to bear upon him, and which probably would, might propose that certain persons be admitted to registration on a foreign diploma, and then the Council would have to prove, what it would be hardly possible to prove—namely, that the examination of those persons had not been sufficient. In other words, the Council would be called upon to prove a negative, or to show a reason why they refused the application. The case with regard to Practitioners before 1858 was not at all analogous, and therefore did not apply to this case. The President had said that the only object was to admit distinguished foreigners, and if he were sure of this he would at once withdraw his amendment; but if that were the only reason the clause was not necessary for it, because at the present time there was not a body in this country who would not admit a distinguished foreigner. He did not believe that any distinguished foreigner would ever come here to enter the arena of practice, but under this clause they would be opening the door to a band of adventurers, and he did not know where they would stop. In Belgium the Government were not satisfied with the examinations of the Universities, but themselves examined all the holders of degrees before they allowed them to practise, and yet under this clause the holder of a degree may obtain registration here when he had failed to acquire the right to practise in his own country. There was no hardship upon such men at present, for they only had to attend a College for twelve months, and if they wanted degrees to be at a University for six months, and they might at once present themselves for examination. For all these reasons he thought they were opening the door too wide, and he therefore pressed his amendment.

Dr. Andrew Wood said they only wanted to provide for the registration of foreigners who proved themselves to be properly qualified, and no man would be able to apply unless he had obtained a diploma from one of the bodies which the Council named. The first step was for the Council to decide, after mature deliberation and investigation, what degrees and diplomas were worthy of recognition, and having decided, a man who came with one of those diplomas would be admitted.

The amendment was put and lost, and the original motion was carried by 14 to 5.

Dr. Alexander Wood proposed the adoption of clause 12, omitting all reference to Schedule (B), and adding—"The General Medical Council shall annually submit to the Privy Council for approval a list of the foreign and colonial qualifications which from time to time the General Medical Council may consider worthy of recognition, such list to be published in the *Gazette* and in the Medical Register for the year."

Dr. Rumsey seconded the motion.

Dr. Acland moved, and Dr. Sharpey seconded, as an amendment, that the clause as it stood should be adopted, omitting any reference to Schedule (B).

After a long and desultory discussion the debate on the motion of Sir D. J. Corrigan, seconded by Dr. Embleton, was adjourned.

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## Sixth Day.—Wednesday, May 23.

The Council reassembled at the usual hour, and confirmed the Minutes of yesterday's proceedings, which were read by the Registrar.

On the motion of Sir D. J. Corrigan, the Council resolved itself into a committee in order to consider further the report of the Medical Amendment Act Committee.

Mr. Ouvry, the solicitor of the Council, read, at the request of the President, the form in which he considered clause 10 ought to be drafted:—

"Each Registrar may erase from his Register the name of any person who, having ceased to practise, shall desire to have his name removed from the Register; and each Registrar may send by post to any person registered in his Register a registered letter, addressed to that person according to his registered address, inquiring whether or not he has ceased to practise, and whether he desires his name to be retained on the Register; and if the Registrar does not, within three months after sending such a letter, receive any answer thereto from the person to whom it is sent, he may, within fourteen days after the expiration of the said period of three months, send by post to that person another registered letter, addressed to him according to his registered address, referring to the first letter, and stating that any answer thereto has not been received by the Registrar; and if the Registrar does not, within three months after sending such second letter, receive any answer thereto from the person to whom it is sent, that person shall, for the purpose of the present section, be deemed to have ceased to practise and not desire to have his name retained on the Register. And the name of any person shall not (without his consent) be removed from the Register on the ground of his having ceased to practise, except in pursuance of the provisions of the present section. Provided that a person whose name has been erased from the Register with his consent, on the ground of his having ceased to practise, shall not be liable to any penalty under this section by reason of his being engaged gratuitously in the cure or treatment of any disease or injury."

The clause was then adopted as amended.

Sir D. J. Corrigan rose to propose an alteration in the clause, but the President decided that he was out of order in doing so, but that he could propose the alteration when the whole Bill came before the Council.

On the adjourned debate on clause 12 being resumed,

Dr. Andrew Wood said he had a communication of some importance to make with reference to what had taken place with regard to the debate since its adjournment. A great deal of time had been spent yesterday in discussing the clause, but he believed that Dr. Christison, after giving to the matter the attention of his very practical mind, had now put things in such a condition as would greatly aid the deliberations of the Council.

The President ruled that Dr. Andrew Wood was out of order, and must reserve his remarks till he had put the amendment to the Committee.

Dr. Acland withdrew the amendment which he moved yesterday, and the President said the question now before the meeting was the resolution proposed by Dr. Alexander Wood and seconded by Mr. Rumsey, that clause 12 should be adopted as amended.

Dr. Christison said that as the result of his consideration of the matter, the clause had been placed before Mr. Ouvry, who had made certain corrections in it more clear, distinct, and conformable to what was right. After reading the clauses attentively, he found that they were very much mixed up together, and there was also involved in them a most important privilege which nobody had adverted to in the course of yesterday's discussion—namely, a privilege given to the Council to determine, with the sanction of the Privy Council, that any new titles which might be given in the United Kingdom should be registered in like manner as if those titles had existed originally. This was a privilege which had not been mentioned, but he thought it was one of the most important items in the clause, and it appeared to him that to the extraordinary mixing up of different things in the clause was owing part of the confusion which existed yesterday and the difficulty of getting out of it. On looking over the clauses referring to colonial and foreign degrees and diplomas, he had come to the conclusion that they might make the whole thing very plain by separating the one entirely from the other. The matter had been submitted to Mr. Ouvry, and a little correction would be required. Among the corrections which he proposed was one by which colonial and foreign diplomas were only to be recognised if they conferred the right to practise in the country or colony where they were obtained, and this seemed to be according to the general opinion of the Council. Another correction was with regard to the privilege of recognising new titles, and provided a condition that such new titles should only be recognised if they were granted by bodies which were legally entitled to grant them, because by a strange omission in the clause as it stood, any Medical body in the United Kingdom might grant a new title, and the Council would be entitled to take it up. No lawyer could have intended to introduce by a side-wind such a privilege, which was never intended to be granted at all. Another correction referred to the latter part of clause 11, which provided that any person should be entitled to registration who had not been guilty of any offence which, according to the laws of the country to which he belonged would disentitle him to practise Medicine and Surgery.

The President said he could not accept any amendment on clause 11, which had been fully discussed yesterday and passed, and had now been entered on the Minutes and approved by the Council.

Dr. Christison said they must go back to clause 11, because there was an important omission, inasmuch as there was no allusion to the Privy Council, and they were quite sure that they would not get the approbation of the Government unless they included the sanction of the Privy Council.

Dr. Andrew Wood believed there was nothing in Dr. Christison's amendment which was at all inconsistent with what they did yesterday. It only confirmed and carried it out and put it into a practicable and legal shape. The solicitor had now prepared the clauses in the form in which they could be legally carried out and adopted by the Council and approved by the Government. In a matter of so much importance, it would never do merely on a point of form to go to the Home Office with a Bill which did not contain the mind of the Council.

Dr. Alexander Wood withdrew the motion which he had made yesterday, and stated his reasons for doing so. He had made his motion for the purpose of providing against what appeared to him to be a very great evil to which they might be subjected if the Government Bill became law. Under the New Medical Act Schedule (B) was to be appended containing the names, inserted by the Council, of certain bodies whose diplomas they considered to be of equal rank with those mentioned in Schedule (A). It did occur to him, knowing a little of the temper of the House of Commons, and of certain individual members of that house, that it might be quite possible while the schedule was passing through the House that certain members might move, without the consideration which they would wish given to it, that certain Universities might be added to the schedule which it would be no credit to the Council to be associated with, and whose licentiates or graduates they would not wish to admit upon the Register. That was his first difficulty; and the second was, that in the schedule the names would be fixed, and the schedule would be like the laws of the Medes and Persians. New Universities might rise abroad which they would wish to have associated with them; but they would not be able to do so without going to Parliament for the power. Under these circumstances, he proposed that, instead of the Schedule (B.), they should annually present a list of bodies to the Privy Council, and, with their approval, enter diplomas from those bodies upon the Register. This was highly approved by the Committee, and when the clause came before the Council he proposed the motion now before them for the sake of bringing out that view. He did not profess to be a lawyer, and therefore was not able to prepare the draft of a Bill; and, when he found that Dr. Christison, with his clear and logical understanding, and the Chairman of the Business Committee had gone to the solicitor, and that the solicitor had prepared clauses which fully and efficiently carried out the object he had in view, he saw no reason whatever for pressing his motion, which, with the permission of the Council, he now begged to withdraw.

Dr. Christison moved that there should be substituted for clause 12 the clauses prepared by the Solicitor.

Dr. Quain seconded the motion.

Mr. Ouvry then read the clauses he had prepared as follows:—

"1. Every person who has resided in the United Kingdom for a period of not less than twelve months immediately previous to making his application shall be entitled to be registered under the 'Medical Act, 1858,' who legally possesses a colonial or foreign diploma from a University, College, or other body qualifying him to practise Medicine or Surgery in the colony or foreign country where such diploma was obtained. Provided such diploma shall have been granted by a University, College, or other body recognised in a list of such qualifications, as shall from time to time appear to the General Medical Council as proper to be included in a list to be annually prepared by such Council, which list shall be submitted to Her Majesty in Council for approval, and shall thereupon be published in the *London Gazette*.

"2. If it appear to the Privy Council, on representation by the General Medical Council, that any qualification, other than those described in Schedule (A) to the 'Medical Act, 1858,' as amended by this or any other of the Medical Acts, is granted by any University, College, or body in the United Kingdom, legally entitled to grant the same, after such a course of study and such examination as guarantee to the satisfaction of the General Medical Council that any person to whom such qualification has been granted possesses the requisite skill and knowledge for the efficient practice of Medicine and Surgery, it shall be lawful for Her Majesty in Council to direct by order that every person holding such qualification shall be entitled to be registered under the 'Medical Act, 1858,' in the same manner and with the like effect as if the qualification were inserted in the Schedule (A) to the Medical Act, 1858."

Dr. Andrew Wood said that by this clause they would constitute their Registrar a judge in a very important matter, which he had not been before. The question as to whether a man had been guilty of an offence was one for the Council to decide rather than the Registrar, and he did not think it right to impose such a duty upon the Registrar. It was introducing a very new principle indeed to make the Registrar the judge of a man's moral character.

The President said the Registrar had already a discretionary power, and if he had any doubt about any applicant, he was at liberty to hesitate before he placed him upon the Register. Such a case had recently occurred.

Dr. Andrew Wood thought that if that were so under the Medical Act he saw no reason why it should not be continued.

Mr. Ouvry said the Registrar had the power to do so, and if he did he was bound to take the responsibility.

The President said it was a very important matter. If a man of immoral character in Paris was given up by his colleagues, and obliged to flee from the country, was the Council bound, if he made application, to put him on the Register? By requiring him to live in the country for twelve months before he applied, they certainly had a safeguard.

Mr. Cæsar Hawkins thought they should have the same power in this respect over foreigners as they had over their own countrymen.

Dr. Andrew Wood suggested that the consideration of clause 12 should be deferred until the bringing up of the Report.

The President said they were now sitting in Committee, and could not rescind a former resolution of the Council.

Dr. Alexander Wood proposed that they should settle clause 12, and then when the Report was brought up pass a resolution that clause 11 was unnecessary in consequence of what followed.

Dr. Christison moved that, instead of clause 12, the clauses prepared by the Solicitor should be substituted.

Dr. Alexander Wood seconded the motion, which was carried unanimously.

Clause 13 was adopted.

Dr. Andrew Wood proposed, and Dr. Parkes seconded, the adoption of clause 14.

Dr. Paget thought the clause might be adopted without any harm but for the remarks with which it was introduced by the Chairman of the Medical Acts Amendment Bill Committee, who spoke of it as a matter of justice to the London University, inasmuch as all other Universities in the United Kingdom were allowed to register a similar degree. The matter was made still worse by the explanation which that gentleman gave of his vote against the same proposition last year—namely, that he was under a misconception as to the legality of it. It seemed to him that the whole thing was a mistake, and a very unfortunate one, since it placed the Council in the disagreeable position of having done injustice last year. If all other Universities were allowed the power, there was no doubt that a great injustice had been done to the University of London, but the facts showed that such was not the case. The first fact was that no other University in Great Britain had the power of registering the degree of Bachelor of Surgery, and the next fact was that the University of London had the power of registering any degree in Surgery which was granted by any other University in Great Britain. The original Act granted the privilege of registering one degree in Surgery—namely, the Mastership—to all the Universities in the United Kingdom without any exception, the University of London being, of course, included. The only other qualification in Surgery possessed by any University in the United Kingdom having the right of registration was that of Licentiate of Surgery granted by either of the Irish Universities—the Dublin University and the Queen's College in Dublin—so that, under the Acts as they existed, there were two qualifications in Surgery which had the privilege of being registered, and no University whatever possessed the power of registering the degree of Bachelor of Surgery, which was an entirely new degree. He was by no means prepared to oppose the measure. The question was a large one, which might well be discussed; but if advisable at all, he did not see why the privilege should be confined to the University of London, and this opinion seemed to be entertained by the gentleman who had made the marginal title, for there there was no allusion to the University of London at all, but simply said "degree of Bachelor of Surgery to be a qualification." If it were right to grant the privilege to one University, it was right to grant it to all, and he said this without entering into the general question, which involved principles worthy of discussion, and if it were proposed in his own University he should oppose it. He would propose that the words "University of London" should be substituted by "any University in the United Kingdom."

Mr. Hargrave seconded the amendment.

Sir D. J. Corrigan approved of the principle, and suggested the introduction of the words, "Any University in the United Kingdom legally authorised to grant the same."

Dr. Paget said some Universities not now authorised might in future become authorised, and they ought to provide for that.

Dr. Storrar asked to be allowed to make one remark in justice to himself and the University he represented. When he proposed last year that the Degree of Bachelor of Surgery of the University of London should be registered, his motion was rejected, and the University of London then took the only course open to them. They appealed to the Secretary of State to insert the clause in the Bill; but they were not bound to ask the same for every other University in the Kingdom. Had they done so, they would have gone beyond their duty, because some Universities might not desire it. They therefore only asked the privilege for themselves.

Dr. Apjohn inquired what the qualifications in Arts were.

Dr. Storrar replied that they were the same as those for a Bachelor of Medicine.

The amendment was then put and carried as follows:—"The Degree of Bachelor of Surgery conferred by any University in the United Kingdom, which now is, or hereafter shall be, legally entitled to confer the same, shall, for the purpose of enabling any person to be registered under the 'Medical Act, 1858,' be deemed to be one of the qualifications described in the Schedule (A) of the Act."

The amendment was afterwards carried as a substantive motion.

Dr. Andrew Wood proposed the adoption of Clauses 15 and 16, after omitting the words "of Medicine" in Clause 16.

Dr. Parkes seconded the motion.

Dr. Christison said in any case of the kind anticipated by this clause the prosecutor would have to prove the practice, on the part of the person offending, which was always a very difficult thing to do. Another objection was that if they omitted the words "of Medicine," they would prevent any man from using the title of "Doctor," though he might really be entitled to it, being a Doctor of science, philosophy, or music. In order to conciliate the Government in that respect, they might require proof of the practice of Medicine and Surgery in that particular instance, but he did not think they would be able to conciliate the Government by merely striking out the words "of Medicine." The important point was how to include the phrase "Doctor" in the list of prohibited titles not to be used by unlicensed Practitioners. It was very odd that every other title which was usually given to a man practising Medicine should be forbidden by the Act, while the English title of all that was known was not so forbidden, because this was what the clause amounted to as it stood at present.

Sir D. J. Corrigan said he had seen written on a door in the Strand "Dr. Donovan, Practitioner and Teacher of Phrenology." How was such a case as that to be met?

Dr. Alexander Wood: Was he a Practitioner in Medicine?

Sir D. J. Corrigan said he left that to those who went to him to decide. He quite concurred with Dr. Christison in the objections he had expressed, and thought the words must be left in.

Dr. Andrew Wood was sorry that they were going into the same debate that they had last year. If the Home Office had introduced into the clause anything different from what the Council agreed to last year, there might fairly be a discussion, but as they had debated the clause last year and made several amendments, and as the Home Office had adopted the clause with only the objectionable words "of Medicine" introduced into it, he thought it was a great pity to raise the discussion again. The clause in the Medical Act had proved inefficient because the offence for which the penalty was imposed was not that of practising Medicine, but of taking a title implying that the person was placed upon the Register; and he believed that some audacious individuals actually dared to put on their plates "Mr. So-and-so, Practitioner in Medicine, not registered," and so escaped the infliction of the penalties. After a large amount of discussion last year they had arrived at this clause, which he believed had given great satisfaction throughout the Medical Profession, who would be greatly disappointed if it were left out. The new matter that was introduced then was, "That no man shall practise Medicine under any Medical title who is not registered under this Act." It would not be more difficult to prove practice now, but easier, because if they found a man practising Medicine under any such title they would refer at once to the Medical Register, and if his name was not there the penalty could easily be enforced. If the Council should fall back upon their former position they would subject themselves to a great amount of odium outside, and would show a vacillation which was not creditable to them. The question was, were they prepared to enforce registration, and if they were prepared to do so last year, why not this year? He hoped the Council would not take such a retrograde step, which would be disrespectful to the Home Office and bring odium upon themselves.

The President was obliged at this point to leave the meeting, and the chair was taken by Dr. Stokes.

Dr. Paget objected to the way in which the question was put by Dr. Andrew Wood. The question was not as to the imperfections of the old Act, for on that they were all agreed. It was not correct to say that the clause was the one they agreed upon last year. If it were, it would be vacillation to discuss it again; but the clause as it had come back from the Home Office was so altered, though only by a few words, that it seemed to him to be actually worthless. If the words "of Medicine" were omitted, any quack might with perfect impunity call himself "Doctor," practise Medicine, and not be amenable to the law at all, and thus the public would continue to suffer as they had suffered. The only persons who would be amenable to the law, according to the Home Office clause, would be those, with whom he did not entirely sympathise, but many of whom were most respectable, but who, though legally qualified to register, did not do so. He thought they were wrong in not registering, but he was sure the Council would not wish gentlemen such as many of them were to be prosecuted and fined.

Dr. Alexander Wood said the clause was not the one they agreed to last year. Dr. Christison had proposed an ingenious plan for making the clause effective and to carry out the design of the Council in a manner which would be least offensive to the gentlemen who influenced the Home Office in the matter. If they went back again with the clause of last year it would not be respectful to the Home Office. There were other Doctors besides Doctors of Medicine, and why should these be disfranchised? It was suggested that they should modify the clause so as to satisfy the Home Office as to their reasons for leaving out the words "of Medicine," and also guard against the necessity of being obliged to prove practice. There were difficulties in the way of framing such a phrase, but he had no doubt it would be done, and that the Council would adopt it.

Dr. Christison said that at the first it would perhaps have been wrong to compel every man practising Medicine to register, but he thought they were compelled to do so now. If his suggestion was adopted, they would make the prosecutions as easy as possible.

Dr. Sharpey said there were a great number of persons who had the degree of Doctor of Medicine who were not engaged in practice.

Mr. Rumsey mentioned that last year a clause was agreed to commencing with the words, "Any person practising Medicine or Surgery, or being engaged in the treatment of diseases or injuries," etc., and he thought with that general proviso Dr. Christison's object would be fully obtained, without weakening the application of the proviso to the other titles. He hoped the same general clause as the Council agreed to last year would be now insisted upon.

Sir D. J. Corrigan said that if the words "Any person engaged in the cure or treatment of diseases or injuries" were used, it would have to be proved that the person was so engaged. If a man adopted the title of Accoucheur he would be absolutely liable to the penalties of the Act.

Dr. Andrew Wood wished, before making further remarks, that Mr. Ouvry would state what he thought would be the effect of these two clauses, because from what took place last year he (Dr. Wood) believed the clause proposed by Dr. Christison would answer no purpose whatever. He also had a strong idea that the Home Office were not particularly wedded to the words "Doctor of Medicine."

Mr. Ouvry did not agree that the words "engaged in the cure or treatment of diseases or injuries" would be introducing a new difficulty. He thought they were necessary because they implied the offence. No doubt in many cases there would be difficulty in proving it, but he did not see how they could avoid that difficulty in any way. With regard to the title of "Doctor of Medicine," as put in by the Home Office, that was simply absurd, because it was already prohibited in the former part of the clause, inasmuch as it was one of the designations specified in the schedule of 1858. The Home Office had not considered that the clause was really limited by the first words, "any person practising Medicine or Surgery." He should think, with reference to what Sir D. J. Corrigan had said, that a person following the Profession of an Accoucheur would be engaged in "practising Medicine or Surgery."

Sir D. J. Corrigan said that under the Charter of the London College a man might practise as an Accoucheur without any qualification whatever.

Mr. Hawkins pointed out the words, "or any other designation used by or used to distinguish duly qualified Practitioners of Medicine or Surgery, or any class thereof," and remarked that surely midwifery was one of the class.

Dr. Acland imagined that this clause would allow persons registered under one title to use another. Was it intended to do so?

Mr. Ouvry said it had nothing to do with registered Practitioners, but applied only to unregistered.

Dr. Andrew Wood then moved, and Dr. Parkes seconded, "That clauses 15 and 16, as to unregistered persons, be adopted, with the omission of the words 'Schedule (B) to,' and of the words 'of Medicine,' after 'Doctor.'"

Dr. Christison asked Dr. Wood whether he retained the words, "or engaged in the cure or treatment of diseases or injury? He thought it would be a dangerous thing to do so.

Dr. Andrew Wood said they considered the effect of that last year, and it was only after very great deliberation that those words were put in. He hoped Dr. Christison would allow them to stand.

The clause was then adopted with the omission proposed.

Dr. Andrew Wood next moved, and Dr. Parkes seconded, "That clause 17 be adopted."

Dr. Acland rose *pro forma* to move an amendment. He said they were aware that notice of motion had been given, and would come on this session, with regard to the legality of what he proposed on the first day of the session, concerning grants for particular purposes. He did not at all desire that any clause should be inserted in the Amendment Act to give them powers which he believed they at present possessed, but he conceived he was obliged to take this opportunity of offering the clause, inasmuch as the Council had voted that they had not the power to make grants for particular purposes. The clause he would propose would, if accepted, stand as No. 17, and the only difference would be that clause 17, as it at present stood, would be 18. He then proposed, "Notwithstanding anything in the Medical Act to the contrary, such expenditure as from time to time may be deemed by the General Council necessary for the improvement of the list of Materia Medica shall be deemed to be authorised by the Act." Though he brought this clause forward he did not think it was necessary, as he maintained they had the power, but if they had not, they ought to have it.

Mr. Rumsey said that, as a matter of form, he would second the amendment of Dr. Acland.

Mr. Sharpey thought this amendment was quite unnecessary. There could not be a doubt as to the power of the Council to spend money for making scientific inquiries, but he objected to Dr. Acland's proposition on the first day, because he did not think the inquiry proposed was necessary or expedient.

After some further remarks, Dr. Acland withdrew his amendment, and clause 17 was agreed to.

Dr. Alexander Wood rose to propose a resolution to the effect that the Report of the Committee be referred back to be adjusted in accordance with the alterations in the clauses of the draft Bill, when

Sir D. J. Corrigan interposed by observing that the Committee's Report had not been adopted.

Mr. Hargrave then moved, and Mr. Rumsey seconded, "That the Committee's Report be read paragraph by paragraph."

Dr. Alexander Wood said the Committee's Report was simply an explanation of the Bill, and, having settled the clauses of the Bill, that they should now proceed to settle the Committee's ideas upon it, seemed to him one of those ways of wasting time for which this Council was peculiarly felicitous. He therefore moved as an amendment, "That the Council do now resume."

Dr. ACLAND seconded the amendment, remarking that as the Report had been received and entered on the Minutes any further discussion upon it was unnecessary.

Sir D. J. CORRIGAN rose to a point of order. There was a great difference between receiving a Report and adopting it. They had received reports over and over again, and they had undergone great alteration before being adopted. There were passages in the Committee's Report to which he had a strong objection, one of which was this—"The Committee, on the whole, would recommend that—the objections stated notwithstanding—under the conditions contained in the Home Office clauses, the Council should accept these clauses, especially as they are given to understand that the insertion of them is a *sine quâ non* to the support of the Bill by the Government." Now, he objected altogether to adopt a paragraph which told them that it was an understanding on the part of the Committee that unless they put their hands under the feet of the Government and accepted a Bill they did not approve of, they might get no Bill at all. Therefore he should support the resolution that the Report be read paragraph by paragraph.

Dr. ANDREW WOOD thought Sir D. J. Corrigan was perfectly in order. They went through the analogous Report brought up last year in a similar way. It was necessary, along with the draft Bill, to take the comments of the Council upon it, as it would help the Home Office to understand what they proposed.

Dr. ALEXANDER WOOD then withdrew his amendment, and the resolution "That the Report be read paragraph by paragraph" was carried.

The REGISTRAR then read the preamble paragraph in the Committee's Report.

Sir D. J. CORRIGAN proposed, and Dr. A. SMITH seconded,—"That the first part of the Report be amended as follows:—

> "The Committee having fully considered the Bill, and compared it with that which was drafted during the last session of the General Medical Council, beg leave to submit the following Report:—
>
> "The Bill of the Home Office embraces substantially the Bill of the Council, with, however, some important additions and alterations which require specific notice.
>
> "*The Preamble.*—The Council's draft Bill commenced with the following Preamble:—'Whereas the "Medical Act, 1858," has been found ineffectual to enable persons requiring Medical aid to ascertain who are qualified Practitioners, etc.' This Preamble the Home Office draft leaves out.
>
> "The Committee are of opinion that, if there be no valid reasons against its being retained, it would be desirable that it should be restored as part of the proposed Bill."

Dr. ALEXANDER WOOD thought the proper way of proceeding would be to send the Report back to the Committee, in order that they might amend it in accordance with the resolutions of the Council on the draft Bill, and then this amended Report could take precedence of all other business to-morrow (Thursday). If Sir D. J. Corrigan was not satisfied when the Report came up, he would still be at liberty to object to any paragraph. He moved a resolution to this effect.

Dr. ACLAND seconded this proposition, remarking that, whether they were acting on precedent or not in considering the Report paragraph by paragraph, it seemed they were doing a very irrational thing.

Sir D. J. CORRIGAN rose to a point of order. A resolution had been passed that the Report be read paragraph by paragraph, and having got through two paragraphs he considered a new motion on the subject a proceeding not to be tolerated. If the course he proposed was irrational, it was the course that had been pursued on every occasion on which a report had come up.

Dr. ALEXANDER WOOD again hoped the Report would be remitted to the Committee, as it would save a great deal of valuable time.

Dr. ANDREW WOOD was in favour of the Report being considered paragraph by paragraph.

The CHAIRMAN was about to put the motion that the Council do now resume, when

Sir D. J. CORRIGAN again rose, and protested against it. This was a point of immense importance. A resolution had been carried that the Report be read paragraph by paragraph, and he put it whether, that resolution having been carried, it was not altogether out of order, in the middle of this discussion, to propose an amendment which would abrogate the original resolution.

The CHAIRMAN ruled that it was irregular, and therefore he declined to put it.

Mr. HAWKINS thought they would get into inexplicable confusion if they went on in this way. The Report had been considered in conjunction with the corresponding clauses of the Bill, and therefore the only common-sense plan would be to appoint a Committee to bring up another Report upon what they had done, so that it might be sent to the Home Office with the Bill as amended.

Mr. SYME said the Report before them was simply the Report of a Committee; what they wanted to send to the Home Office was a report of the whole Council, and therefore he considered they had decided upon a right course.

The CHAIRMAN thought that under the circumstances they could not avoid going through the Report paragraph by paragraph. The whole object of that Report was to assist the Government in giving them a proper Bill, and it was of the utmost importance to them that it should go to the Government, not from a Committee, but from the whole Council.

Sir D. J. CORRIGAN's motion was then put and carried.

The next paragraph of the Report having been read,

It was moved by Sir D. J. CORRIGAN, and seconded by Dr. ANDREW WOOD, and agreed to,—"That Section II. of the Report be amended, as follows:—

> "2. *The Registration Clause.*—The object of the clause as to registration, proposed in the Council's draft Bill, was to facilitate the duty of the Registrars in keeping their Registers correct; to enable persons who, having ceased to practise, may desire it, to have their names erased from the Register; to render it imperative on the Registrar to address to any registered Medical Practitioner (instead of one letter within six months, as in the 'Medical Act, 1858') two letters within six months, at an interval of three months, inquiring as to change of residence, before erasing his name from the Register, and to prevent any person who has been once erased from the Register from being re-registered without the instruction of the General or Branch Councils.
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> "In the Home Office Bill this clause has been substantially adopted, though the phraseology has been somewhat varied, and the clause has been subdivided for convenience into eight clauses. The Home Office Bill contains, however, two additions requiring mention, viz.:—
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> "I. The Council's draft Bill provided that when the name of any person shall have been erased from the Register by the General Council or any Branch Council, it shall not again be registered in any Register, except by direction of the Council which directed the erasure. The Home Office Bill adds the words, 'or by order of a Court of competent jurisdiction.' The Committee see no objection to this addition.
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> "II. The Council, in their clause, had provided that the Registrar should address to any registered Medical Practitioner two letters within six months, at intervals of three months, inquiring as to whether he had ceased to practise, or had changed his residence, before erasing his name from the Register. The Home Office clause diminishes still further the chance of any mistake by providing that the letters to be addressed by the Registrar shall be registered letters; and that the second letter shall be addressed within fourteen days after the expiration of the first three months."

It was moved by Sir D. J. CORRIGAN, seconded by Dr. ANDREW WOOD, and agreed to:—"That section 3 of the Report be amended as follows:—

> "3. *New Clauses as to Registration of Foreign and Colonial Practitioners.*—The Home Office Bill embraces three new clauses (11, 12, 13), which provide for the registration of foreign and colonial Practitioners, under certain conditions, these conditions being—(1) That only those foreign and colonial diplomas and degrees shall be registered which have received the sanction of the General Medical Council, and shall be included in a new schedule entitled Schedule (B), which the General Council have been requested by the Home Office to prepare. (2) That the provisions contained in sections 20, 21, 22 of the 'Medical Act, 1856,' shall apply to all qualifications contained in the schedules to the proposed Bill—that is to say, that the Council, if they do not consider the course of study and examinations to be gone through in order to obtain any such qualifications sufficient, shall be entitled to represent the same to the Privy Council, who shall have power to suspend the right of registration. (3) That no qualification, whether British, foreign, or colonial, other than those included in Schedules (A) and (B) in the proposed Bill, shall be entitled to registration unless by order of the Privy Council, on the representation of the General Medical Council. (4) That no person shall be registered upon any foreign or colonial diploma or degree who has not resided in the United Kingdom for a period of not less than twelve months immediately previous to his making his application for registration.
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> "The Council are aware that, though there was power in the Council to register, if they saw fit, persons holding only foreign or colonial diplomas and degrees—provided they had obtained them previously to the passing of the Medical Act, 1858—yet that they had no power to register any such diplomas and degrees obtained after the passing of that Act. The Committee consider it fair and right that some provision should be made for the registration of foreign and colonial diplomas and degrees (especially if registration be rendered indispensable for practice under recognised Medical titles), as it would be a harsh measure to deny the privilege of registration in this country to persons who may come from abroad or from the colonies holding foreign or colonial diplomas or degrees, provided these qualify for practice in the countries where they have been granted, and are deemed deserving of recognition by the General Medical Council, as implying education and examination not inferior to the minimum required in the case of qualifications granted in the United Kingdom.
>
> "In the Home Office Bill a new Schedule (B) is proposed to be introduced, for the purpose of including those foreign and colonial degrees and diplomas which are to qualify for registration. The duty of preparing this schedule has, as already stated, been committed to the Council by the Home Office.
>
> "Whilst the Committee have done their utmost to meet the wishes of the Government in framing a Schedule (B), they have found the difficulty of the task to be so great that they consider it preferable to make a provision in clause 12 of the proposed Bill, by virtue of which it shall be lawful for the General Medical Council annually to prepare and submit to the Privy Council, for approval, a list of those foreign and colonial qualifications which, from time to time, the General Medical Council may consider worthy of recognition—this list to be published in the *London Gazette*.

The fourth section of the Committee's Report was then read.

Sir D. J. Corrigan moved, and Dr. Alexander Wood seconded, "That section 4 be amended as follows :—

"4. *Registration of the Degree of Bachelor of Surgery.*—The Committee see no reason why the degree of Bachelor of Surgery, conferred by any University in the United Kingdom, which now is, or hereafter shall be, legally entitled to confer the same, should not be included in Schedule (A)."

The fifth section was then read.

Sir D. J. Corrigan said that if he stood alone he should be inclined to vote against this paragraph, especially this sentence—"The Committee believe that the Home Office Bill, with the amendments suggested by them to be adopted by the Council, would prove a salutary amendment of the Medical Act, one calculated to benefit the Medical Profession, but especially the public for whose protection from unqualified Practitioners it makes more efficient provision." If they put it in this way, it seemed as if they looked after themselves and the public, while they took no steps in this Bill for improving the education of men engaged in the Profession.

Dr. Andrew Wood said the reason for putting this sentence in the Report was that there was a very general impression abroad, and in Parliament especially, that these Medical Bills were made alone for the good of the Medical Profession. That was a doctrine he utterly repudiated. If the Medical Profession had an interest in having a Medical Act, the public had a ten times greater interest, because it was to give them the means of knowing who were the men to whom they could trust their healths and their lives. It was no use going to Parliament without stating in strict terms what was actually the case—that the public were largely interested in having a Medical Bill that they might be wrested from Medical quacks. He did not see why Sir Dominic should object to that sentence. He (Dr. Wood) quite agreed they ought to have good education for those who entered the Profession, and that they were endeavouring to obtain. At all events, let the Profession and the public know that they were endeavouring in every way, so far as they could, to guard the public against being imposed upon by Practitioners, either out of the Profession or in it, who were not qualified.

It was then proposed by Sir D. J. Corrigan, seconded by Dr. Andrew Wood, and agreed to—"That the remaining portion of the Report be amended as follows :—

"5. *The Penalty Clause.*—This important clause, as framed by the General Council last year, has been substantially adopted in the Home Office Bill. There is only one important point requiring notice, viz., that instead of the word 'Doctor,' as in the Council's draft Bill, the words 'Doctor of Medicine' have been used in the Home Office draft Bill. The Committee believe that the effect of this alteration is materially to weaken the clause; as, if it be retained, unqualified persons will continue as now to practise Medicine, calling themselves 'Doctors,' but not 'Doctors of Medicine,' and will thus evade the penalties. It might be said that by using the word 'Doctor' only you include all Doctors, whether of Philosophy, Law, etc. The answer to this is, that it is only those who, not being registered, are 'practising Medicine under the title of Doctor' who are affected by the clause. The Committee would advise the Council to represent this matter very specially to the Home Office.

"The Committee believe that the Home Office Bill, with the amendments suggested by them to be adopted by the Council, would prove a desirable amendment of the Medical Act, one calculated to benefit the Medical Profession, and the public, for whose protection from unqualified Practitioners it makes more efficient provision. They therefore trust that the Council will adopt it, and will, before the conclusion of the present session, send a deputation to the Home Office to state the views of the Council regarding the Bill; and further, to urge on the Government the expediency of the Bill being introduced as a Government measure."

It was next resolved, on the motion of Dr. Alexander Wood, seconded by Dr. Embleton—"That the Chairman of the Committee do now report progress, and that the Council resume."

It was further proposed by Dr. Alexander Wood, and seconded by Dr. Embleton, "That it be remitted to the Medical Acts Amendment Committee to prepare and bring up the Bill, as now amended in Committee of the whole Council. That the Report of this Committee take precedence of all other business to-morrow."

This resolution having been put to the meeting and agreed to, the Council adjourned.

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### Seventh Day.—Thursday, May 24.

The Council met at 2 o'clock, the President in the chair. The minutes of yesterday's meeting having been read and confirmed,

Dr. Andrew Wood brought up the Report of the Medical Amendment Acts Committee as amended, and with the following additional recommendations :—

The Committee have carefully gone over, with Mr. Ouvry, the draft Bill, with the alterations adopted by the Committee of the whole Council. They beg leave to make the following suggestions in reference to the Bill as it now stands :—

"1. The Committee recommend, that as clause 11, as originally adopted by the Council, is inconsistent with clauses 11 and 12, as subsequently agreed to by the Committee of the whole Council, the first mentioned clause 11 be omitted from the draft Bill."

"2. The Committee recommend, with a view of simplifying the language of the clause adopted in place of clause 11 by the Committee of the whole Council, that these words should be erased—viz., 'of such qualifications as shall from time to time appear to the General Medical Council as proper to be included in the list;' and that the words 'General Medical Council' should be substituted for 'such Council.'

"3. The Committee recommend, that in lieu of the third division of clause 11 of the Home Office draft Bill, it be provided in clause 13 that sections 29 and 39 of the Medical Act of 1858 be added, so as to bring persons registered under foreign and colonial qualifications under the same liability of removal from the Register, for offences as those registered under Schedule (A) to the Medical Acts."

The Committee would further recommend that, instead of communicating to the Home Office the Report of the Medical Act Amendments Committee, as finally adjusted by the Committee of the whole Council, the Council should transmit a succinct statement, prepared by their solicitor, Mr. Ouvry, of the reasons for such alterations in the Government draft Bill as may be adopted by the Council. Finally, the Committee recommend that a letter be, without loss of time, addressed by the President to Sir G. Grey, requesting that he will receive a deputation from the Council in reference to the Bill, on as early a day as he can conveniently appoint.

Dr. Andrew Wood then moved, and Dr. Embleton seconded,—"That the Report of the Committee on the Medical Acts Amendment Bill be received, and that the recommendations contained in it be considered seriatim."

This motion was carried, and the report adopted to the end of the 9th clause.

On the motion for adopting the 10th clause,

Sir D. J. Corrigan moved the following amendment:—"That in clause 10 the four last lines, viz. :—'Provided that a person whose name has been erased from the Register with his consent, on the ground of his having ceased to practise, shall not be liable to any penalty under this Section, by reason of his being engaged gratuitously in the cure or treatment of any disease or injury,'—be omitted. He thought that the clause, as it stood in the Bill, would read very badly to a stranger, and in the House of Commons, because it would be impossible to understand the motive which induced them to include those words. It would read as though they did not care whether a man went out of the Profession or not, or whether he practised as an amateur (in which case the patient would be much better without his treatment than with it), provided he did not take a shilling for it. The object was said to be that clergymen or very humane persons who had studied the Profession and had been registered, might desire their names to be taken off the Register, but might still wish to practise gratuitously among the poor. He was perfectly sure the poor would be very much better without such men than with them. They sought to be Practitioners, though their names were not on the Register, and he objected to saying that they would allow that, provided they practised gratuitously, for money could be got from the poor in many ways.

Mr. Syme seconded the amendment.

Mr. Ouvry said the proviso had been put in by the Home Office, and it did not seem desirable to meddle with it. He did not think the proviso would have any material effect.

Sir Dominic Corrigan said that after the statement of the solicitor he objected to the clause a thousandfold, and he would rather have the whole Bill thrown out than have those lines inserted. It was very easy to see the object of those who introduced them, and how there would be a scrambling of certain persons to get on the Register—persons who had no status, and who could get on the Register with scarcely any examination at all.

The President disclaimed using any influence in getting the words inserted, and said it was well known that the Legislature was very unwilling to grant them the power of imposing pains and penalties.

The amendment was put, and nine members voted for and nine against it. The President gave a casting vote against the amendment, which was therefore lost, and the original motion carried.

Dr. Andrew Wood moved, and Dr. Parkes seconded, the following motion, which was agreed to :—"That in lieu of clause 11, adopted by the Council; and in lieu of the clause 11, subsequently adopted by the Committee of the whole Council, the following clause be substituted,—viz. :—

"Every person who has resided in the United Kingdom for a period of not less than twelve months immediately previous to making his application, who legally possesses a colonial or foreign diploma from a University, College, or other Body qualifying him to practise Medicine or Surgery in the colony or foreign country where such diploma was obtained, shall be entitled to be registered under the Medical Act, 1858. Provided such diploma shall have been granted by a University, College, or other Body recognised in a list to be annually prepared by the General Medical Council, which list shall be submitted to Her Majesty in Council for approval, and shall thereupon be published in the *London Gazette*."

On clause 12 the following resolution was, after some discussion, moved by Mr. Hawkins, and seconded by Dr. Paget:—"That a new clause be drawn up, or some words added by Mr. Ouvry, to a clause like clause 29 of the Act of 1858, which shall apply to persons registered under clause 12 of the draft Act on foreign or colonial qualifications, for crimes and offences committed in their own countries, of the same nature as those referred to in clause 29 of the Act (1858), when committed in England, Scotland, or Ireland, by persons registered under the Act of 1858."

This motion was lost, and the following, proposed by Dr. Andrew Wood, and seconded by Dr. Parkes, carried instead:—"That clause 13, which is as follows,—viz., 'The provisions contained in sections 20, 21, and 29 of the Medical Act, 1858, shall apply to any qualification, which in pursuance of this Act entitles persons to be registered under the Medical Act, 1858,—be amended, by inserting after '22' the words '29 and 39,' and by striking out the word 'and' between 21 and 22.

The two following resolutions were adopted unanimously on the motion of Dr. Andrew Wood, seconded by Dr. Parkes:—"That Mr. Ouvry be requested to prepare a succinct statement of the reasons for the alterations made in the Government Bill by the Council (based on the Report of the Medical Acts Amendment Committee, as finally adjusted by the Committee of the whole Council) for transmission to the Home Office." "That a letter be addressed, without loss of time, by the President to Sir G. Grey, requesting that he will receive a deputation from the Council in reference to the Bill, at as early a day as he can conveniently appoint."

Dr. Andrew Wood proposed, and Dr. Parkes seconded,—"That the Report of the Medical Acts Amendment Committee be adopted as amended by the Council."

Sir D. J. Corrigan said he rose for the purpose of moving an amendment and of expressing his conviction, which might or might not be shared in by other members of the Council, that a more mischievous Bill than that which was now before them, or one which would be more useless to the Profession, could not be devised. Not only did he feel a great objection to the Bill on its own merits, but he very much objected to going forward with it under the circumstances in which they were placed with regard to the Government, and which connected them with the Government, or rather which disconnected them from them. In order to prevent any mistake or misconception, he would at once propose the following amendment:—"That the Secretary of State be requested to take the necessary steps to procure the issuing of a Royal Commission to inquire into the working of the Medical Acts, and to examine the members of the Medical Council, and such other persons as they may see fit, with the view of framing a report that may lay the ground for a Medical Bill that will ensure the better education of candidates for the practice of the Medical Profession, and better protection for the rights of qualified Practitioners, than the present Medical Act affords." In supporting this amendment, he would first express his obligation to the President for putting the whole case in a nutshell by saying that the full scope of the Bill was the hope that the Government would enable them to introduce the word "Doctor" instead of "Doctor of Medicine." The President also put the question, as far as he understood, and he hoped he was not misrepresenting, whether it would not be right, in consideration of obtaining that great boon, to submit to a great many things from which they dissented. They were now going to Parliament with a Bill which gave them no redress; but if they looked into it they would find it repealed a most important clause contained in the Act of 1858, to which he would draw their attention. That clause was—"That, after the first day of January, 1859, the words 'legally qualified Medical Practitioner,' or 'duly qualified Medical Practitioner,' or any words importing a person recognised by law as a Medical Practitioner, or member of the Medical Profession, when used in any Act of Parliament, shall be construed to mean a person registered under this Act." They were now going to repeal this Act, which was the whole foundation of the protection of the Profession, for it had been carried by a majority—a small one, it was true, but still a majority—that a person might obtain the placing of his name on the Register by any means whatever, no matter what they were; that once on the Register he could withdraw his name from it; that he could still continue to practise, and would be a legally qualified Practitioner, though his name was not on the Register. In other words, the Bill provided that persons over whom they had no control, and who got their qualifications as they best could, could get their names on the Register, and then withdraw them, but still continue to practise and be recognised by law as qualified Medical Practitioners provided they practised gratuitously. They could commit any crime or any felony they pleased, and turn round and laugh at them and say, "We are qualified Medical Practitioners, though not on the Register, and you cannot convict or punish us unless you prove that we have taken money for practising." So much for the protection of the Profession! Was it a great boon that, as the Home Office had provided, a man was not subject to penalties unless he wrote "Doctor of Medicine" or received money from his patients? Then the Committee in their Report had proposed a list of at least 17 foreign Universities, many of them having 13 or 14 Colleges, whose diplomas at one fell swoop should be recognised; and yet this was called protecting the Profession in the United Kingdom! No matter how they guarded it, there would be men come to them whose social status abroad was of the lowest description, and the Profession would be inundated by a horde of unwashed foreigners who possessed no status in their own country, and who lived in a way that would be a disgrace to them; and not only that, but when once on the Register, it was very doubtful whether they could be legally ever taken off. Was this protecting the Profession?

The President said the Council had not given their sanction to this being done.

Sir D. J. Corrigan said the Committee had admitted these 17 Bodies in their report, and with the colonies the number would amount to 40. It was not at all probable that the number would be confined to that, but that it would increase.

Dr. Alexander Wood rose to a point of order. The Council had already settled by vote that the clause should stand as part of the Bill, and he wanted to know whether these discussions could be reopened again and again in that way. Sir D. J. Corrigan had bestowed a great deal of time and attention upon the matter, for which the Council felt indebted to him. For the best part of two days the Council had been engaged in considering the Bill, which they had now amended, and had passed a resolution to send it to the Home Office, and yet after that Sir Dominic Corrigan came foward and made a speech directed against the Bill. There surely must be some irregularity in such a course, and the Council was being led into that irregularity.

Sir D. J. Corrigan said the only irregularity about the matter was the interruption by Dr. Alexander Wood. The question now before the Council was not that they should send a Bill to the Home Office, but that the report of the Committee be adopted; and he held that he had the right to move the amendment unless the Chair decided that he had not.

The President ruled that Sir Dominic Corrigan was quite right in moving an amendment upon the motion, which was that the report of the Medical Amendment Act Committee be adopted. As Dr. Alexander Wood had stated, they had agreed upon the amendments to the Bill, and that the Bill should be sent to the Home Office, and also that it should be accompanied by a succinct statement by the solicitor of the reasons why they thought the changes necessary. The only thing he was not quite satisfied about was that Sir Dominic Corrigan seemed in his speech to charge the Council with having sanctioned the recognition of seventeen foreign Universities.

Sir D. J. Corrigan said he did not say the Council had sanctioned it, but the Committee.

Dr. Sharpey considered that Sir D. J. Corrigan's remarks did not apply, because this matter was not contained in the Report at all.

Sir D. J. Corrigan said he had only stated what he begged the liberty to repeat, that the recommendation of the original Report was for seventeen foreign Universities and their Colleges. When that recommendation came before the Council he had strong fears as to what the effect of it would be, and in submitting his amendment he held that he was perfectly at liberty to introduce any argument which in his opinion justified the amendment he had proposed.

The President said the Council and Sir Dominic Corrigan were of the same opinion with reference to the recognition of those seventeen bodies, and they had declined to recognise them.

Sir **Dominic J. Corrigan** said he must again repeat what he had stated before, that the Committee originally recommended seventeen foreign Universities whose diplomas should be recognised. Here he would leave this subject and go on to another; but before he went further, he would say at once that even to the manner in which the Bill was to be proposed or brought forward he most strongly objected. The Secretary of State for the Home Department had declined to have any hand in the Bill. They were now a public department of the State, and what did the Secretary of State say to them? He recommended them to put the Bill into the hands of some person in the House of Lords or some person in the House of Commons, but he recommended the House of Lords. Was that a proper position for the Council to be placed in? Was it a proper thing for the President to have to go down to the lobby of the House, and wait, hat in hand, and with

"Bated breath and whispering humbleness,"

till he could find some one who would take charge of the Bill? He asked in all sober seriousness whether this was a proper position in which to place the Council. Even if he cordially approved of the Bill, he would not go either to the House of Commons or the House of Lords, and stand, hat in hand, and ask private Members to take it up. They would be met by a whole host of opposition, by homœopaths and quacks, and all kinds of people. Who was to invite the discussion? Who was to stand with a soap-boiler or a respectable man in some other trade, who understood his own trade very well but knew nothing of the Medical Profession, and with a homœopathist on the other side, and bring forward the Bill? The Government had shelved them, and he suggested that a letter should be written to Sir George Grey, stating that as he had declined to take up the Bill of a public department of the State, they, under those circumstances, declined to go forward with the Bill, and would let the onus rest upon him of refusing to introduce a Bill which concerned both the public and the Profession. He did strongly object to go to the House of Commons or the House of Lords in the manner which Sir George Grey suggested.

Dr. **Christison** asked if the Council were really placed in that position, because if it was he thought every member of the Council would object to it.

Sir D. J. **Corrigan** said they applied to Sir George Grey to undertake the charge of the Bill, and he would read Sir George Grey's answer:—". . . . I am directed by Sir George Grey to say . . . Some member of the House of Commons might be found by you who would take charge of it. It would be better, if possible, that it should be brought in in the Lords with a view to its progress." Were they prepared to act upon that, that "some private member might be found by you who would take charge of it?" He now came to his reasons for adopting the course which he had proposed, and, to have recourse to a very common expression, but one that had a great deal of truth in it, he would say he thought that they were putting the cart before the horse. What were they doing? They were about to state, as the reason for the course which they wished to adopt, that qualified Practitioners required to be protected from unqualified or ignorant men. This was all very well, and he did not object to it. If a member of Parliament were asked to take the Bill up, it would be on the ground that qualified Practitioners ought to be protected. But what would that member say when he was met in the House, as he would be, by a reference to an authority which could not be disputed—namely, the returns from the Navy Board, and which showed that last year, 1865, that Board reported on the gross ignorance of a great number of the candidates sent from the licensing bodies, the representatives of which sat around that table. The blame of that rested with those bodies, for the candidates had gone from nearly every one of them. It might be said that this was in 1865. Then he would come to 1866, and the report in 1866 from gentlemen whose word could not be doubted, was—he would quote the exact words by-and-by—they begged to express their surprise that members of a liberal Profession should be found who were incompetent to spell and write the commonest English composition, while some of them were so ignorant of therapeutics or the basis of Medicine, that it would be unsafe to let them pass. Now, would not any sensible member of the House of Commons say—"I do not see what is the object of this Bill, nor why I should support it, for according to the evidence in the Minutes of the Council it is clear that the registered Practitioners are just as bad as the unregistered, and the unregistered just as good as the registered. I do not see how it makes the least difference to the public whether the man who does not know how to prescribe is registered or not; in other words, the one is just as bad as the other." He had said that they were putting the cart before the horse, and he contended that their first step should have been to have asked for powers which would enable them to enforce such rules upon the licensing bodies as would prevent them exhibiting them in such a painful and humiliating position before the world. If they had done this—if they had been able to enforce a good education, and to say that no men were let loose upon the public but such as were to be trusted, then they might fairly go forward and ask for protection; but they must not ask for protection, nor was there any chance of getting it if they did, till they had first taken some steps to enforce a proper education. In the present state of things the men who were turned out from the Navy Board were, with their diplomas, let loose upon the public. If they adopted the course he proposed, and asked for a Royal Commission, they would then set themselves right both with the Legislature and with the public, for they could say that if these evils had arisen they had done their best to prevent them; whereas, to go and ask for the Bill at present would be to lay themselves open to misconstruction, and, in his opinion, to put the wrong foot foremost. If they applied for the Royal Commission,—and if his amendment should be carried he should at once move that the Royal Commission be applied for,—they could state to that Royal Commission the objects they had in view, but that there were insuperable difficulties in their way. They did not want to say they were not defective, but they wanted to show where they were defective. What the constitution of the Royal Commission should be would be best left to the Secretary of State; but let the Commission be applied for and appointed; let it examine every member of the Council; let it examine those without and those within; let them confess their failings before it, whatever they might have been, and then that Royal Commission would frame a report to the Government upon the whole matter. But, even supposing the Government threw overboard the Royal Commission, they would then be in a better position than they were before, for they would have been able to say that they had done everything in their power, and that if the Government had not thought proper to aid them in amending the defects which existed, the Council had nothing to look back upon; but if they went forward with what the President had truly called "this wretched Bill," ("Hear, hear," and loud cheers) they would be in a worse position, in the opinion of the public, than they were before. With regard to the Register, he should, if a Royal Commission were granted, indicate an alteration from the present form, which he held would be an improvement upon it. If he took up the *Almanach de Médicine* he did not find the Practitioner of Leicester-square, who prescribed for the organ-grinders—and he knew one or two of them under peculiar circumstances—set side by side with the highest men in the Profession. (Hear, hear.) Even with regard to the Register, he would propose an improvement and suggest that they should do what was done in the *Almanach de Médicine*, where those who possessed high qualifications were placed by themselves in one class, and all the names arranged according to the various qualifications. The two great objects they had to gain were the better education of Practitioners and a protection for themselves. He would read a resolution passed by the Cork Medical Association, which he believed expressed in plain words what they all felt:—"That convinced as we are by increasing experience of the paramount importance of securing to the country competent Practitioners in Medicine and Surgery, we desire to record our anxious wish to see the Medical Council so modified, both as to its constitution and powers, that it will enforce a high uniform standard of education, both preliminary and Professional, on all licensing bodies throughout the United Kingdom." He believed that this embodied what was thought by a great many of them. Up to the present hour there was not a single licensing body which had concurred with their recommendation, except by accident. It did happen that the Dublin University, to its great credit, would not permit any man to commence his Medical studies without he had undergone a thoroughly sifting examination in preliminary education. Some others did the same, but how were they circumstanced at the present moment? In the Report from the Scottish Branch Council, they found that a large number of exceptional claims had been made, including the whole of the students who, since November, 1865, had commenced their studies in the Universities of Glasgow and Aberdeen, and who had been allowed to commence their Professional studies without a preliminary examination. Added to this, they had a communication from the University of Glasgow to the effect that that body thought it not expedient to adopt the plan of registration recommended by the Council. That letter said—"In transmitting to you the accompanying list, I am directed to state that as, according to the present regulation of the University of Glasgow, Medical students are, in certain cases, admitted to enter upon their Professional studies previously to their having passed an examination in general education, it has been thought expedient not to adopt the plan of registration recommended by the General Medical Council, and for which you sent the required printed forms, but in the meantime to transmit an authentic list of Medical students who have commenced their Professional studies at this University, and are in the first year of their attendance, with a statement as to whether or not they have passed an examination in general education." At the end of eight or nine years they found, not one body, but several bodies, who did not pay the least attention to the regulations of the Council. The University which he represented was exactly in the same predicament, and was just as bad as any other. The Queen's University in Ireland did not comply with the recommendations of the Council, nor pay the least attention to it. They all differed from the Council as to the time when Professional study should commence. He did not attach blame to any of them for this. He did not say that they should attend to the regulations of the Council, and hoped he should not be understood as passing a censure upon any of them; but he was simply showing that they were in a position in which they were utterly powerless to enforce good education or good examinations, and that their first step ought to have been to have gone before Parliament for powers to enable them to do that, and then, after that, to ask for protection for the Profession. It was no use leaving the conduct of examinations to those bodies who had an interest in the matter on account of the fees by the students. The London University had no interest of that kind. In a letter which he had written to Dr. Mackesy, the President of the Medical Association in Cork, he pointed out that the Council had no power to enforce any course of study or examination, but that the several corporations could do as they liked; and in that letter he said—"The Medical Council has no power to enforce any course of study or examination. They tried it with the University of Edinburgh in the second year of their existence, and were beaten. The several corporations may do as they like, and in the present state of free trade and underselling each other for the profit of the diplomas, I see no hope of any amendment." But, supposing when the matter came before the House of Commons, legal opinion was taken, and it was held that they had the power, then the next question they would be asked would be what they had done with it. (Hear, hear.) They would be told that they had the power to protect the Profession from unqualified persons entering into competition with those who were qualified, and yet at the end of eight years they were not able to put their hands upon a single instance in which they had attempted to exercise that power, and that they now came and asked for protective laws when their own conduct showed that they did not care a straw about them. He promised to read to them the Report of the Naval Board in 1865, and he would do so:—"The majority of those rejected were utterly ignorant of the Latin language; two failed altogether in Anatomy and Surgery, and two were so ignorant of Materia Medica that it would have been dangerous to pass them as qualified." It might be supposed that there had been some improvement since then, but, unfortunately for that supposition, the Report for 1866 was still worse, for it said,—"In renewing our expressions of regret, that so much ignorance of the Latin language should be displayed by a large proportion of the candidates who submit themselves for examination, we are sorry to have to add that many of the manuscripts sent in by the candidates have given evidence of such an ignorance of orthography and of the most ordinary rules of English grammar and composition as could hardly have been credited in members of a liberal Profession." This was the improvement between 1865 and 1866, and yet in the face of this they came forward and asked the House of Commons to protect them from unqualified Practitioners, when on their own Minutes they had the evidence that such were the men who at the present moment were let loose to practice upon the lives of Her Majesty's subjects. His conclusion was that they were in a dilemma,—either that they had not the power to enforce education, or, if they had the power, that for eight years they had been doing nothing for the public safety in that respect. If they went before the House of Lords or the House of Commons with the Bill in its present condition, they would be placed, as a public department of the State, in a humiliating position; but if they applied for a Royal Commission they would be putting themselves in the high position of doing justice to all, concealing nothing, and showing that they were disposed to do what was right, either by Act of Parliament or by themselves. If they went on as they were going, he very much feared that a contingency would arise which would come upon some of the licensing bodies, and perhaps all of them, like a thunderbolt; and that was that as the Army and Navy Boards, seeing the lamentable state of ignorance in which the Council let them loose upon the public, had ordered certain examinations of their own, under examiners of their own, and would not recognise a single examination of the Council's, so the Poor-law Commissioners of England and Ireland would do the same. He did not know the powers of the Poor-law Board in England, but in Ireland they had the power of examining for themselves the qualifications of any man who held office under them, and he certainly should not be surprised if to-morrow an order were to come out referring to the communication from the Navy Board and saying,—"We do not feel justified in entrusting the care of our poor to the licentiates of any one of your licensing bodies, but we will ourselves appoint a body of examiners to test the ability of those who take charge of the poor under our supervision." If this were the case, what a lamentable position they would be in. If they asked for a Royal Commission they would be able to say that they had voluntarily offered every information to the public, that they wanted a new Bill, that they wanted an amended Bill, and that they would expose the weaknesses of the licensing bodies and the defects of the present Bill. It now only remained for him to apologise for the time which he had taken up in bringing this matter forward. He felt deeply and sincerely that they had come to a most painful crisis and turning-point in the existence of the Council. It was a matter of such importance that he felt it to be his duty to give expression to his feelings and opinions upon it. If he had made use of a single observation which might have offended any person or any licensing body, he hoped they would recollect that he had not spared his own body, and in bringing his amendment before them he believed he was only discharging a public duty.

Mr. **Rumsey**, in seconding the amendment, trusted the Council would kindly listen to the few remarks he had to make, and if he should say anything at all disagreeable, either to any of the Council as a body or to the institutions which they represented, he hoped they would excuse it on the gravity of the question which this amendment brought before them. He did not support the amendment on quite the same grounds as the mover did; he supported it without opposing the Report of the Committee on the Medical Acts Amendment Bill. He was perfectly ready to support the amendment proposed by the Council, not because he thought that was the best way of settling the question, but because he believed it would be a very useful and valuable alternative in the event of Sir Dominic's amendment being defeated. It was impossible and unwise for them to ignore the dissatisfaction which existed in the Profession at large as to the results of legislation in 1858, the working of the Medical Acts, and the present state of the Medical law. The dissatisfaction was not that of uninformed and unthinking persons, but of thoroughly accomplished and highly educated minds. If he might be permitted, he would read six lines from a letter addressed by one of the most distinguished members of this Profession to another very distinguished member of it in this country. It was unnecessary for him to give the name of the writer.

The **President** reminded Mr. Rumsey that it would have more weight if the name was given.

Mr. **Rumsey** said he could not do that. The writer said, "I only share in a common opinion that if the Medical Council were to adjourn its sittings for a very long period the loss to the Profession would be extremely small." (Laughter, cries of "Oh, oh!" and "Name.") He was happy to assure them that he did not endorse the opinion he had read. (Hear, hear.) He granted them that the present demands of a large portion of the Profession had been, and were still to some extent unreasonable; but that was no reason whatever why the grounds of this complaint should not be fairly considered. He granted this also, that no legislation could establish all the so-called rights and abolish all the supposed wrongs of the body; but the question was whether all had been done that might have been effected under a better law, or which might have been effected under their own Amendment Bill. Now, he came to certain defects in the Act of 1858—defects in principle, which were not touched by the Amendment Bill before the Council. The preamble, they would be so good as to observe, was not repealed; a preamble most objectionable, most unsatisfactory, and most partial. To register under the Act of 1858 must be confessed to be a very imperfect means of distinguishing qualified Practitioners, and when made even more perfect than it was, it by no means became the sole or main object of Medical legislation. The Amendment Act would still be so framed as to place all degrees, grades, and qualifications in one dead-level category. It would do away with the necessity for full and complete qualification for the high and important duties of a public official character, and it would lead administrative bodies to be content with a lower standard of qualification than they might otherwise have thought it right to demand. With regard to education, probably as much had been done by the Council as was possible under the conflict of opinions and the absence of compulsory powers which so remarkably characterised this Council. He confessed his surprise that so much had been accomplished; nor was he one who would at all ask for compulsory powers. He thought it most fortunate that the Council, in its present constitution, had not such compulsory powers, and it was very beneficial to the public that they should not be so empowered with their present constitution. Then, with regard to the third department of the duties entrusted to them under the Act, the Pharmacopœia, he trusted the Council would render a good account of that next year; yet let it be recollected that the bulk of the labour devoted to that great work had been done out of the Council, and in the intervals of the session. So much for what had been done. Now, he would ask permission to draw attention to questions of great importance which might come before a Royal Commission. One was whether the machinery constituted by the Act was the best that could be devised to attain the objects of that Act; whether it was the most suited to meet the rational and moderate wishes of the Profession, and the obvious needs of the public; whether, in fact, this peculiar combination of representative and executive functions was a successful experiment? He admitted, as much as any member of this Council could admit, the importance of full representation in a deliberative body; but he affirmed that just in proportion as the representation of all interests, Professional and educational, was perfect, so the body represented became unfitted for ministerial and administrative duties. This was not seen by those who clamoured for Medical Reform before 1858. They fancied Parliament would not only constitute a representative Council, but would invest it with large summary and administrative powers. But Parliament did no such thing, nor would it ever do anything of the kind. Were practising Physicians and Surgeons throughout the kingdom adequately represented, as the Colleges were so overpowering in this Council, then, however perfect for deliberative purposes, this Council would become more remarkably unfitted for the execution of the Medical measures which resulted from its deliberations. On the other hand, were the executive powers of this body strengthened by Parliament, it would be probably on condition that its representative constitution was modified and subordinated. There might perhaps be two bodies – one a large consultative body, and the other a small executive body. Another question which might come before a Royal Commission would be this, whether a General Medical Council so constituted, and combining representatives from the three divisions of the United Kingdom, could or ought to be expected to settle in a mandatory way all details of registration and education on precisely the same principles and by the same methods and details for the whole kingdom. There were, he need not say, already existing firmly established differences of practice in the three kingdoms – differences which depended on national character, each system appearing to be suited more or less to its own people, and hence had originated that wide difference of opinion between the three nationalities which they had observed in this Council. Many of those differences seemed to him perfectly irreconcileable; there was enormous difficulty in smoothing angularities to obtain a mere specious surface of uniformity. Nor did he admit that such superficial uniformity was desirable, because he believed if it were carried it would be unreal. Far better that each Branch Council should regulate independently the Medical education of its own division, the registration of its students, the order and even the curriculum of study, at its own discretion, in conformity with its national habits and characteristics, only provided always that the standard of qualification be suitable for all, and the reciprocity of privilege complete. By such an arrangement the Royal Commission might report that the duties and the cost of the General Council would be greatly diminished. A few questions would always remain of material bearing, and these might be referred to short annual meetings of the whole Council; or it was quite possible the Royal Commission might recommend—and Parliament might decide upon their recommendation—that such matters be referred to a Committee or a small body directly responsible to the Government. To such a body would more fitly belong the framing of Medical laws, and the carrying on of what Mr. John Stuart Mill called the "legisfactive" function, as distinguished from the "legislative," which he did not think they performed in the best possible manner; while the approving, amending, and vetoing powers would still belong to the large representative body, or bodies into which the Council might resolve itself, or be transformed. He did not state these simply as his own views; they were views held by many persons of great political experience and esteem—men who had thought upon this question all their lives; and whether right or wrong he submitted that they ought not to be tabooed by this Council. In conclusion, Mr. Rumsey expressed his approval of even the small measure of amendment indicated by the Amendment Bill; and, as he said at the commencement of his remarks, he should be most happy to support what had been done by the Council in that matter. (Hear, hear.)

Mr. Hargrave said he could not support Sir Dominic Corrigan's motion, considering that he was either utterly inattentive to the working of the Medical Act, or ignored its results. Two or three times during this meeting Sir Dominic had alluded to the character of the Naval Surgeons in a most marked manner. He had spoken of their ignorance of Latin, English, anatomy, Surgery, Materia Medica, and so on, and said that it was the dross of the Medical students who now sought for admission into that service; that no candidate well educated and of a good family and gentle blood, and "two or three and twenty years of age," would enter it to be snubbed, because he was "only the Doctor," or submit to the overbearing character of the captains, who were, as a rule, if not tyrannical, at least overbearing; and the Medical Service in the Navy was fast returning to the state of things which existed in the time of "Roderick Random." (Laughter, and "Oh!") He (Mr. Hargrave) was sure that the Government would grant no Royal Commission, as the Council failed in its duty in carrying out the provisions of the Medical Bill given to them, and he referred particularly to clauses 20 and 21, which granted to the Council full powers of appeal to the Privy Council. The Medical Council was deficient in action and independence in not having availed itself of this valuable privilege to control recognised parties. He recollected when he first had a seat on the Council, there was a motion brought forward bearing on the College of Surgeons of England, which had declined to accede to some of the recommendations, to appeal to the Privy Council against the proceedings of the College, which was lost by the casting vote of the then President, Sir Dominic voting with the President. As to the question of the education of Medical students, he maintained, from the great and numerous opportunities afforded him of observing, that there was a marked improvement in the bearing and conduct of the students, and that they were infinitely more attentive both to their lectures and Hospital attendance than they were formerly. (Hear, hear.) But the great obstructive to Medical improvement was Sir Dominic himself. When last year there issued the recommendation of visitation of examinations, he (Mr. Hargrave) opposed it in Council, as he considered it a most irksome duty to attend and report on the examinations of institutions which competed with his College, and he decidedly declined acceding to the recommendation. When the Irish Branch Council met in August, 1865, to consider this question, he joined Sir Dominic Corrigan, and still declined to follow the recommendation. The meeting was adjourned till the next day, that the subject might be further considered. He went home and slept upon it, changed his mind, and agreed to support the recommendation of the Council. Sir Dominic would not attend one of the examinations. He (Mr. Hargrave) visited the examination in Surgery in the University of Dublin last December, and he was much gratified to be able to judge for himself, as he had heard so many conflicting and contradictory opinions as to the manner in which it was conducted, and he must say that he was very much pleased. He objected to their applying for a Royal Commission, as the Medical Bill gave the Council full powers, by appeal to the Privy Council, to remedy any abuse, and thus bring the provisions into harmony. (Hear, hear.)

Sir D. J. Corrigan rose to reply, but it was urged that the mover of an amendment had no right to reply.

The President ruled that if Sir Dominic had any personal explanations to make he could do so.

Dr. Acland said he wished to speak upon the amendment. When a member of the Council made such a proposition, and enforced it with a speech such as that they had heard from Sir Dominic Corrigan, he confessed that, considering the great time constantly given to discussions in that room, it would be most unseemly that they should hurry over the question. The last thing he should desire to put into the possession of Sir Dominic would be the power of going out of this Council and saying that when he seriously and deliberately brought forward a proposition of this kind they had shelved it, declining to entertain it. That was the last weapon he should like to put into Sir Dominic's hand. (Hear, hear.)

Dr. Parkes remarked that they were not hurrying over the question, as they had already been engaged three days upon it. He did not think it necessary to prolong the discussion.

The President intimated that Dr. Acland was quite in order.

Dr. Acland said it had just been mentioned, in comment apparently upon the few anticipatory observations he had made, that the Council had already been three days discussing this question. That was quite true. But there was one thing which he should very much like to put to the Council — and that was, whether a large portion of that discussion had not been caused, as was said by Mr. Hargrave, by Sir Dominic Corrigan himself? (Hear, hear.) And he would put it to the practical sense of the individual members of the Council, whether, if it had not been for the course adopted by Sir Dominic, in full right -he did not doubt the right, but the reason of it—the three days spent upon this Amendment Bill might not have been wholly spared if Sir Dominic Corrigan had had the straightforwardness to inform them beforehand of his intention, after three days' deliberation, to pull them up short, and to bring forward this proposition, which was to be reported all over the kingdom in the different journals. (Hear, hear.) He was extremely sorry to differ from those who thought it better to take no notice of what Sir Dominic had brought forward. He (Dr. Acland) had always had this opinion—and he was sure the Council would forgive him (if they thought there was any necessity for it) for frankly expressing an opinion that had been several times expressed before, that the constitution of that body was one which was extremely difficult to work, and, as an executive, nearly impossible. (Hear, hear.) But they did not make the constitution. The question was, whether each, according to his capacities, did the utmost he could to make it work? They all knew—and the mover of the amendment knew as well as any of them—whether they had, according to their abilities, from the time when they first were honoured with seats at that board—done the best they could to advance the real interests committed to the trust of the Council? (Hear, hear.) He had not the slightest doubt, from the sincere regard he entertained for the members of the Council individually, but that they could all answer that question on the whole honestly. With regard to the general statement bandied abroad as to the determination of each of them to defend his own particular interests, he simply denied it—(hear, hear)—that is to say, he denied it so far as his own knowledge went. He had lately said in private, and would repeat in public, that, with respect to the particular body which he had the honour of what was called "representing" (though he did not agree to the term so often used), if there was one thing more than another which would cause him to forfeit the confidence of his friends in Oxford it would be if they believed he could advocate any interests connected with that University that would interfere with the public good. (Hear, hear.) He knew that to be their feeling; and he had a right, within all reasonable limits, to attribute the same to other institutions; and he thought it insulting to that Council—and, what was more, insulting to their character as Englishmen—that they should have it reported all over the country that the particular ends of particular bodies was the moving principle of this Council; calling it, as Sir Dominic Corrigan often did, "a battle of shops." He would repeat, they did not make their constitution, and all that they could do was to work it as well as they were able. (Hear.) Now, he had no objection whatever to a Royal Commission. He should be very happy to see a Royal Commission appointed. He had not the slightest objection to answer any question to that or any other body concerning this Council, or anything they had had to do. But whether it was a proper and necessary thing for the Council to ask for a Royal Commission, *on the grounds alleged by Sir Dominic*, was another question altogether. He thought it was not proper now, nor was it necessary; but he repeated that he had not the slightest objection to it, and if it should help them out of their difficulties, and enable them to better discharge the duty imposed upon them, he for one should heartily welcome it. (Hear, hear.) The fact was this, that there was nothing more unreasonable or more unjust than to use *ex post facto* knowledge as though it had existed beforehand. It was a thing which no acute man, who was also a fair man, ever would do. (Hear, hear.) This body was originally constituted as it was by a kind of necessity under the then existing circumstances. Starting from the point from which they did start, all they could do was to work it for the best. It was originally necessary, in order to construct a Council at all, that the interests of the Corporations and Universities should be represented, and this involved many difficulties. But there were a great many difficult and troublesome things in England, arising from the relations and differences that existed between local institutions and what was called central administration. What they had to do was not to put difficulties in each other's way, but each to help the other to work and to do the best he could for the country. He would state two things which he thought were fatal to the easy working of this body. On finding himself on a former occasion in a minority upon them, there were only one or two circumstances which induced him to remain in the Council, and those were, first of all, personal regard for the colleagues with whom he had the honour and privilege of sitting, and the great pleasure he had in meeting them from year to year, deriving many advantages from that intercourse. Feeling thus, he could not do otherwise than help to work the thing which he nevertheless considered almost unworkable. That was one consideration. The other was that there was not any practical good in hastily withdrawing from a body which still had to go on equally hampered, inasmuch as some one else would be placed in his position. He should, then, have withdrawn from the Medical Council—first, when the majority introduced reporters after several years of opposition; and, secondly, when the same majority ruled that it was inconsistent with the working of the Council that they should appoint small standing committees for investigating and reporting on particular objects—an arrangement to which he had had occasion often to allude before. In his judgment, two things were absolutely necessary for the carrying on with success and credit the business of this body. One was, that they should deliberate amongst themselves, unfettered by the loss of entire freedom of debate. In a deliberative and executive body, such as they were, they had made it all but unworkable by making their table a public one. He would ask any person who had ever sat on a Commission or a Council of the Royal Society, or any other councils he could mention, charged with joint deliberative and executive functions, whether managing their business in public did not practically amount to being unable to manage it at all. The second point was with reference to the Committees. They had been charged with the duty of settling the most delicate and intricate details of education, of examining, and of visiting examinations. They endeavoured to settle those details around that Board in the course of four or five days, amidst the pressure of much minor business, when every man of judgment and experience must feel that it would be far easier, at all events, to do it by a Committee of three or four deliberating and corresponding during the long interval between the sessions and bringing up reports to the General Council. When, two years ago, they made it a settled principle that they would not have these standing committees to make elaborate reports upon certain points, he thought there was a second chance gone of their being able to carry on their work well. There was one other thing of which he would like to remind Sir Dominic Corrigan. That was with regard to the statement he had before been pleased to make, that the Council had "done nothing." On the other hand, he told them that they had no powers; and on the other, that they did not exercise them. The fact was, they had, considering the circumstances, done a great deal. He would use the strongest words that ordinary society allowed, and when Sir Dominic Corrigan said they had done nothing, he would say that everybody knew that was not the case. Why, what had the Council done since its appointment? The National Pharmacopœia had been constructed. The registration of the Profession had been effected, and now was become a piece of office routine. Much had been done for education. Although all had not been done which might have been done, it was throwing dust in the eyes of the public, who had not full knowledge of the facts, to announce that nothing had been accomplished. (Hear, hear.) Look at it in a practical point of view—and let Sir Dominic attend to this—did he (Sir Dominic) mean to say that the habits of the Practitioners in the country, the habits of students, were to be altered in a moment, without regard to previous circumstances, involved in vested interests, in existing corporations, teachers, and examiners? It was impossible; it could not be. In the very nature of things it must be that, for a time, men would come up for examination ill prepared. He repeated that Sir Dominic had advanced what members of the Council knew not to be the case. He might say, perhaps, it was cruel, he would say it was not just, to throw broadcast over the country such allegations. He defied Sir D. J. Corrigan, or any other person, fairly to charge members of the Council with being more indifferent to this matter than he was himself. (Hear, hear.) Was it true there was no improvement in education? Was it true that no attempts were being made to improve the qualifications of the Profession in the best sense of the word? Was it true there was a single corporation or University in Great Britain or Ireland that had not been endeavouring—to use Mr. Syme's words used two or three years ago—to mect the "moral suasion" of this Council? (Hear, hear.) He simply believed it was not the fact. He should like to be told which body had set itself determinately to protect abuses. If such a body were represented in this Council, let Sir Dominic Corrigan say which it was, and let its representative explain to them if it be so or not. (Hear.) It was unjust to state things which did not truly represent the case as it really was. He repeated, with regard to education, Professional and non-Professional, that it was his firm belief, —and he could be contradicted if proved to be wrong,—that there had been a sincere endeavour from the passing of the Medical Act on the part of the bodies to raise the education of the students, and to fit the students for the due discharge of their duty in life, according to what was practically possible in their respective stations. When he said that, he did not at all doubt there were still many imperfections. At Oxford, for instance, there had been difficulty, as all knew, in getting physical science incorporated in the studies of the place; but was anybody who should come there and find things not yet perfected there going to say that there was the power to make them so at once? Why, if any one could show him anything that was wrong, he would undertake to show him more than he could find out for himself. He should like very much that Sir D. J. Corrigan press this matter. He had not the slightest objection to it. If it turned out that it was proper and necessary to have a Commission, by all means let them have it. But he should vote against asking for it, as a member of this body and on the grounds alluded to, because he did not think it was necessary or proper that this body should seek it. If it came, it was perfectly welcome; and if it would help to remedy their difficulties, by all means let them thankfully accept it. (Hear, hear.) He thought if they did not have this Commission they were bound to appoint at once a Committee such as he had moved for last year, which should show in what way they could have the business of the Council thoroughly sifted and brought before them. The fact was, he thought the want of Standing Committees had been a great practical administrative blot in their proceedings. It had been at first almost a necessary part of their constitution, under the existing circumstances of the three kingdoms, that they should meet at first with something of jealousy; and there had been suspicions with regard to their motives and proceedings, arising from the number of conflicting interests represented. But would Sir Dominic say that it had not been an advantage to all of them—himself included—to come there and deliberate on all the questions that had come before them? He appealed, therefore, to any old member of the Council whether this body had not worked as harmoniously together for the public good as any body constituted in so heterogenous a manner could have done in the same time? (Hear, hear.) Of course, they would be much to blame if they did not take steps to make the wheels run more smoothly. If they would not give powers to a standing Executive Committee to complete the business in the intervals between the sessions—business of the kind which could only be prepared in leisure—then he must say he thought they would be greatly to blame. He appealed even to those who had been most warmly opposed to himself on this subject—he appealed to their candour—whether if two years ago they had appointed a standing Committee to draw up a careful report within the succeeding twelve months on the whole question of education, of the mode of conducting examinations, and visiting examinations in three separate documents, they would not have been much more forward than they were, and whether they would not have produced a valuable Report containing the views of the Council carefully set forth which would have been of the utmost service to them? (Hear, hear.) He admired greatly the ability and energy of Sir D. J. Corrigan, and he only wished he had a small portion of them, and then he should be able to grapple with him better, and would do it. (Laughter.) If Sir Dominic failed in getting a Royal Commission, what he sincerely hoped he would do would be to join them with his great abilities in seeing how they could exercise the powers they really possessed in a calm and judicial manner—not talking about the coercion of the various interests committed to them, but with a feeling of trust and confidence in his colleagues, and in the good intentions of the several bodies they were called upon to represent, seriously and truly, and, to use the Scotch expression, "loyally" endeavour under the great difficulties that existed among them to work the machinery they possessed. (Cheers.)

Dr. Stokes said he could not give a silent vote on this occasion. It was only right he should state to the Council what in his humble experience he believed to be true; and he could declare most positively that there was nothing more remarkable than the great advance which had taken place in the mental training of Medical students from the very first year in which the question of education was agitated in this Council. (Hear, hear.) He was verified in this statement by the experience of a large number of his friends in Dublin who were occupied in the teaching of Medicine. Whether they looked to the general attainments of students in Arts, or to the great question of Professional studies, it appeared to the persons engaged, as he had been, that they had descended into a new stratum of men altogether. How had all this been brought about? Not by coercive regulations. (Hear, hear.) It would not do for it to go forth to the public that they were to take the standard of the rejected candidates of the Navy Board as an example of the class of rejected Medical students. The improvement which had taken place was the result of moral suasion, which was going on more and more. His report upon the examination of the Royal College of Surgeons had not been presented to the Council, but he could safely aver that the class examined there could no more have answered as they did seven years ago than they could fly. Out of fifteen examined four were rejected; and there were several young men whose answering in Greek and Latin was really admirable. (Hear, hear.)

After a few words from Mr. Syme,

Sir D. J. Corrigan referred to some of the recent examinations to prove that the education of the students had not improved of late, and said he would next allude to the words applied to him by Dr. Acland, whom he never saw in a passion before. (Cries of "Oh, oh!")

Dr. Alexander Wood: I do not think Sir Dominic is quite right in saying that Dr. Acland was in a passion. I only wish he was in a passion oftener if that is a passion. (Hear, hear.)

Sir D. J. Corrigan remarked that Dr. Acland said he was unjust, and had accused him of a want of straightforwardness. That was a personal attack, and he wished to rebut that attack. The want of straightforwardness arose from the fact, as Dr. Acland had put it, that he did not tell the Council weeks ago what he intended to do. He would appeal to the Council whether he had not a right to bring forward a proposition when he thought it was the right time to do it, and when he hoped it would be carried. He would conclude with a few lines of a German fable, which he thought would be appropriate on the present occasion:—

> "'I protest, since they will give me no praise,
> I'll trumpet myself to the end of my days;'
> So saying, away to the forest he flew,
> And ever since then has been crying 'Cuckoo!'"

(Laughter.)

Dr. Andrew Wood, in reply, remarked that if, as Sir

Dominic Corrigan had said, Dr. Acland was in a passion when he spoke on this occasion—if he was mad, there was "method in his madness." Dr. Acland had said that he regretted reporters were introduced into the Council, but he (Dr. Wood) rejoiced that reporters were present that day to take down and give currency to Dr. Acland's speech, which was as manly, as eloquent, and as true a speech as any he had ever heard at that board. It was a speech that did great honour to Dr. Acland, who gave emphatic utterance to what he (Dr. Wood) was certain was the feeling of the great mass of the gentlemen who sat around the table in repelling the charges which had been made so recklessly against the Council as individuals, and against the bodies they represented. (Sir D. Corrigan here made a remark across the table which did not reach our reporter's ear.) Sir Dominic Corrigan might not care much for what he (Dr. Wood) said, but he begged to remind him that there sat with him as colleagues around that table those who had feelings in their breasts which could not but be acutely touched by accusations such as had been made that day. He could not refrain from saying that; and more than that, he could not help telling Sir Dominic Corrigan that he was surprised that a man of his great eminence as a Physician should have taken the course he had done in this Council. Sir Dominic was a great Physician: there was no man who could diagnose a case of disease better than he could; but he would ask him, when he had made out the disease, when he had found by symptoms where the disease lay and what was its nature, would he sit down by the bedside and say to the patient, "No, I won't try to apply the remedy; go on and die?" Yet that was exactly what he said in this Council. (Hear, hear.) Again and again he was coming before them, and telling them, "There is your disease, there is your rottenness," and then he went on and told them in plain words, "I will not attempt to put you right; I will sit down here and mock at your helplessness, and come to abuse you, and hold you up to obloquy year after year." When in this Council some years ago a motion was made to represent the College of Surgeons of England to the Privy Council because they had refused to do what the recommendations of the Council set forth, on which side of the question was Sir Dominic Corrigan's name to be found on that occasion? It was on the side of not exercising the powers which this Council undoubtedly had. (Hear, hear.) And then again, as Mr. Hargrave had said, when last year it appeared by the returns laid upon the table of this Council that there were being sent forth into the country by various licensing bodies as qualified Practitioners men who were anything but a honour to those bodies who licensed them and to the Profession, not to say dangerous to the public, and when this Council set to work to endeavour, by all the power they had, and specially by a visitation of the examinations, to rectify that error, who was the man that said, "Do what you like, I will try to rectify nothing; I will refuse to act as a visitor?" It was Sir Dominic Corrigan. (Hear, hear.) He (Dr. Wood) could not understand on what principle Sir Dominic refused himself to do his duty as a member of this Council, and then came forward to upbraid unjustly his colleagues for failure in their duty. Every other man sitting round that board, he (Dr. Wood) felt assured, was impelled to perform his duty, a most important duty, by a conscientious conviction that it was right that he should do it, and do his utmost, to improve the Profession to which he belonged. (Hear, hear.) These were the feelings with which he had heard Sir Dominic Corrigan make this sudden and unwarrantable onslaught upon them. Those remarks of his would doubtless go forth to the public, and might, if uncontradicted, prove damaging to the character of the Council and to the working of the Medical Act; but he was thankful that Dr. Acland's able reply would also go forth at the same time. He felt perfectly convinced—let who might gainsay it—that they were going on, it might be slowly, but still steadily, and in an increasing ratio in the benefits they were conferring upon the Profession. He believed he had been as often in a minority in this Council as any other member of it; but had he on that account desisted from doing what he could to press the Council on to what he considered their duty? No; and he never would play such a pusilanimous part. (Cheers.) His duty, he felt—and that was a duty incumbent on all the members of the Council—was to come to its meetings and use what powers they possessed for the general good. Last year he did what he could to induce the Council to apply to Parliament for greater powers in regard to their educational clauses. He thought it right and proper to do this; and though he was out-voted more than once he did not take offence on that account; he did not sit down in helpless despair; he did not, though he thought their decision a wrong one, lavish abuse on the majority who held that it was inexpedient to apply for new powers; but he resolved, as far as he could—and he trusted the whole Council would do so too—to use the powers they had for the purpose of inducing bodies who might otherwise be inclined to lag behind to go forward in the improvement of their curriculum of study and examinations. He was satisfied, from what he knew of the tone of this Council at the present moment, that, so far from its members not being willing and anxious to do their duty and to exercise their powers when the occasion arose, there was a firm determination to do so; so that should any of the licensing bodies refuse to comply with essential parts of their recommendations, he had no doubt but that this Council would represent them to the Privy Council; and if this representation were carried in the Council by a sufficiently large majority, he had as little doubt the Privy Council would support them in doing their duty. He could have said a great deal more, had time allowed, in answer to the attack of Sir D. J. Corrigan, and it required a degree of virtue in him to resist the temptation to prolong his remarks; but having been challenged as they had been that day by Sir D. J. Corrigan, he felt it right to take up the gauntlet in defence of the Council and to say—

> "Lay on, Macduff;
> And damn'd be he that first cries 'Hold; enough!'"

(Cheers.)

The amendment was then put, and there were for it, 3; against it, 19. It was therefore declared lost.

Sir D. J. **Corrigan** required that the names and numbers of the majority and minority, and of those who declined to vote, be taken down.

This having been done by the Registrar, the original motion was put to the vote and carried.

It being now six o'clock, a resolution was agreed to that the standing order be suspended, and that the Council sit after this hour.

The President, having an engagement, was obliged to leave the chair, which was afterwards occupied by Dr. Acland.

It was moved by Dr. **Andrew Wood**, and seconded by Dr. **Parkes**, "That Mr. Ouvry be requested to read the statement of reasons for suggested alterations in the Home Office draft Bill, which is to be sent with the Council's amended draft Bill to the Home Office; as also the letter to be addressed by the President to Secretary Sir George Grey."

This resolution having been carried, Mr. Ouvry read the following:—

'*Reasons of the General Medical Council for suggested Alterations in the Draft Bill to amend the Acts Relating to Practitioners in Medicine and Surgery.*

"*Preamble.*—In the draft Bill prepared by the Home Office the preamble suggested by the Council has been omitted. The Council would submit, that it is desirable to state the grounds on which fresh legislation is thought necessary, and, therefore, that the preamble, either in the form suggested by the Council or in any more apt words, should be adopted.

"*Clause X.*—The Clause, as framed by the Home Office, is considered open to objection, inasmuch as it would give to the Registrar power to erase from the Register the names of gentlemen who have ceased to practise, although such gentlemen may wish to retain their names on the Register. This is not desired; the main object of the clause is to enable the Registrar to remove the names of persons who have really ceased to practise and whose addresses are not known. This will be affected by the proposed mode of sending letters, and the Council therefore have suggested a slight alteration in the clause in accordance with this view.

"*Clauses XI. and XII.*—The Council have ventured to suggest a modification of these clauses. The main feature of the alteration is the doing away with the proposed Schedule (B) to the Act. The Council has done its utmost to meet the wishes of the Government in framing such schedule, but they have found the difficulty of the task to be so great, that they have ventured to propose that the list of bodies, whose diplomas shall confer a qualification, shall be inserted in a list to be annually prepared by the General Medical Council and submitted to the Privy Council. By this means the General Medical Council will have the opportunity, from time to time, of making inquiries as to the status of the several foreign and colonial bodies, the nature and extent of their studies, and the quality of their examination, so as to judge whether they are worthy of recognition in the proposed list.

"It has appeared to the Council that the third provision of Clause XI., which authorises the Registrar to refuse to register any person who shall have been guilty of an offence which would prohibit him from practising in his own country, is open to objection on several grounds: 1st. It would cast a judicial responsibility on the Registrars, which, by the 29th Section of the 'Medical Act, 1858,' is given only to the General Council. 2nd. The terms of the clauses might be considered to cover offences which, although they might disqualify the Practitioner from practising in his own country, would not be considered as any objection to his practising in this country—offences, for instance, of a political nature or otherwise, not involving moral guilt. On these grounds the Council considers it safer to leave foreign Practitioners in the same position as the Practitioners of the United Kingdom, by making them amenable to the sections 29 and 30, of the 'Medical Act, 1858.'

"*Clauses XIII.*—The Council proposes to amend this section, so as to bring clauses 29 and 39 of the 'Medical Act, 1858,' within its operation.

"The Council is aware that the proposed addition to this clause does not fully meet a difficulty which the draft Bill prepared by the Home Office was intended to meet, inasmuch as there is no power to remove from the Register the name of any Colonial or Foreign Practitioner who may, in his own country, have been convicted of any crime or offence.

"The Council has failed to perceive any means in which this difficulty can be effectually met, owing partly to the difficulty of obtaining evidence of any such conviction, and the further difficulty of defining the class of offences which ought to exclude from the Register.

"The Council would be very glad if the advisers of the Government could suggest a clause adapted to the case.

"*Clause XIV.*—The Council consider it would be expedient not to limit this clause to the London University, but to extend it to any University in the United Kingdom, which now is, or hereafter shall be, legally entitled to confer the degree of Bachelor of Surgery.

"*Clause XVI.*—The Council proposes to amend this clause by striking out the reference to the proposed Schedule (B) to the Act, and by striking out the words 'of Medicine' after the word 'Doctor.' It is to be observed that the taking of the title of 'Doctor of Medicine' is prohibited by the earlier part of the clause, inasmuch as it is one of the designations enumerated in Schedule (A) to the 'Medical Act, 1868.' Its subsequent introduction therefore is wholly unnecessary, whereas the introduction of the title 'Doctor' simply is all important to the efficiency of the operation of the clause. The title 'Doctor' is the one most commonly assumed by unqualified persons practising Medicine; and if such practice be allowed to continue, it is obvious that any unqualified person, by assuming that designation, might evade the penalty of the clause. If it be said, by using the word 'Doctor' only in the clause, all Doctors, whether of philosophy, law, etc., are included, the answer is that the clause applies only to those who, not being registered, are practising Medicine under the title of Doctor. The Council beg to submit a print of the Bill amended in accordance with the above suggestions.

"SIR,—The Draft Bill framed by the Home Office for the Amendment of the Medical Acts has been very carefully considered by the General Medical Council, and, at the request of the Council, I have the honour to transmit herewith a print of the Bill framed by the Home Office, with such amendments therein as appear to the Council advisable.

"I have also the honour to transmit a statement of the reasons which have induced the Council to suggest the amendments; and I am to ask that you will, at your earliest convenience, be pleased to receive a deputation from the Council to consider the amendments in question.

"I have the honour to be, Sir,
"Your most obedient, humble Servant.

"The Right Hon. Sir GEORGE GREY, Bart.,
&c., &c., &c.
"Home Office."

Dr. ANDREW WOOD proposed, and Dr. EMBLETON seconded, "That the statement of reasons by Mr. Ouvry, and letter to be addressed by the President to the Home Secretary, be entered on the Minutes," which was agreed to.

Dr. EMBLETON brought up a Report of the Committee on the working of the system of registration of Medical students, adopted by the General Medical Council last year.

On the motion of Dr. EMBLETON, seconded by Dr. A. SMITH, it was resolved, "That a Committee be appointed to report on the returns from the licensing bodies in compliance with recommendation No. 6, Sect. V., of the recommendations of the General Medical Council of 1865, and the register of students for the past year." The Committee consisted of Dr. Embleton (Chairman), Mr. Cooper, Dr. Thomson, Dr. Leet, Dr. Apjohn, and Dr. Stokes.

It was then moved by Dr. EMBLETON, seconded by Dr. THOMSON, and agreed to, "That a Committee be appointed to revise the standing orders." The Committee consisted of Dr. Embleton (Chairman), Dr. Thomson, and Mr. Hargrave.

Dr. EMBLETON proposed and Dr. THOMSON seconded, "That the recommendations of the General Medical Council on the subjects of preliminary examination, of registration of Medical students, and of Professional education and examination, be referred to a Committee for re-arrangement." Dr. Embleton (Chairman), Dr. A. Smith, and Dr. Thomson. This motion having been carried, the Council adjourned at half-past six o'clock.

### EIGHTH DAY.—FRIDAY, MAY 25.

The Council met at two o'clock, and after confirming the minutes of yesterday's proceedings, resumed the adjourned consideration of the Report of the Committee on the subjects of general education.

Dr. STOKES moved, and Dr. STORRAR seconded, "That natural philosophy, including mechanics, hydrostatics, and pneumatics, be adopted as one of the optional subjects."

Dr. ACLAND proposed the following amendment:—"That the optional subjects be divided into two classes, that one subject in each class be taken up by each candidate, and that where natural philosophy is not taken up in the Arts' examination it shall be required at a later period of study; that the following be the classes:—Greek and natural philosophy; German and French." He doubted whether the motion as it stood was worded so as to convey in the best manner to teachers and examiners the information which the Council wished to convey. He thought it required some further information, and it did appear to him to be of great consequence that in issuing regulations to teachers and examiners it should be an understood thing that if Physics were taken as one of the optional subjects the candidates should be required to be accurate in it up to a certain point. He suggested that the chairmen of committees should issue some more detailed instructions as to what the Council meant, and what it required from students.

Mr. SYME said it was very important that the Council should state accurately what they meant by their instructions. He strongly urged the necessity of requiring an examination in Physics during some period of a candidate's study.

Dr. STORRAR said that no more details had been given because the Committee were anxious to leave the amount of the examination in natural philosophy to the examining bodies, and they exercised some care to draw up the list with as great an avoidance of specification and detail as possible. He did not differ from Mr. Syme in his opinion that provision should somewhere be made for securing that every Medical student should have a knowledge of natural philosophy, but the question at present before the Council was whether natural philosophy should form part of the preliminary examination, or whether it should form part of the Medical or the pre-Medical. At the present moment they were dealing with the education which could be got at school, and he apprehended the difficulty was that lads who came fresh from school at the age of 17 to pass a preliminary examination, would not have any amount of knowledge of natural history that was worth having. By putting Greek and natural philosophy in the relation to each other which Dr. Acland proposed, they would be inviting a certain number of men to take natural philosophy instead of Greek, which he thought would be, under the circumstances, very unadvisable. It appeared to him, as far as he could arrive at a conclusion, that the way out of it was for the several examining bodies who attached importance to these subjects—and he hoped they all did—to provide that natural philosophy should be compulsory either at one time or another, and that no man should pass a Medical examination if he had not passed a natural philosophy examination. He thought the matter might fairly stand as it was with regard to preliminary examinations, leaving it to the Medical bodies to require natural philosophy at some time or other.

Dr. STOKES trusted that the matter would rest where it now was. The object was to determine what students should learn at school.

Sir D. J. CORRIGAN said he was very much struck with Dr. Storrar's observation with reference to boys 16 and 17 years of age not being able to understand much of natural philosophy. He suggested that natural philosophy should be omitted altogether from the preliminary examination. Even in some of the best schools boys could not learn it. If they left it optional, a boy might come who was up in German, French, or Latin, but who knew nothing of natural philosophy. If he merely produced a certificate that he had passed an examination in natural philosophy, it would be at a time when his mind would be incapable of understanding it, even if he had the opportunity of learning it, and he would then probably pay no more attention to it. He suggested, therefore, to Dr. Stokes, that this subject should be withdrawn altogether, and that when the Committee was appointed to consider the Professional examination they should determine that natural philosophy should be a compulsory subject in the first Medical examination, the same examination in which chemistry was required.

Dr. PAGET thought it would look very bad, seeing the importance which the Council attached to education, if the subject now under discussion appeared at all to be optional. He was very well aware that there was a generally expressed opinion that it should be required of Medical students at some time during their course of study. He quite agreed with Sir Dominic Corrigan that to examine boys just fresh from school in these subjects was really to agree to accept a very meagre knowledge of them indeed, and not sufficient for persons to have who were about to pursue the study of Medicine. He thought, therefore, that it would be better to leave these subjects out of the optional list altogether, and to require them at a subsequent period of study. Had he known that the discussion was coming on he should have been prepared with a motion to that effect.

Mr. SYME moved that natural philosophy should not appear as an optional subject.

Dr. CHRISTISON reminded the Council that the constant cry throughout the Profession was that too many subjects were required already, and that they were now thinking of adding one of the most important subjects which they could require. He did not entirely agree with those gentlemen who would object to natural philosophy being studied. He thought it would be better to leave it optional, so that students might take it up if they liked, but he very seriously objected to their removing from their list of subjects for preliminary examination all notice whatever of natural philosophy—a subject which was so important in Professional examination. It was a most practical subject, and it was right that those who had an opportunity of studying it should do so. Of course, a knowledge of natural philosophy could not be obtained without an able lecturer and a complete apparatus, neither of which could be expected in all the small schools of the country. At the same time, he called the statement in question that the students who came forward were not able to acquire a knowledge of natural philosophy, for in the University of Edinburgh no difficulty of this sort was found to exist; he had known many students who had a most admirable knowledge of physics at the age of 16 or 17. He thought that Dr. Andrew Wood would confirm him in the statement that natural philosophy was required in the College of Surgeons of Edinburgh.

Dr. ANDREW WOOD said that, with regard to natural philosophy, they never required it till after the students were 21. At the same time, he was bound to say that the examinations had been very successful. Out of twenty-seven candidates twenty-three passed, and this was not because the examination-papers were easy, for he had seen them, and could testify to the contrary.

Dr. CHRISTISON said that although the time supposed to be taken by students was four years, in reality they generally took five years, and therefore they would have plenty of time to study the subject of Physics.

Dr. ANDREW WOOD would not like to see this subject disappear from the list of subjects, because sometimes students showed an aptitude for it, and studied it. If, however, they made too many subjects compulsory they would exclude a large number of students from the Profession who would be an honour to it. He would suggest that the matter should be left as it was, and that they should see how it would work.

Mr. CÆSAR HAWKINS agreed in the propriety of leaving natural philosophy as an optional subject. They might be told that they did not think it sufficiently important to make it compulsory, but the reply to that was that they wanted to show their leaning, and to give warning that though they might ask it now as an optional subject they might afterwards make it compulsory. He thought that it ought to be made compulsory at some time or the other if it had not been included in the preliminary examination.

Mr. SYME withdrew his amendment.

Dr. ACLAND pressed his amendment, and stated that he believed this subject was being taught in the schools throughout the country, and that in five or ten years' time it would be still more extensively taught.

Dr. APJOHN said that in the University he represented natural philosophy was looked upon as a most important subject.

Mr. COOPER expressed a hope that these subjects would neither of them be made compulsory.

Dr. STORRAR said that Dr. Acland's proposition would make two of these subjects compulsory instead of one, as was originally intended. He thought, too, that it would have a tendency to exclude Greek, which, notwithstanding the importance he attached to natural philosophy, he held to be of considerable importance to a Medical student. He was as anxious as anybody that Physics should be studied, and hoped it would soon be made compulsory; but he believed that Dr. Acland's amendment would act injuriously, and therefore he hoped that he would not press it.

Dr. ACLAND'S amendment was not seconded, and the original motion was carried.

Dr. STOKES proposed, and Dr. STORRAR seconded, the following motion—"That the following paragraphs of the Report be adopted, viz.:—

"The Committee recommend that certificates of proficiency be received from all bodies legally authorised to examine in general education in Great Britain and Ireland, and from the several licensing bodies enumerated in Schedule (A) of the Medical Act in Great Britain and Ireland, which bear evidence that the candidates have been examined and approved in the above subjects.

"In the case of certificates received from similar educational and licensing bodies in other parts of the empire and foreign countries, satisfactory evidence must be given to the Medical Council (or Branch Councils) that such certificates are equivalent to those recognised in the United Kingdom."

Mr. CÆSAR HAWKINS said they were now doing away with the present list of the Medical Council and leaving the matter in the hands of the licensing bodies, and it would, therefore, be necessary for the Council to have some means of supervising the diplomas granted by those bodies. He also gave some explanation of a statement made by Sir D. J. Corrigan as to a diploma of the Belfast College being refused by the Royal College of Surgeons.

After a few words from Dr. STORRAR, the following amendment was proposed by Dr. EMBLETON, and seconded by Mr. CÆSAR HAWKINS—"That the foregoing paragraph be adopted, with the following addition:—

"That it be delegated to the Executive Committee to prepare annually and lay before the Council for recognition a list of examining bodies whose examinations shall fulfil the conditions of the Medical Council as regards preliminary education."

The amendment was carried, and, having been put as a substantive motion, was agreed to.

On the motion of Dr. EMBLETON, seconded by Mr. HARGRAVE, the following resolution was carried—"That the regulations of the General Medical Council as to preliminary education adopted during the present Session do not come into operation till October, 1868, and that in the meantime the previous regulations remain in force."

Dr. STOKES proposed, and Dr. STORRAR seconded—"That the concluding paragraph of the Report be adopted, viz.:—

"The Education Committee having considered the letter and resolution of the Irish Medical Association forwarded by Dr. Mackesy, and referred to them, recommend that the resolution be entered on the minutes. The Committee further recommend the forwarding this resolution of the Council to Dr. Mackesy."

Dr. ANDREW WOOD proposed, and Dr. PARKES seconded—"The previous question," as an amendment, which was rejected.

The following amendment was then moved by Dr. EMBLETON, seconded by Dr. ALEXANDER WOOD, and carried—"That the concluding paragraph of the Report be not adopted; but that the Registrar be requested to acknowledge the receipt of Dr. Mackesy's letter, and the resolution of the Irish Medical Association, and to inform him that the subject of them has received the full consideration of the Council."

The amendment was then carried as a substantive motion, and on the motion of Dr. STOKES, seconded by Dr. STORRAR, the Report of the Committee, as amended, was agreed to.

The REGISTRAR then read the following report of the Pharmacopœia Committee:—

"The Pharmacopœia Committee have to report that since the date of their last Report Messrs. Redwood and Warrington have continued to be engaged in the duty assigned to them; and they have so far completed their work, that the whole of the matter, with the exception of the Appendix, is now in type. The Committee have reason to hope that the volume will be ready for circulation, in proof, amongst the members of Council, in three months from the present time. Under these circumstances, the Committee beg leave to direct the attention of the Council to the resolution adopted at the meeting of last year (Minutes, vol. iii., p. 285), as follows:—

"'That it is desirable to have a proof copy of the new Pharmacopœia in the hands of the members of the General Medical Council at least one month before the meeting of the General Medical Council, at which the opinion of the Medical Council is to be given relative to its being published, in order to afford to each member of Council the opportunity of making such suggestions to the Committee as may appear desirable.'

"As the Committee anticipate that the work will be ready some considerable time before the next ordinary general meeting of the Council, the Committee would wish to receive such further directions as the Council may feel it necessary to give them on this subject. The Committee, before concluding their Report, desire, in reference to an impression which seems to prevail, that some unnecessary delay has taken place in the production of the Pharmacopœia, to assure the Council that no time has been spent in the work which was not necessary.

"The Committee beg to inform the Council that they have not hitherto had occasion to draw upon the fund placed at their disposal by order of the Council.—(Minutes, vol. iii., p. 285.)

"May 21st, 1866." "R. CHRISTISON, Chairman.

Dr. CHRISTISON moved, and Dr. QUAIN seconded—"That this Report be adopted."

Dr. A. SMITH asked one or two questions as to the progress of the Pharmacopœia and the sums which had been expended on it, and was answered by Dr. CHRISTISON.

Dr. APJOHN said that the Report of the Pharmacopœia Committee being now before the Council, a sense of duty compelled him to bring an important subject connected with this report under the consideration of the members. The fact of his being a member of the Committee made the task he was about to enter upon rather unpleasant; but under the circumstances he felt that it was one from the discharge of which he could not shrink. On May 2, 1864, it was resolved, on the motion of Dr. Quain, seconded by Mr. Syme, that the

Pharmacopœia Committee should be appointed, and that it should consist of the following members:—Dr. Christison (chairman), Dr. Sharpey, Dr. Apjohn, and Dr. Quain. Some meetings of this Committee were held at Dr. Quain's residence in Harley-street, during the week of the meeting of the Council, and several preliminary topics were considered. The most important of these was the question of the manner in which the chemical composition of definite therapeutic compounds should be expressed in the Pharmacopœia—whether it should be given in parts per cent., or represented by a chemical formula; and, after much discussion, it was finally resolved that inquiries should be instituted as to whether, in the new edition of the Parisian Codex preparing for the press, chemical formulæ were to be used, and that the practice in relation to the British Pharmacopœia should be governed by the result—that was to say, if they should find that the Codex included formulæ, then they should be introduced into the British Pharmacopœia, and *vice versâ*, if not found in the Codex they should not be introduced into the British Pharmacopœia. The task, too, of making the necessary inquiry was assigned to Professor Redwood, and after communicating with Professor Guibourt, of Paris, he reported as follows:—"I have received a letter from Professor Guibourt, of Paris, from which I learn that in the new French Codex, now in course of preparation, the composition of bodies of definite chemical composition will be represented by symbols and proportional numbers, the old atomic numbers being used. This was the plan agreed upon at the last meeting, and it will at once reconcile that decision with our previous arrangement that we should follow the example of the Codex, while at the same time it will meet the views of Dr. Apjohn, and I hope those also of Dr. Christison." This extract was from a letter dated 11th January, 1866, addressed by Professor Redwood to Dr. Quain, and was forwarded to him two days afterwards with a note from Dr. Quain, in which he said, "I send you Professor Redwood's letter to me, which I hope you will consider satisfactory." This was no doubt very satisfactory to him (Dr. Apjohn), who attached great importance to symbolic notation and atomic weights, and he was simple enough to consider the question settled. Such, however, was not the case. At a meeting of the Pharmacopœia Committee, held at Dr. Quain's on the previous Monday (May 21), the resolution which had been agreed upon after much inquiry and deliberation, was rescinded, and it was decided to abandon symbols and equivalents altogether, and return to the old percentage method of expressing the composition of compounds. The Council would no doubt be anxious to become acquainted with the cause of so sudden a change of opinion on the part of the Committee. To enlighten the Council on this point it would be necessary for him to read the document he held in his hand, which purported to be a letter or memorial addressed to the President of the General Medical Council by the President and Council of the Chemical Society. It was as follows:—

"*To the President of the General Council of Medical Education and Registration.*

"Burlington House, 19th March, 1866.

"SIR,—The President and Council of the Chemical Society venture to call the attention of the Medical Council to the system of chemical notation adopted in the British Pharmacopœia; and as they are informed that a new edition of that Pharmacopœia is in course of preparation, they entertain a hope that it may not be an inopportune moment to urge upon the Medical Council the desirableness of considering whether, in the forthcoming edition of the work, the use of chemical symbols could not be advantageously dispensed with altogether. In the few cases which may seem specially to call for the use of such formulæ, a per-centage representation of the composition of the body would, it appears, supply all the necessary data.

"The grounds on which the President and Council of the Chemical Society have been induced to suggest this course are these:

"The system of notation at present adopted in the British Pharmacopœia is constructed in conformity with views which are rapidly disappearing from chemical teaching in this country.

"The Pharmacopœia is necessarily the text-book on which the examinations of Students of Medicine and Pharmacy in Pharmaceutical Chemistry are based. It appears, therefore, extremely desirable that no work shall be put forth on official authority, such as that of the Medical Council, which shall be at variance with the views propounded by many of the most active experimental leaders and principal teachers of chemical science; or which shall oblige the teacher to adopt a double numerical system in his exposition of the facts of chemical science to his pupils—a course which is always a source of embarrassment both to professor and learner.

"It is obvious that the adoption of a plan such as the one now suggested does not necessitate any expression of opinion on the part of the Medical Council upon a subject which is still under discussion. At the same time, it will relieve the Council from the inconvenience of appearing pledged to the maintenance of doctrines which are no longer believed to be correct by many of the most competent to form an opinion on the subject.

"The President and Council of the Chemical Society trust that the importance of the subject will sufficiently explain their anxiety to bring this matter under the consideration of the Medical Council.

"WM. ALLEN MILLER,
"President of the Chemical Society.

"To Dr. Burrows."

Having put the Council in possession of this document, which, for some reason he was quite unable to explain, had not before this been brought under their notice, he proceeded to make some remarks upon it. Notwithstanding the respect he entertained for the Chemical Society as a body, and especially for his distinguished and excellent friend Dr. Miller, the president of the Society, he could not but think that the memorial and letter included some statements which, as far as his information extended, were not in strict accordance with the facts. It was not true, as stated in that memorial, that "the system of notation at present adopted in the 'British Pharmacopœia' is constructed in conformity with the views which are rapidly disappearing from chemical teaching in this country." He was in a position to assert positively that, so far as respects Ireland, that was not the case. In Dublin they had numerous Professors and teachers of Chemistry, several of them being persons of eminence in this department of science, and the lectures delivered by all, without exception, were based upon the ordinary chemical notation and equivalent numbers; and to this statement he might add that the gentlemen who filled the chairs of chemistry in the Queen's Colleges, all of whom, particularly Professor Andrews, of Belfast, were chemists of established reputation, did not in their teaching adopt any symbols or atomic weights but those which, until a comparatively recent period, had been in general use. What he had said of Ireland might, he was informed, be repeated of Scotland. The Professors of Chemistry in the Scottish Universities and Medical Schools, men of undoubted ability and eminence, did not in their lectures burden the students with new theoretical views, but were satisfied to rest their teaching upon facts on which there could be no controversy. There were, however, in England persons who thought it was of comparatively little importance to consider what was done in Ireland or Scotland, that they should look exclusively to London, and be governed by the practice which prevailed in this metropolis. Now, without saying that he fully admitted the justice of this doctrine, he begged to add that he had taken the trouble to find out what was the prevalent course pursued in the London schools of chemistry, and he had ascertained as the result of his inquiries that the great majority of the London chemists adhered to the old notation and the old atomic numbers. He stated this to be his opinion at the meeting of the Pharmacopœia Committee held at Dr. Quain's on the previous Monday, but the statement was received with much incredulity, and after a good deal of discussion it was decided to call in Professor Redwood and inquire of him how the matter really was. He (Professor Redwood) was accordingly introduced, and the question having been put to him by Dr. Christison, he replied that there were in this metropolis a few chemists who based their teaching on unitary views, but that the great majority of the London teachers still employed the symbols and the atomic weights in ordinary use.

The time for adjournment having arrived, the President asked Dr. Apjohn whether he would like to conclude his statement that evening, or adjourn and resume it on the following day. Dr. Apjohn preferred the latter course, and the meeting accordingly adjourned.

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SATURDAY, May 26, was entirely occupied by the Adjourned Consideration of the Report of the Pharmacopœia Committee.

MONDAY, May 28.—The Report of the Committee on a Communication from the Secretary of State for War was considered; also the Report of the Committee on Returns of Examinations and their Results from the Licensing Bodies, and on the Register of Medical Students for the last year; and the Re-arrangement of the Recommendations of the Council on Education and Examination was adopted.

TUESDAY, May 29.—The Council met at 1 o'clock. The amended Report of the Committee on the Registration of Medical Students was adopted. A letter from the Metric Committee of the British Association for the Advancement of Science, and the Returns from the Medical Departments of the Army and Navy were considered. The Reports of the Finance Committee and of the Committee on Returns from the Licensing Bodies were adopted. Important motions by Dr. Fleming, enlarging the constitution and powers of the Executive Committee, were agreed to; some other important and some routine business settled; and the Session was brought to an end.

The details of these days we are compelled to defer till next week.

## ORIGINAL COMMUNICATIONS.

## CASE OF EPILEPSY.

By Dr. FRASER,
Senior Physician to the London Hospital.

A. B., a private gentleman, died at 64 years of age; originally robust and healthy, and never had an illness, except a severe attack of small-pox in infancy: a man of great classical learning, with great talent for the abstruse sciences, helped by a powerful memory. For the last thirty years of his life had indulged freely in the use of ardent spirits, and, before restriction was employed, not unfrequently drank four quarts of whisky per day. The appetite was usually good, and in that also a restriction was found necessary.

In the year 1833, having previously had several what he called "bilious attacks,"—always removed by a dose of calomel—one morning while shaving he experienced a momentary and indescribable sensation in his head, compelling him to lay the razor down, and yet so obscure as to create no alarm, either to himself or family. Two months afterwards, whilst at breakfast, he experienced a similar sensation, but could give no description of his sensations. Shortly after the second attack he was seized with diarrhœa, which continued for some days, causing great weakness, and followed by a total loss of the use of the lower extremities. After a tedious recovery, his general strength was much diminished; the unpleasant sensations in the head were more frequently experienced, and gradually assumed a character such as to render their effects perceptible to spectators. Without warning, and it might be while talking or eating, he would suddenly stop and, bending the neck forwards, place his hands on the temples, and moan for ten or thirty seconds, and then rapidly recover consciousness. If standing, he attempted to reach a chair, and if walking staggered forwards, but never fell. In the year 1835 these fits became more frequent, sometimes five or six in twelve hours, and since that time they had continued with much the same character, sometimes with intervals of a week or weeks, or even months, and then suddenly recurred daily.

In February, 1839, a more severe form made its appearance, the smaller still continuing, and it would appear that a cessation of the smaller always preceded a severe attack. The latter began with violent struggling, and a grasping at near objects. The shoulders were drawn backwards, and the head and neck to one side, like to a combination of opisthotonos with pleurosthotonos; the eyes open, mouth twisted, and severe spasm of the respiratory muscles; the teeth clenched. The tongue had never been bitten, although no precautions were used, nor were the accessions of the fits announced by a scream. This stage continued for ten or twenty minutes, the convulsions gradually lessening, and a state of sopor supervened, with puffing of air through the lips, but no saliva appeared, nor was real stertorous breathing heard. The second or soporific stage continued nearly the same time, and then consciousness gradually returned, and he almost always immediately made water, and not unfrequently a copious alvine evacuation followed. He recognised those around, although vision was still indistinct, and in grasping an object he either passed his hand too far or not far enough.

Since February, 1839, he has had twelve of these severe attacks. At this time he was able to walk a short distance and take daily drives; was much emaciated, although the appetite was good, and he was still allowed nearly half a pint of spirits per day. The memory was nearly lost, although the integrity of the judgment was unimpaired when called into action. Various attempts were made to trace a connexion between the attacks, and the effects of diet, mode of life, or any other contingent circumstances; but no conclusion was arrived at. A periodicity was thought to exist, as the small attacks would recur always at the same hour, whether that happened to be morning, noon, or night, and the three last severe attacks each had an interval of exactly three months.

There is little or nothing to say on the treatment. Leeches were applied to the temples, cupping to the nape of the neck, but the general health was the chief aim. At one time purgatives were used, but the fits were clearly aggravated by their use. This case is a marked instance of the "Petit mal" of the French writers, and shows the slowly insidious course which the malady sometimes follows, before severe symptoms appear. The curious fact that a cessation of the slight attacks generally preceded a severe attack I cannot explain, except by the very mechanical idea that the peculiar state of the nervous system which induces the disease becomes pent up, and when it obtains egress, it is by a sudden and strong demonstration. Although there is no doubt but that it was a case of epilepsy, I may mention that it wanted what Hall considers essential to constitute an epileptic seizure—viz., an injury or wounding of the tongue, also the scream so characteristic of the accession of a fit. The complete loss of memory, the power of reason remaining entire, are corroborative of the doctrine which inculcates that the healthy action of a particular portion of the brain is necessary for the action of the faculty of memory. The following notes add to the interest of the case:—

On November 9, 1842, the Medical attendant wrote as follows:—"He has had a severe attack of sciatica, and it is surprising that he has scarcely had one of the epileptic attacks, and these few very slight, since the sciatica began."

On January 25, 1843—"He has had three bad fits since December 22, making up for the three previous months during which he had none. The same holds good as to slight fits.

"February 10, 1843.—A severe fit a few nights ago; the action of the heart is most inordinate, and great congestion in lungs; eyes fixed and iris insensible; copious urinary discharge on recovery, and complete unconsciousness of what has passed.

"Died on March 10. No post-mortem allowed."

## REPORTS OF HOSPITAL PRACTICE
IN
## MEDICINE AND SURGERY.

## SAMARITAN HOSPITAL.

### CASES OF OVARIOTOMY.

(Under the care of Mr. SPENCER WELLS.)

(Continued from page 340.)

WE continue here the record of the cases in which Mr. Wells has completed ovariotomy in the Samaritan Hospital, in the order in which the operations were performed. He operated on the 4th of April on a case in which it was known that the uterus and both the ovaries were diseased, and removed the greater part of a fibro-cystic tumour of doubtful origin. The tumour has been referred to a Committee of the Pathological Society, and we shall publish the case when the report of the Committee is complete.

*Case 79.—Adherent Cyst, Never Tapped—Ovariotomy under Local Anæsthesia—Sixty-nine Pounds Removed—Death in Fifty-two hours.*

Dr. Sadler, of Barnsley, wrote on February 21, 1866, to Mr. Spencer Wells asking for the admission of a patient to the Samaritan Hospital, whom he believed to be suffering from an enormous ovarian cyst, with some ascites and complete prolapse of the uterus. She came to town, and was admitted on March 10. She was single, 23 years of age, and had been in good health until about three years ago. Her first complaint was numbness in the upper part of the left thigh. Soon after, about December, 1862, the abdomen began to enlarge, and had gone on increasing ever since. Menstruation had ceased in July, 1863. Measurement on March 12 showed the girth at the umbilical level to be 54 inches; the distance from ensiform cartilage to pubes 32 inches, and from the spine of the right ilium to the left 40 inches. The whole abdomen was occupied by an enormous cyst, both loins being dull, and the right flank being the only part resonant on percussion. The ensiform cartilage and false ribs were pushed forwards and outwards, and the upper border of the cyst had pushed the liver and apex of the heart up to the level of the nipples. The superficial abdominal and thoracic veins were large and numerous. The uterus was completely prolapsed between the thighs of the patient, forming a tumour as large as a cocoa nut, covered by the everted vagina, with parts of the bladder and rectum. The mucous membrane had become skin-like, and the lips of the os uteri were abraded. This prolapse had not been reduced for more than six months. Fluid, free in the peritoneal cavity, caused considerable projection of the umbilicus.

The question of tapping, as a preparation for ovariotomy, was seriously considered. Mr. Wells stated that the evident advantages would be relief to pressure on the thoracic and pelvic viscera, and lessening the shock of operation. But the dangers of first tappings in very large cysts are so serious; or, to speak more correctly, the dangerous effects of the rapid re-accumulation of fluid are so great, that it seemed advisable to avoid them by immediate ovariotomy.

The operation was performed on March 14. Professor Hughes, of Dublin, and Dr. Skoldberg, of Stockholm, were present. Owing to the extreme compression of the lungs and displacement of the heart, Mr. Wells determined to try the effect of local anæsthesia by Dr. Richardson's ether spray rather than give chloroform. It answered completely, as the first incision and the tapping were completed without the patient being in the least conscious of anything being done. But when it became necessary to separate adhesions, a little chloroform was administered. On making an incision, four inches long, midway between the umbilicus and symphisis pubis, the peritoneum bulged up between the lips of the wound. It was opened by a trochar, and several pints of ovarian fluid, which had been free in the peritoneal cavity, escaped. The peritoneum was then opened, and an adherent cyst was tapped, emptied, and gradually withdrawn, extensive adhesions to the abdominal wall, in some places very firm, being separated as the cyst was drawn out. A pedicle as thick as three fingers was secured about three inches from the right side of the uterus by a small clamp. Several pints of fluid were then pressed and sponged from the peritoneal cavity. One bleeding vessel in the abdominal wall was stopped by torsion. The left ovary was found to be healthy. The prolapsed uterus was replaced; and the wound was closed in the usual manner. The fluid removed weighed sixty-four pounds, and the cyst walls with small cysts removed entire, five pounds—total sixty-nine pounds.

The patient was very quiet and comfortable after the operation; was not sick, required no opium, and an abundance of urine was removed by the catheter, but no perspiration could be induced. The pulse ranged from 130 to 140, and the heart did not change its position in the least. In the morning of the day after operation, this condition persisting, Mr. Wells thought of venesection, but as the kidneys acted very freely he deferred it. Thirty-two hours after operation, the skin being still hot and dry, the pulse 160 with an occasional intermission, and the superficial veins very full, he opened a vein in the arm. The blood ran very slowly at first, but afterwards more freely. The pulse became fuller and fell to 140. The blood drawn separated into 5 ounces of clear serum, and 5½ ounces of firm clot, with one-tenth by measurement of fibrine on its surface.

On the morning of the second day she was said to have passed a fair night. She had not been sick; no opium had been given, as there was no pain; plenty of clear urine had passed, but the skin was still dry and hot, and the pulse 160 and irregular. The abdomen was not distended, but the stomach was tympanitic and high up behind the ribs, the heart not moving from the position it occupied before the operation. Quinine was given by mouth and rectum, but the patient gradually sank, and died 52 hours after operation.

On examination of the body, the thorax was found resonant up to the space between the fourth and fifth ribs, and the ribs were widely pressed outwards. There was no distension of abdomen, and the wound was perfectly closed. About two pints of serous fluid were in the peritoneal cavity, but neither blood clot nor ovarian fluid. The process of repair on the surfaces where the adhesions had been separated had been commenced by a layer of lymph, but there were no other signs of peritonitis. The pedicle was perfectly secured, and exerted no traction on the uterus. The left ovary was healthy, as was the uterus, with the exception of the abrasion around the os. The upper border of the liver was on a level with the right fourth rib, the apex of the heart with the space between the fourth and fifth ribs on the left. The right lung and pleura were healthy. The left lung adhered all over its surface, and adhesions between its lower lobe and the diaphragm held up the diaphragm, and prevented it and the heart from descending. The heart was healthy, though rather soft. A firm fibrinous clot filled both its right cavities, adhered to their walls, and extended along the pulmonary artery beyond its bifurcation. There was no deficiency of blood in the vessels, and the muscular tissue throughout the body was very healthy in appearance.

(To be continued.)

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# Medical Times and Gazette.

SATURDAY, JUNE 2.

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## GENERAL MEDICAL COUNCIL.

The sittings of Tuesday, Wednesday, and Thursday, May 22, 23, and 24, were almost wholly absorbed by the "Medical Acts Amendment Bill." The debates were long, prolix, and, at times, desultory. It will be remembered that last year the Council themselves, after a lengthened discussion, drew up a "Medical Acts Amendment Bill," which was transmitted to the Home Office, and this year the Home Office returned to the Council a "revised draft" of the Bill. A Committee was appointed to consider the Home Office Draft Bill, and, having given in its report on Monday, May 21, the discussion on it in the Council was opened on the Tuesday, and continued through that and the following day; the Bill, "as amended in Committee of the whole Council" was then remitted to the former Committee. The consideration of their second Report, and further amendments of the Bill occupied the Thursday, but the Bill was then finally settled, and was ordered to be transmitted to the Home Office, together with "a statement of the reasons which have induced the Council to suggest the amendments" agreed to by them, and a request for an early reception of a deputation from the Council in reference to the Bill.

There are only three or four additions and alterations of any importance to be found in the Bill as now drafted, when it is compared with the Bill of last Session. A great deal of time was spent over the registration clauses, and the changes made are most of them good, but we confess that we do not sympathise with the anxiety of the Council to remove from the Register the names of persons "who have ceased to practise," but who have not requested the removal of their names. No definition is given of the phrase, "having ceased to practise." Suppose that A, a registered Practitioner, goes abroad for a year or two, say to Australia, what harm can possibly arise from his name remaining on the Register? but according to these new regulations it may be arbitrarily removed during his absence; the Registrar having evolved from his inner consciousness—no other source of information is mentioned—the idea that A has ceased to practise, addresses to him a registered letter, according to his "registered address," inquiring whether such is the case, but A being on the high seas, or wandering (in search of health perhaps) in Australia, does not receive the letter, though "registered," nor that which follows it three months and fourteen days later; or, at any rate, does not get either in such time that his answer can reach the Registrar within six months and fourteen days from the date of the first letter; the consequence is that he "shall be deemed to have ceased to practise, and not desire to have his name retained on the Register." What mischief his name could in any way have caused, we do not see, nor why he should be thus exposed on his return to the annoyance of finding himself Registerially defunct, and the trouble of getting his Registerial life restored.

We are glad that the Council rejected a proposal to omit the last paragraph of clause 10—that, viz., which provides "that a person whose name has been erased from the Register with his consent, on the ground of his having ceased to practise, shall not be liable to any penalty under this section, by reason of his being engaged gratuitously in the cure or treatment of any disease or injury." Under the circumstances, this provision can hardly open the door to any serious abuse, while without it a retired Practitioner might be now and then exposed to great annoyance and hardship.

The clauses giving the Council power to register, under certain conditions, approved colonial or foreign diplomas, will meet with general approval. When a student has, by going through the legal course of study and examination obtained a diploma, qualifying him to practise, from a foreign University of high standing, such as that of Paris, Vienna, or Copenhagen, it is surely a very illiberal and oppressive thing to deny him registration, and to require from him a fresh course of study and examination here before he can be qualified to practise. If it be objected that foreign countries do not to this degree admit the validity of English diplomas, we reply that "two wrongs do not make a right," and that it will not be the first time that England has set other countries an example of liberality and progress. We have not the least fear of our being "swamped by an influx of foreign degrees;" or "inundated by a horde of unwashed foreigners" of no social standing, and of disgraceful habits of life:—such gentry would find even starvation more expensive here than on the Continent; but we think the Council have acted very wisely in keeping in their own hands the duty of preparing an annual list of approved colonial and foreign Universities and Colleges, instead of adding a schedule of them to the Bill. Such a schedule might very possibly receive some strange additions during the passage of the Bill through Parliament.

Government required, as a matter of course, that the degree of Bachelor of Surgery of the University of London should be admitted to the registration which the Council had the hardihood to deny it last year, and the Council have, and very rightly, enlarged the admitting clause, so as to make it apply to "the degree of Bachelor of Surgery conferred by any University in the United Kingdom which now is, or hereafter shall be, legally entitled to confer the same."

The penalty clause, section 40 of the original Act, is amended so as to make penal the assumption of any Medical title "by any person practising Medicine or Surgery, or engaged in the cure or treatment of diseases or injuries, not being registered under the Medical Acts." The Bill of the Council prohibited the assumption of the title "Doctor," but in the Home Office Bill the words "of Medicine" were inserted after the word "Doctor." These added words the Council have struck out, and most rightly insist that "the introduction of the title 'Doctor' simply is all-important to the efficiency of the operation of the clause;" and they press upon the notice of the Home Office the fact that the title 'Doctor' is the one most commonly assumed by unqualified Practitioners, and that as the clause applies only to persons "who, not being registered, are practising Medicine under the title of Doctor," the objection that the word Doctor includes all Doctors, whether of philosophy, law, etc., cannot be held to have any force.

These several points include, we believe, all that is important in the proposed "Medical Acts Amendment Bill;" they do not amount to much, but they are, we think, worth gaining. We do not see, however, that there is the slightest chance of the Bill passing this year. Sir George Grey has distinctly declined "to undertake the charge of the Bill at present," and suggests that some member of the House of Lords or Commons might be found by the Council who would undertake it. We think such a mode of proceeding would be derogatory to the dignity of the Council; any measure coming from them ought to have in the fullest possible way the support of Government; to go to Parliament without it, even with so small a measure as that now proposed, would, we believe, be to court defeat; (a) and defeat would lower still further the influence and power of the Council. On the final motion "That the Report of the Medical Acts Amendment Committee be adopted as amended by the Council," Sir Dominic Corrigan moved, as an amendment, to ask for a Royal Commission to inquire into the workings of the Medical Acts, etc. We commend his speech to the notice of all who may like to read very forcibly expressed everything that can be said against the Council. The whole discussion, indeed, is somewhat instructive and very entertaining; speakers got so excited that they became eloquent and poetical, and even a Scottish member went so far as to quote naughty language from Shakespeare. Sir Dominic's speech might be entitled "contemptuous condemnation of the Council, by one of themselves;" there is indisputably a great deal of truth in it; and if Government would seriously and earnestly take up the subject of Medical education and Medical policy, a Royal Commission might be of great value; but we cannot think that Sir D. J. Corrigan showed wisdom, good policy, or good taste either as to the time when he brought forward his motion, or the tone and manner in which he supported it. Its adoption would have rendered useless the three days' labours of the Council, and have shelved the whole of the subjects now under consideration for, probably, two or three years to come. Now it may be only too true that the Council have done very little, and it is certainly true that the little they have done has been effected by a great expenditure of time and talk, and at no slight cost to the Profession. But they have done something; they have effected considerable improvement in the education of Medical students; or, at any rate, this has advanced not a little contemporaneously with the existence of the Council. And they have "recommended" more; they have, at a cost of £5000, laid the foundations of a National Pharmacopœia; and they have, for certain fees, registered all grades of the Profession higgledy piggledy together in a large annual volume, which any one who chooses may buy. Let us be just, and not forget these works. Dr. Acland's speech against the motion was eloquent, and full of good sense and manliness; but the irrepressible Baronet, in his reply, accused him of being in a passion, and concluded by quoting, as "appropriate on the present occasion," the lines—

> "I protest, since they will give me no praise,
> I'll trumpet myself to the end of my days;
> So saying, away to the forest he flew,
> And ever since then has been crying 'Cuckoo.

But we do not exactly understand whether he meant them to be applied to himself or to his colleague.

On Friday the adjourned consideration of the Report of the Committee on the subjects of general education was resumed, and it was agreed "That natural philosophy, including mechanics, hydrostatics, and pneumatics, be adopted as one of the optional subjects." It is a real satisfaction to be able to report that the Council have at last determined to recommend "That the following subjects constitute a minimum to be required of candidates for preliminary examination, viz.:—

*Compulsory Subjects*—

1. English language, including grammar and composition.
2. Arithmetic, including vulgar and decimal fractions; algebra, including simple equations.

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(a) We see that on Tuesday, the 29th, the Council delegated to the Executive Committee authority to act, as regards the passing of the Bill, very much in the spirit of these observations.

3. Geometry: first two books of Euclid.
4. Latin, including translation and grammar; and
5. One of the following

*Optional Subjects*—

1. Greek. After the year 1869, Greek shall be one of the compulsory subjects.
2. French.
3. German.
4. Natural philosophy, including mechanics, hydrostatics, and pneumatics."

Can any one seriously think that these subjects take too high and large a range for the examination of a youth of 17, who is designed for one of the "learned and liberal Professions?" It is very possible that the requiring such a degree of preliminary education may lessen the number of Medical students, but that will be partly because those who are utterly unfit for the Profession will be warned off, and so the Profession will rise in character and tone, and partly because so many avenues to competency and position are now open to well-educated youths, which used to be accessible only through interest, and because the greatly increased engineering and commercial enterprise of the day affords a much wider field than of old to the energies and intellects of the sons of the middle classes. But shall it be therefore said that we must pitch the general education to be asked of Medical men so low as to tempt the indolent and small-brained? The same causes have much reduced the number of yearly candidates for Holy Orders, but we have never heard it seriously proposed to lower the education of the clergy! Away, then, with such arguments! If our Profession is to continue to hold a high and honoured place among the callings of gentlemen, we must raise the standard of mental training to be required from all who enter it, and demand that it shall at least come up to the average liberal education of lads in this middle of the nineteenth century. And if the supply of Medical men should threaten to fall short of the demand, the continually and vastly-increasing wealth of the country must, and doubtless very soon would, apply a remedy. In the Church every effort is being made to increase the value of all small Livings and of Curacies; and so in our Profession, some of the increase of national wealth must be fructified in paying Medical services better, in increasing the pay of the Army, Navy, and Poor-law Medical Officers; and much less gratuitous service must be demanded from the Profession. Let gentlemen feel assured of meeting with honourable treatment and fair remuneration, and there will never be any lack of candidates for the Medical Profession. Something might have been urged in favour of allowing chemistry, natural history, natural philosophy, or the like subjects, instead of algebra, or geometry, or Greek; but very few, if any, schools are at all prepared to teach those subjects, and the Medical Council is the last body to venture on attempting to alter the educational system of the country, even were it desirable, which we do not say, that they should do so. Nearly all the arguments against making Greek compulsory would have applied equally well to Latin, and would, in fact, have tended to reduce the requirements to the famous three "R's," Reading, 'Riting, and 'Rithmetic. We rejoice, then, that the Council have at last adopted "a minimum" of subjects for the preliminary education; but our joy is largely tempered by the reflections that it has taken them eight years to achieve this labour, that they still venture only to *recommend* this minimum, and that their "recommendations" are not intended to come into operation till October 1, 1868.

A great deal of difficulty has been created about the insertion of Medical titles in the Army List. In May, 1864, the King and Queen's College of Physicians of Ireland complained to the Director-General of the Army Medical Department that if a Medical officer possessed a Medical degree he had M.D. appended to his name, while if he had a diploma from a College of Physicians he got no Medical affix. The matter was brought before the Council that year, and they passed a resolution that "it would not be advisable to insert the letters Phys.," but that the "several Medical qualifications which Army Surgeons possess, as in the Medical Register, might be entered after their names in the Army List." The matter came again before the Council in 1865, and they sent to the War Office a new resolution recommending "that initials, indicating the several Medical qualifications which Army Surgeons possess should be inserted after their names without distinction or preference to one degree or licence over another;" each Surgeon to be allowed, however, only one qualification. This year Lord De Grey politely asks for a list of "*initials*." How, for instance, he asks, is the licence of the King and Queen's College of Physicians in Ireland to be expressed by initials? and if a man possesses more than one qualification, who is to determine which shall be initialed in the Army List? We suspect his Lordship rather chuckled over his questions, and thought he had posed the Council, and we confess to having thought so too. The matter was referred to a committee, and they recommended that abbreviations be used to signify the Medical degree or licence possessed without in any way distinguishing what University, College, or company it proceeded from. Thus—

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| M.D.<br>M.B. | signifying University graduates, without specifying any particulars. |
| Ph. | signifying "Physician" in like manner, without specifying any particulars. |
| Ap. | signifying "Apothecary" in like manner, without specifying any particulars. |

It might have been objected that this would have been cutting the Gordian knot rather than untying it, and that these abbreviations do not "designate the several Medical qualifications possessed," but only the *kind* of qualification. One might also have been tempted to wonder what superiority the combination "Ph." possessed over the discarded "Phys." And one felt that the Army List would certainly need to give a glossary, or how would the multitude ever have arrived at the meaning of "Ph." or of "Ap.?" The former might have been translated into Pharmacologist or Pharisee, as well as Physician; and many would have been reminded by the latter of the old smokejack, which was for ever repeating, "Once I was 'ap—'ap—'appy, but now I am meeserable," and they would have suspected some reference to the repudiated Warrant of 1857, and the present state of the Army Medical Department. Perhaps, however, it would have been generally felt that the Committee deserved to be congratulated on having found so 'appy and so ap-posite a solution to what seemed a rather thorny question, and we were prepared to congratulate them accordingly.

The Council, however, lacked the boldness of their ingenious Committee, and resolved "That the Registrar acknowledge with thanks Sir E. Lugard's letter, and inform him that on further consideration the Medical Council has decided not to urge the matter referred to in Sir Edward's letter on the attention of the Secretary for War." A "most lame and impotent conclusion," truly; the Council completely backing out from all the advice they have offered the War Office on the subject. How such conduct must increase any influence the opinion of the Council may be politely supposed to have hitherto had with that department of Her Majesty's Government!

Notwithstanding the recommendation of their own Committee, the Council could not persuade themselves to allow the resolution of the Irish Medical Association to be placed on the Minutes, but they inform Dr. Mackesy that both the resolution and his letter "have received their full consideration." Acting on the *omne ignotum* principle, the public will imagine that the resolution must be charged with most terrible thunder.

A "Memorial of the County and City of Cork Medical

Protection Association" has been admitted on the Minutes, this honour being in place of "full consideration," we suspect. The Memorial is good, and well deserves all the "consideration" the Council could have given it.

The new edition of the Pharmacopœia is so far complete that "the whole of the matter, with the exception of the Appendix, is now in type." The Council directed that as soon as the proof is quite ready a copy should be sent to each member of the Council for his observations, to elaborate which he should be allowed one month; then the Pharmacopœia Committee should "duly consider" all such observations, and "hand over the proof, when finally approved, to the Executive Committee for publication." And they also, moved thereto by a letter from the President of the Chemical Society, agreed that "it be an instruction to the Pharmacopœia Committee to give for each therapeutic compound of definite constitution occurring in the forthcoming edition of the Pharmacopœia, two formulæ—the first being that in ordinary use at present, the second being one constructed in accordance with the more recent view of what is called the "unitary system." There is evidently a good deal of work still before that Committee. We venture to suppose that the expression "therapeutic compound" in the above instruction should be read "chemical compound."

There is also to be inserted a "complete comparative table of metric and imperial weights and measures, with instructions for their mutual conversion."

# THE CHOLERA AT LIVERPOOL.

*(From a Correspondent.)*

There have not appeared any fresh cases of cholera among the emigrants at Bank Hall since Monday, the 14th; nor to this date (22nd) is there any suspicion of the disease having been localised in any place or among any residents of the borough.

This gratifying fact will not, we trust, cause any relaxation of precautionary and preventive measures on the part of the parochial and municipal authorities, for such present immunity does not imply security in the future. In 1854 the cholera, as now, reached Liverpool through the transit of emigrants, but did not immediately spread among the other inhabitants. Thus, though in the week ending April 8 of that year there had occurred numerous deaths among the passengers and crew of the American vessel *Winchester*, the disease did not fix itself in the town with anything like epidemic virulence until the third week of July, when a fresh importation of sick emigrants was attacked by cholera on board the ship *Derigo*. Then, unfortunately, there were co-existent all the climaterial causes and exciters of the disease, and from that time until the latter end of October it raged with fatal intensity.

The rate of mortality from cholera has been as follows:—Of the 38 cases treated by Mr. Rayner on the Hospital ship *Jessie Munn*, 23 died and 15 recovered; of the 18 admitted into the Workhouse Hospital, 8 have died, 9 been cured, and one remains under treatment.

All on board the *Jessie Munn* are to be landed to-day (May 22) and conveyed to the convalescent wards of the Workhouse. The reports from the depôt at Birkenhead are equally satisfactory.

May 22.

From the 22nd the health of all the emigrants continued to improve so steadily and satisfactorily that Captain Prior, the Government emigration agent, having satisfied himself that a clean bill of health could be reasonably granted to the ship and passengers, authorised the *Helvetia* to prepare for sea, and to-day, May 29, at 12 o'clock (four weeks since the period of his first start), she again sailed from the Mersey. Mr. Rayner, late of the *Jessie Munn* Hospital ship, has consented to go out with the passengers as Surgeon.

The cholera has not appeared among the residents of the town; but the Select Vestry and health authorities are quietly making those arrangements which will be required by the exigencies of an epidemic, and by the provisions of the "Diseases Prevention Act."

May 29.

# THE APPENDIX TO THE REPORT OF THE CATTLE PLAGUE COMMISSIONERS.

We have already given our readers a general account of the conclusions arrived at by the Commissioners as to the Medical history of Rinderpest, and intend now to offer an analysis of the data upon which these conclusions are based. And we may congratulate the Commissioners on the fruit of their labours. The results obtained by those gentlemen who severally undertook lines of special investigation possess a general value which it is impossible to overrate, a very wide range of applicability—far beyond the narrow limit of Rinderpest alone—to the pathology and progress, indeed, of all acute diseases. Rinderpest has furnished the occasion whereby a large addition has been made to our common stock of Medical knowledge, and has helped to bring out large generalisations, which must very considerably modify many of our present opinions as regards the causation and treatment of disease.

In reading through the details of the Report, a marked unanimity between the opinions and results of the different observers is evident; it is strikingly illustrated in regard to the pathology and symptomatology of the disease. Even the most novel points in one are in harmony with the observations recorded in other sections of the Report. This is proof not only that Rinderpest and its circumstances have been most severely interrogated, but the observations afforded us are eminently trustworthy. The *special* investigations carried on have brought to light not only much reliable information in regard to *diseased*, but also *healthy* conditions, of which we were before quite ignorant. When the investigators appointed by the Commissioners entered upon their researches, they at once discovered that as regards Rinderpest, science was so far deficient as to afford really very few data of comparison. The object proposed was, of course, to ascertain the degree and nature of the departure from health. This was very difficult, inasmuch as our knowledge of the healthy state in many particulars was uncertain. For instance, Dr. Marcet says, "I found it necessary to institute a series of investigations on the chemistry of bovine animals in the state of health in order to obtain a standard of comparison wherefrom to draw results as to the morbid changes due to the disease."—P. 55. In his report on disinfection, Dr. Angus Smith enters into the meaning and principles of disinfection in general. He observes "the results obtained by M. Pasteur regarding the existence of organised substances, as we may call them, or germs, is so definite, clear, and important that we must begin as on a new foundation, and date theories of many diseases, and also of disinfection and cure, from this era." This is a matter of congratulation, for it has presented us with an essay on disinfection which will be received as one of the most valuable contributions that have been made to science.

The ideas of the different observers have been running towards the same point of view in regard to another most important matter—viz., the nature of the poison at work. One cannot refuse to see that although there are many chemico-mechanical actions, yet the phenomena seems to indicate that the poison is of a *living* nature.

The Commissioners, who are entitled to immense praise, express their obligations to the gentlemen whom they selected to investigate the epidemic from special points of view, and we cannot too cordially award the highest praise to each and every one, expressing at the same time a fear lest we fail in this short report to do them justice.

The first Report is that of Dr. Sanderson, who was requested "to study the disease in animals of different species, and, in particular, to investigate its characters when produced by inoculation as compared with those which are met with in animals to whom it has been communicated by natural infection," and also to ascertain its mode of propagation. The following are the more important conclusions :—

1. *General Characters and Progress.*—It appears that what we understand by the term fever existed several days before any *local* change could be detected; and in this, as in all other respects, such as duration and development, Rinderpest observes a very marked uniformity. Dr. Sanderson gives us a full account of the natural course of the disease, dividing it into three stages—the first, which is characterised by a rise in temperature only; the second, comprising the third, fourth, and fifth days, when the more ordinary symptoms are developed; and the third, in which there is a rapid fall of temperature and cessation of vital functions. These different features are fully described. Death occurs on the seventh day.

2. *Alterations in the Temperature.*—We have already given some of the more important conclusions upon this matter, more especially as showing that the onset of the disease may be recognised at a very early period. It now only remains to notice peculiarities observed during the further progress of the disease. The increase of temperature is greater in those animals which were inoculated and which recovered, than in others which died—indeed, a mere increase of temperature is not of much moment, in a prognostic sense. In fatal cases, however, the acme was reached a day earlier than usual, and where a favourable issue resulted, the rise and fall was more regular and gradual. Recovery is also preceded by a fall in temperature, but the decline is gradual, and does not set in till about the seventh or eighth day.

3. *Alterations in the Urinary Secretion.*—Dr. Sanderson tells us that the quantity of urea is found to be greatest on the fifth day, and in fatal cases the percentage is nearly doubled, "the increase being greatest at the same period of the disease at which the total daily excretion of urea was most rapid." We shall recur to this in speaking of Dr. Marcet's report.

4. *Alterations of the Pulse.*—The acceleration of the pulse is very inconsiderable in the early stages; later, there is a slight increase in frequency perhaps. The pulse is somewhat slower in those animals which recover, quicker in those which die, and especially accelerated in the stage of collapse; but the frequency of the pulse is of little importance, either for diagnosis or prognosis. The quality, however, is a good test.

5. *Alterations in the Respiratory Functions.*—Dr. Sanderson finds that in the early stages there is little alteration as regards the *rate* of breathing. Much more is learnt, we are told, by observing the *mode* of respiration. "During the first stage of the disease respiration is performed in a perfectly natural manner, but about the fifth day irregularities begin to be observable," the rythm of the chest movements is altered, and expiration is accompanied by moaning. On the sixth day "the chest dilates suddenly, but apparently with considerable effort, in consequence of the unnatural permanent expansion of the lungs due to obstructed expiration. This inspiratory movement is immediately followed by closure of the glottis . . . . the closure of the glottis is always attended by a sound . . . . so loud that it can be heard at a distance. This sound coincides with the resisted expulsive effort," etc. The glottis remains closed for a while, and then the confined air is expelled with the peculiar grunting noise, after which a fresh inspiration is made; thus, as Dr. Sanderson points out, the rest or pause does not occur at the end of expiration when the lungs are relaxed, as it were, but when the latter are inflated, that is, in the middle of the respiratory act, or rather in the middle of the expiration, as some of the air escapes after inspiration before the glottis closes. "At the moment that closure takes place the air confined in the chest is strongly compressed by the action of the expiratory muscles, and in this way gives rise to the interlobular emphysema which is so commonly observed in cattle plague."

Dr. Sanderson then proceeds to explain how the closure of the glottis is effected, drawing attention to the similarity of breathing between that of the Rinderpest animal and that observed after section of the pneumogastric nerve :—

"In all animals, as is well known, the vocal chords separate from each other in inspiration and approach in expiration, these movements being very inconsiderable in the tranquil condition, but increasing in activity whenever the breathing is excited or interfered with. Hence we may readily understand that in the hyperæmic and tumid larynx of cattle plague, the expiratory narrowing of the glottis becomes complete, while even during inspiration the opening is insufficient to allow the free ingress of air. Hence the permanent dilatation of the chest, the enfeebled action of the diaphragm arising from the permanent depression of its central tendon, the laborious, but relatively fruitless, action of the other inspiratory muscles in expanding the thoracic walls, the fixation of the chest during the prolonged closure of the glottis, and the noisy expulsion of the imprisoned air through the narrow chink the moment that the vocal chords separate from each other for inspiration."

6. *Alterations of the Visible Mucous Membrane.*—Dr. Sanderson lays great stress on these as in themselves the most constant and important characters of cattle plague, especially those seen about the mucous membrane of the mouth, but we defer an account of them till we take up the "Morbid Anatomy" of Rinderpest. It is only just, however, to observe that Dr. Sanderson calls particular attention to the "perfect agreement in the time at which the first local manifestations of disease could be detected." About two days intervenes between the first rise in temperature and the development of local change. He then discusses in detail the alterations of the alvine dejections; those of the skin, which we shall by-and-by refer to; the alterations of the functions of the brain and nervous system; the diagnosis; remarking that "cattle plague may be discriminated from all other diseases whatsoever by the alterations of the visible mucous membranes generally, and particularly by those of the lips and gums," especially in conjunction with the change in temperature.

Then the phenomena of cattle plague in sheep are descanted upon; the effect of inoculation, which would, on the whole, seem to be occasionally beneficial. The experiments of Professors Jensen, Unterberger, Rasdolsky, Raupach, and others are referred to. The difference of opinion upon the point whether the virus loses any of its virulence by transmission through several animals of the same species would seem to be very great. Dr. Sanderson's Report concludes with some tables, forming a complete record of his valuable observations.

Dr. Marcet's Report follows next in order. His researches concern the muscular tissue and solids of the body, in a chemical sense.

*The Blood.*—In the earliest stages the water is increased, in later stages diminished; coincidently with the diminution occurs an increase in the solids of the blood. The proportion of *albumen* seems to rise and fall with that of the water; in one case only was it absolutely increased. The *fibrin* is always in excess, and such excess is an early feature.

The proportion of *mineral constituents* does not seem to vary from that of health.

*Muscular Tissue.*—The flesh of diseased contains more soluble albumen than that of healthy beasts; and, moreover, the rate of diffusion of albumen would appear to be slower throughout the former than the latter. Dr. Marcet remarks that the "excess of soluble albumen may be considered either as due to a process of solution or albuminous degeneration of the muscular tissue; or to an increased supply of albumen to the muscle from the blood," . . . the nutrition of the muscle is seriously altered from that of health.

*Urine.*—An increase in the amount of *urea* occurs just as the temperature begins to rise, and augments in direct proportion to the increase of the latter, thus confirming the conclusions of previous observers in other diseases. The total *amount* of urine secreted varies little from that of health. The *specific gravity* falls always as the disease advances, from decrease in the amount of mineral constituents. *Albumen* is generally found in the urine about the fourth day after the rise of temperature, and gradually increases. The reaction, at first alkaline, in the latest stages becomes acid.

*The Milk.*—The specific gravity and quantity diminish, and the fatty matters seem to be increased.

As in the case of Dr. Sanderson's, the Report of Dr. Marcet ends with a mass of tabular matter, which is the best evidence of carefully-conducted research.

Nor is less credit due to Dr. Murchison for his Report, which follows next in order. Basing his observations on the symptoms, anatomical lesions, and pathological relations of Rinderpest, Dr. Murchison argues out solidly the conclusion that Rinderpest is neither typhoid, typhus, scarlet fever, erysipelas, influenza, nor dysentery; that it has alliances to the exanthemata, chiefly to variola, from which, however, it differs in striking particulars.

(*We shall continue our observations on the Report next week.*)

## REVIEWS.

*Lectures on Clinical Medicine delivered at the Hôtel-Dieu, Paris.* By A. TROUSSEAU, Professor of Clinical Medicine in the Faculty of Medicine, Paris, etc. Translated and Edited with Notes and Appendices by P. VICTOR BAZIRE, M.D. Lond. and Paris, Assistant-Physician to the National Hospital for the Paralysed and Epileptic, etc. London: Hardwicke. 1866. Pp. 276. Part. I.

THIS book furnishes us with an example of the best kind of clinical teaching, and we are all much indebted to Dr. Victor Bazire for supplying the Profession in England with a translation of M. Trousseau's admirable lectures; for, whatever may be said to the contrary, it is only when such books come to us in the dress of our own vernacular that they obtain an extensive circulation in this country. French and German works are doubtless read largely, but it is mainly by a superior class of men that this occurs. There is a certain amount of trouble involved in studying the originals which a great many busy men cannot or feel disinclined to take, and to such some of the most valuable contributions made on the Continent to Medical literature are as if they did not exist. Now, this is a book which deserves to be popularised, and we scarcely know of any work better fitted for presentation to a young man when entering upon the practical work of his life. The delineation of the recorded cases is graphic, and their narration devoid of that prolixity which, desirable as it is for the purposes of the man who is about to subject them to an extended analysis, is highly undesirable when the object is to point a practical lesson. The translation, so far as the Anglicising goes, is perfect; it does not read, as some similar productions do, *like* a translation; and this is saying a great deal in its favour. The only objection we have to make on this score is, that the Anglicising has, we think, been carried a short step too far, and that it would have been as well in those instances where examples of efforts at speech on the part of some patients are described to have employed the French words which were pronounced instead of giving them in English. This, however, is a very trivial defect, which may well be condoned good-naturedly. Having said this much of the general character of the work, we may proceed to review it more at length.

The translator has exercised a sound discretion in subjecting the lectures to re-arrangement. The present volume contains lectures upon Venesection in Cerebral Hæmorrhage and Apoplexy, upon Apoplectiform Cerebral Congestion and its Relations to Epilepsy and Eclampsia, upon Epilepsy, upon Epileptiform Neuralgia, upon Glosso-laryngeal Paralysis, Progressive Locomotor Ataxy, and upon Aphasia. Now, of course, we cannot be expected to review all these lectures. Like most of those we address, we shall content ourselves with sitting humbly "at the feet of Gamaliel," and presenting a few samples of the teaching that issues from his lips.

The first two lectures treat of a most important subject—apoplexy, cerebral hæmorrhage, cerebral congestion, epilepsy, eclampsia, and the therapeutic application of blood-letting in relation to these diseases. The opponents to blood-letting in such cases will be glad to be strengthened by the authority of a man of M. Trousseau's extended and mature experience; while probably such as still adhere to the practice of their early instructors will be induced to reconsider the subject in the light thrown upon it by the facts and arguments of the author. The extreme rarity of apoplexy, using the term in its classical signification, is much insisted upon by M. Trousseau. He tells us that in his long experience he has *never once* seen a patient struck down suddenly by apoplexy, either in his Hospital, private, or consulting practice; *without exception*, wherever the attack had occurred in the presence of witnesses, it had come on gradually, had generally been slight at the outset, coma supervening in from ten minutes to several hours afterwards. "In no single instance, I repeat, have I seen a man with cerebral hæmorrhage struck down as by a blow, and dropping instantly into a state of unconsciousness." With regard to the softening of the brain substance found often associated with cerebral hæmorrhage after death, M. Trousseau holds the doctrine that it is an effect, not the cause of the hæmorrhage, neither does he believe that the changes that are often observed in the coats of the blood-vessels are an essential condition for its production. M. Trousseau has entirely abandoned the use of blood-letting, purgatives, and revulsives in apoplectic seizures, and for the best of all reasons, namely, that experience has taught him that patients do better without them. But in addition to this, the grand test of any therapeutical practice, he appeals to the analogy between cerebral and other hæmorrhages, as, for instance, where extravasation takes place under the skin, in which latter case no one would expect blood-letting to facilitate the absorption of the effused blood; and as to its use in arresting the "molimen hæmorrhagicum," he considers, and proves at length in another lecture, that the part played by congestion has been greatly exaggerated. He regards, and we think truly, the apoplectic phenomena as more allied to syncope than to congestion, and that bleeding is, therefore, contra-indicated, not demanded. "Instead of bleeding my patients, or putting them on low diet, and keeping them in bed, I do not draw blood from them, I recommend to them to get up if possible—at least, to remain in the sitting posture—and I feed them." When febrile action occurs, as it rarely fails to do in hæmorrhage of a certain amount, M. Trousseau still abstains from the lancet. Still he points out how difficult it is under such circumstances to do so when a young Practitioner is opposed by the prejudices of a patient's friends, or by the authority of any one older and more experienced than himself. His advice is—"Save your responsibility in such cases" (for in such the fever often ushers in fatal brain symptoms), "avoiding at the same time what your conscience forbids, open a vein, but in such a way as only to draw an insignificant quantity of blood, and explain to the friends that it would be dangerous to go further."

As respects the diagnosis between cerebral hæmorrhage and softening as the cause of hemiplegia, M. Trousseau affirms the proposition of Recamier that "when hemiplegia, complete and absolute, occurs *suddenly* (and I insist on this point—the suddenness of attack) without loss of consciousness, softening of the brain may be diagnosed. Whenever, on the contrary, the complete loss of motor power is attended by loss of consciousness—whenever, especially, the individual has become suddenly comatose, hæmorrhage may be diagnosed, and hæmorrhage to a considerable amount. But when the intellect is affected to some extent, but not entirely—when there is obtuseness, but not complete loss of sensibility—whilst there is absolute loss of motor power, as in the case of our patient in St. Agnes ward, we must always, according to Recamier, diagnose hæmorrhage in connexion with softening, or what has been termed capillary hæmorrhage."—P. 14. Another interesting point is referred to. It is well known that, as a rule, in hemiplegia, when amendment begins to take place, the earliest improvement is observed in the motor power of the lower extremity, and the weakness persists longest in the upper. M. Trousseau, however, adds that when the reverse obtains, and the arm regains power quicker and better than the leg, the patient is worse off. "Three years ago I was sent for to see a general officer, a near relative of mine.

He had been seized that morning a little before breakfast with paralysis of the right side. For three or four days after this his symptoms looked unfavourable, but fever soon ceased, and a fortnight after the attack he could write, shave himself, and walk pretty well. The extreme precision of the movements required for writing and shaving showed clearly enough that his arm was considerably better than his leg, for he walked very lame. After the lapse of a few months his leg became stiff and painful, and he walked with more difficulty. A stick was no longer enough for him, and he required the help of a friend's arm; later, even with this help, he was unable to walk. At that time the arm itself began to lose power, and the intellect failed in proportion. Subsequently the poor man could not leave his arm-chair, and suffered excruciating pain in the paralysed side, especially in the leg. At last he died in a state of perfect imbecility. . . . . Now, gentlemen, if you ask me why our prognosis should be unfavourable when the arm regains power more completely and rapidly than the leg, I must confess my ignorance, and content myself with noting a fact which has often enough occurred in my practice to have attracted my attention. I cannot say whether a morbid process goes on round the clot causing chronic softening or irregular cicatrices, but whatever the cause may be the fact remains, and seems to me to possess some value." —P. 16.

M. Trousseau does not believe in cerebral congestion as the cause of any variety of apoplexy. The cases of so-called "apoplectiform cerebral congestion" he regards as truly cases of epilepsy. Neither does he regard congestion as playing any important part in the phenomena of apoplexy. The stupor of apoplexy he regards as due in part at least to what he terms "*cerebral surprise;*" and he holds that "the same cerebro-spinal modification which causes the fit of epilepsy or eclampsia (which two conditions M. Trousseau regards as pathologically identical), the insultus, the ictus epilepticus, is sufficient to produce the apoplectic stupor which follows it." —P. 36.

We will now turn to the end of the volume—the lecture upon aphasia—which M. Trousseau commences with the brief narration of a series of most interesting cases, upon which, amongst other conclusions, he bases the following:—That aphasia is produced in nearly all cases by an injury to the frontal lobes of the cerebrum, and that this lesion is almost exclusively confined to the left hemisphere, repudiating altogether thus the explanation of those who would account for the habitual association of aphasia with hemiplegia of the right side of the body by placing the organ of the manifestations of thought by speech in the two anterior lobes of the brain. He says "there is no doubt that the intellect is deeply injured in aphasia, and when the affection gets well under our eyes, as it pretty frequently happens, we witness day after day the resurrection of the faculties, and we see them progress exactly as in the convalescence of a grave disease; we see physical aptitudes return day after day." He narrates cases in proof of this, and amongst others that of a man called Paquet, who sometimes read all day long and seemed to understand what he read. "The following experiment proved categorically that he understood much less than he seemed to do. I took up his book and read aloud a few lines at the bottom of a page, asking him to follow me with his eyes, and to turn the page when I came to the last line, but he never could do it correctly." This man read the same tales over and over again, and always with the same degree of attention—a task which no one who recollected what he read could tolerate—yet a remarkable thing about him was that he played draughts and dominoes pretty well, and was cunning enough to cheat at the game and enjoy the joke. M. Trousseau remarks also upon those remarkable cases of aphasia where the intellect is only partially impaired. He regards the condition as one not involving merely a defect of co-ordination of the movements necessary for phonation, but as dependent upon amnesia, and this of a kind which leaves certain kinds of memory untouched. This he holds is not strange when we consider that among healthy persons some possess a strong memory for certain things while others readily escape them. "One man has a good memory for localities, another for names, a third for dates or for figures, and each of these *varieties* of memory, if I may be allowed the expression, is independent of the rest. So that, if it were admitted that an aphasic patient suffers after all from loss of memory, it should be added that he has lost all recollection of the mode of expressing thoughts in writing, in speaking, and by gesture.—P. 270.

We content ourselves with this very partial review of the volume, because we believe we have said enough to induce the Profession in England, now that the book is so accessible, to study it carefully for themselves.

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*Traite Théorique et Pratique des Maladies de l'Oreille et des Organes de l'Audition.* Par le Dr. J. P. BONNAFONT.

*A Treatise on Diseases of the Ear.* By Dr. J. P. BONNAFONT, etc., etc. Paris: Baillière et Fils.

THIS volume is a very valuable contribution to the little-studied branch of Surgery of which it treats. It is, at any rate, free from quackery, and contains a large number of well-observed and well-treated cases. Dr. Bonnafont's strong point appears to us to be manipulative Surgery, in respect to which the procedures he recommends are often very skilful and ingenious, though we have sometimes found simpler methods efficient. Dr. Bonnafont, for example, uses various curved knives and scissors for the removal of polypi, introducing them close to the root, a proceeding requiring some delicacy; we find, however, the ordinary snare armed with a moderately firm fish-line (which is much better than any metal wire) quite sufficient. Dr. Bonnafont also does not seem to be aware of the great efficacy of mildly astringent or absorbent powders, combined with other suitable treatment, in aiding the permanent removal of these growths, frequently so obstinately recurrent. Our author is a great advocate for artificial perforation of the membrana tympani, a proceeding which, he says, if judiciously performed, would benefit one-fifth of all cases of deafness. The only affections in which he recommends it are diseased conditions of the membrane; never in obstruction of the Eustachian tube, which, he says, invariably yields in his hands to the persevering use of elastic bougies, gradually increasing in diameter from about half a line to a line and a half. When the membrana tympani is thickened and the nervous power is unimpaired, perforation, by his statement, almost invariably succeeds—that is, it succeeds for a time; for unhappily (if it be unhappy) such artificial orifices are exceedingly hard to keep pervious. In fact, Dr. Bonnafont says he has never succeeded in doing so, though he has introduced bougies, cauterised, and in one case constructed a canula, expanding at the extremity by a spring, which the patient wore through the orifice for forty-five days, but it healed up afterwards, to the patient's and Doctor's great regret.

In this last respect our experience in the main agrees with Dr. Bonnafont's, though we have in some few cases seen artificial perforations continue permanently open; why, we cannot exactly tell. Nor do we know exactly (being unable here entirely to agree with our author) why it is that perforation of the membrane succeeds when it does succeed, or fails when it does not. Certainly it is by no means successful in all cases of thickening of the membrane with good nervous power; and we have found it beneficial for the time it lasted when the membrane was not thickened, but thin, relaxed, and soft. It is difficult to ascribe the benefit of the operation in such cases as these to its effect upon the membrana tympani itself, when we see continually with what disordered, degenerate, relaxed, softened, hardened, thickened, and thinned membranes a very tolerable hearing may coexist. To our mind the subject seems to need further light, and we look for it with great hope in a more exact knowledge of the relations between the membrane and the ossicula, and through these between the former and the tension of the labyrinthine fluids, and other conditions essential to perfect hearing. We agree with Dr. Bonnafont that some method of keeping open an incision in the membrana tympani is a desideratum in Surgery. So also, though in a less degree, is a method of inducing the healing of ulcerated ones, on which our author gives us less information. A great deal, however, may be effected in this direction. The chief condition of success appears to us to be to make and to keep the exposed tympanic cavity free from accumulations of secretion. This is often difficult, on account of the sac-like form of the tympanum, and still more on account of the viscid and tenacious character of the secretion itself, which is often quite irremoveable by any amount of syringing. We have found, however, that by filling the meatus with a warm solution of sulphate of zinc, and passing at the same time a current of air freely through the Eustachian tube—either by the patient blowing with closed nose, or by inflating the nasal cavity while the patient swallows—the secretion may be coagulated, and by patience the cavity may be entirely cleared. The rapidity with which healing of a perforated membrane sometimes ensues upon a persevering employment of this plan is remarkable. It is by no means always the case that an improvement of hearing immediately ensues; sometimes there is a diminution, probably from contraction or the formation of adhesions, which, however, is not necessarily permanent.

The great idea of Dr. Bonnafont's book, on which he particularly prides himself, is one from which, regretfully (for his enthusiasm is almost catching), we are obliged to dissent. He holds that affections of the nervous apparatus, and of the conducting media, may be absolutely distinguished by the degree to which the power of hearing sounds conveyed through the bones of the head is retained or lost. For this purpose he uses various watches and tuning-forks, and he claims to be the first person who introduced the practice. We are afraid it must be said that experience does not support the notion, plausible though it is. The state of the tympanum appears very powerfully to influence the perception of sounds conveyed by the cranial bones; and, though we may probably say of a person who hears well a variety of sounds through this channel, that his auditory nerve can hardly be much amiss, the converse certainly does not always hold good. Deaf persons also are sometimes met with who hear a tuning-fork very badly when placed on the top of the head, but very fairly when placed on the teeth—that is, of course, as compared with other persons not deaf. There are some, also, in whom a pressure on the meatus greatly deadens a sound conveyed through the skull, and in whom, therefore, it can scarcely be doubted a pressure arising *within* the tympanum would have a similar effect.

We fear that all the large part of the volume before us which is devoted to the illustration of this theory must be held doubtful, and that we must be content to grope farther for a satisfactory method of diagnosing in all cases between tympanic and nervous deafness—the great want (among many great ones) of Aural Surgery. Not that the indications given by this means are valueless; they are only insufficient, and other symptoms (as, for example, some pertaining to the differing effects of pressure on the perception of bone-conducted sound) promise ere long to advance our knowledge on this knotty point at least one step farther. In the future, also, doubtless the results of ophthalmoscopy will be found more or less available for the interpretation of the affections of the kindred organ.

Some interesting physiological observations precede the practical part of Dr. Bonnafont's volume. He is of opinion—and our own examination supports his view—that the tensor tympani and stapedius muscles act in opposite ways upon the membrana tympani, the tensor moving the malleus somewhat forward and rendering the posterior fibres of the membrane tense, at the same time relaxing the anterior ones, and the stapedius relaxing the posterior and tensifying the anterior. He conceives accordingly that different parts of the membrane are subservient to the audition of different pitches and kinds of sounds; the longer anterior radiating fibres receiving grave sounds, the shorter posterior fibres responding to acute ones, and that the opposing muscles are called into play accordingly to fit each part of the membrane for its special function. Dr. Bonnafont even thinks that in cases of perforation he has been able to distinguish a special deficiency to certain classes of sounds, according to the portion of the membrane that was wanting—a point that surely deserves a minute testing. The tensor tympani muscle is more powerful than the stapedius, because acute sounds, for which it has to adapt the short posterior fibres, require a higher tension.

One unaccountable statement in the volume we cannot overlook. Dr. Bonnafont describes (page 18) the membrana tympani as "dry and deprived of blood-vessels and nerves." This must surely be an oversight. The author himself, in another page, records how he has seen the membrane become of a bright red colour from filling of its vessels under the influence of loud and acute musical notes, and in yet another tells us how he touches it with a blunt probe before incising it, in order to deaden its sensibility. Not many such slips as these, however, are to be met with in his book, for which all who look with interest on the progress of this department of Surgery must heartily thank him.

**Bequests.**—Mrs. Rosetta Waddell, of Halford House, Regent's-park, has bequeathed £200 to St. Bartholomew's Hospital, and £50 each to King's College and the Charing-cross Hospitals.

## GENERAL CORRESPONDENCE.

### THE AUGUST EXAMINATION FOR THE ARMY.

[To the Editor of the Medical Times and Gazette.]

Sir,—The Director-General of the Army Medical Department has begun to advertise for candidates for the competitive examination in August next. Now, I have no hesitation in saying that if he succeeds in obtaining young men for his Department, all hope of any change in the present state of things will be gone.

I am induced to place a few facts before your readers:—

1. There are upwards of 800 Assistant-Surgeons in Her Majesty's army, and the present rate of promotion is from thirty to forty per annum.

2. The mortality amongst the very junior ranks of the Army Medical Service is so great that it attracted the attention of an eminent statist some years ago.

3. The batch of Medical candidates before the last thought so little of their prospects that they memorialised to be transferred from the British to the Indian Army.

4. The last batch of candidates is said to have been attracted by the publication of the Report of the late Committee; if so, these gentlemen will have ample time to enjoy their little illusion. One thing is quite clear—viz., their coming forward has been a sufficient reason for the Government deferring all action in the matter. I am, &c.

May 29. Sauve qui Peut!

## OBITUARY.

### DEATH OF JAMES T. ALEXANDER, ESQ.

The Edinburgh papers record the death of this gentleman, who was well known, not only as a Surgeon but as the senior magistrate of the Scottish metropolis. Bailie Alexander was an able and active magistrate, and it appears that his death was hastened by his devotion to the public service. He had been for some time suffering from organic disease, which had been kept in abeyance by strict Medical regimen. "Unhappily," says the *Daily Review*, "his anxiety to be present at the recent Licensing Court led him to disregard the restraint imposed upon him, and the symptoms of his trouble returned in a more serious form, and advanced rapidly during the past fortnight towards an unfavourable termination. He had the regular and frequent visits of Dr. Smart, and the advice of Professor Syme, Dr. Begbie, senior, and Dr. Patrick H. Watson, for consultation; but the malady was of too obstinate a character to yield to the remedial measures employed."

In his public capacity he distinguished himself by his care of the charities of the City. The same paper states that "He was one of the two trustees appointed under the settlement of the late John T. Mackenzie, Esq., of Manor-place. Along with his colleague, the late Richard Gordon, Esq., of Halmyre, he had the disposal of several thousands of pounds from Mackenzie's Trust, for charitable purposes; and at various times he granted sums of money to benevolent institutions, with discriminating liberality. He took a great interest in the Magdalene Asylum, and in the Training House for Friendless Girls; and one of the last acts of his public life was to hand over the new asylum at Dalry to the trustees free of debt, he having given £2500 to the Building Fund of that Institution. It was a most congenial occupation for Mr. Alexander to be helpful to such institutions; for though of an ardent and hasty temperament, his kindly disposition and genuine delight in being serviceable to the unfortunate was well known to all his friends, and to none better than to the poor of St. Cuthbert's parish, where he was for many years a district Surgeon. It is a good many years since a magistrate of the city has died in office; and though not of a strong constitution, Mr. Alexander was one of the last who would have been thought near the termination of his career, so full was he of cheerful animation and heartiness in all his intercourse with his friends and the public.

**The College Lectures.**—Professor Hancock will commence his course of lectures on Monday next, at 4 o'clock, in the theatre of the College of Surgeons, and deliver six lectures on the Anatomy and Surgery of the Foot.

## BOOKS RECEIVED.

The Indian Medical Gazette: a Monthly Record of Medicine, Surgery, Obstetrics, Jurisprudence, and the Collateral Sciences, and of Medical Intelligence, Indian and European. Pp. 24. Nos. 1 and 2. Wyman, Calcutta.

⁂ No. 1, January, 1866, opens with an introductory editorial, stating that, though well aware of previous failures and present impediments, the conductors of the *Indian Medical Gazette* look cheerfully to the future, and desire to make their paper "the medium of really practical knowledge," and the stimulant of good fellowship between the members of our Profession. Dr. Heckford, of Calcutta, has papers on Syphilitic Cirrhosis, Obscure Cases of Renal Disease, and Atalactasis Pulmonum. Dr. A. M. Mantell describes a male hermaphrodite, 50 years old, considered by his or her friends and himself a woman. Baboo Chatterjee gives some important statistics of tetanus for the last four years. Mr. C. P. Costello a Case of Popliteal Aneurism Cured by Combined Pressure and Flexion. An important and extraordinary case of recovery after wounds and protrusion of the intestines is recorded by Mr. J. F. Barter, who ought to report it more at length. Dr. Fleming relates the history of an abdominal aneurism. Mr. Reddie contributes interesting cases from practice. Professor Fayrer proposes that a man show should be held in Calcutta. There is a list of Indian Medical plants by Dr. Waring, whose researches into native resources are, both financially and commercially, likely to be of great benefit to the Government. The article finishes with a list of indigenous drugs by Baboo Loll Dey, extracts from European journals, and Correspondence. No. 2, February, 1866, contains several very valuable papers on Linear Extraction, by Dr. C. Macnamara; on Cholera, by Mr. Switzer; Practical Observations on European Life in India, by Mr. Macdonald; on the Physiological Effects of Quinine, by Dr. Farquhar. Cases of practice are contributed by Surgeon-Major Goldie, Mr. Dymock, and Drs. Palmer, Fayrer, and Partridge. The English correspondent's letter is interesting. The *Indian Medical Gazette* is well got up, and promises to be a success.

On Sewer Rivers. (Manchester Statistical Society.) By George Greaves, M.R.C.S., Cons. Med. Officer, to Charlton Union Hospital, Lecturer on Obstetric Medicine, formerly Lecturer on Forensic Medicine and Public Health, Manchester Royal School of Medicine. Pp. 24.

⁂ An attempt, and a successful one, too, to show that the present mode of dealing with the night soil in favour with the authorities at Manchester, is the best that could be imagined for the generation of fœcal emanations, and their retention in and about the house of the inhabitants. Manchester has a high death rate, and the author believes that it will not be materially lessened until the filth which is now retained within the majority of houses be washed away and carried, not into the rivers, but by special channels away from the city, where it may be harmless. This idea is well and solidly worked out.

A Visit to Vichy. By Prosser James, M.D. Pp. 50.

⁂ Comprises a sketch of its mineral springs, thermal establishment, and a summary account of the medicinal uses of the waters, salts, and lozenges, written in a pleasant style, and well adapted to give those who have no inclination to go deeply into matters, practical information.

## MEDICAL NEWS.

**Royal College of Surgeons of England.**—The following Members of the College, having undergone the necessary Examinations, were admitted Licentiates in Midwifery at a meeting of the Board on the 30th ult.:—

James Cotton Byles, L.S.A., Albert-terrace, Victoria-park-road, Diploma of Membership dated June 24, 1859; George Shannon, M.D. Queen's University, Ireland, Magherafett, Co. Derry, January 26, 1864; John Murray Gibbes, M.B. and M.C. Aberdeen, Sidmouth, Devon, November 15, 1865; Hugh Ferguson, Haverstock-hill, April 24, 1866; David Hawley Burn Anderson, April 24, 1866; John Mildred Creed, Melbourne, Australia, April 24, 1866; Frederick Stocks, Wakefield, April 25, 1866; William French Thurston, South Bank, Notting-hill, April 27, 1866; Joseph William Smith, Weaverham, Cheshire, April 27, 1866; Joseph Riley, Barnes, April 27, 1866; David Johnstone, Magherafett, Co. Derry, May 22, 1866; and Reuben Bolton, M.D. and M.C. Queen's University, Ireland, 1865, Bangor, Co. Down (not a Member).

It is stated that three out of the fifteen candidates failed to acquit themselves to the satisfaction of the Board.

**Apothecaries' Hall.**—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, May 24, 1866:—

Rowland Hills, Conisboro', Doncaster; Charles Aveling, St. Thomas's Hospital; Edward England Phillips, Norfolk-crescent, Bath; John Williams, Fishguard, Pembrokeshire.

The following gentlemen also on the same day passed their First Examination:—

Frederick William Salzmann, Guy's Hospital; Frederick Smith, Westminster Hospital; Thos. Henry Hickman, St. Bartholomew's Hospital.

### APPOINTMENTS.

⁂ The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

**Orton, Charles**, L.R.C.P.E., M.R.C.S. Eng., has been appointed one of the Medical Officers to the North Staffordshire Infirmary.

### BIRTHS.

**Bower.**—On May 26, at 2, Clarence-villas, Windsor, the wife of E. Bower, M.D., of a daughter.

**Grenfell.**—On May 22, at 3, Clarence-street, Penzance, the wife of Henry Grenfell, M.R.C.S., of a son.

**Middleton.**—On May 23, at Brussels, the wife of J. W. Middleton, M.D., of a daughter.

**Orton.**—On May 28, at Newcastle-under-Lyme, the wife of C. Orton, L.R.C.P., of a daughter.

**Phillips.**—On May 22, at Oxford-road, Manchester, the wife of C. D. F. Phillips, M.D., of a son.

**Spender.**—On May 21, at 37, Gay-street, Bath, the wife of J. K. Spender, M.R.C.S., of a daughter.

**Webb.**—On May 19, at 9, St. George's road, Pimlico, the wife of E. L. Webb, M.R.C.P., of a son.

### MARRIAGES.

**Ebbage—Jeaffreson.**—On May 24, at the parish church, Edmonton, T. Ebbage, F.R.C.S., of Leamington, to Amelia, elder daughter of the Rev. C. Jeaffreson, M.A.

**Hall—Firth.**—On May 24, at the parish church, Sheffield, W. Hall, M.R.C.S., to Sarah, elder daughter of W. Firth, Esq.

**Harris—Jeaffreson.**—On May 24, at the parish church, Edmonton, W. John Harris, M.R.C.S., of Worthing, to Florentia Caroline, younger daughter of the Rev. C. Jeaffreson, M.A.

**Probert—Morgan.**—On May 29, at the parish church, Bedwas, J. Probert, Surgeon Plymouth Iron Works, Merthyr Tydvil, to Anne, youngest daughter of the late T. Morgan, Esq.

### DEATHS.

**Bradshaw**, F., L.R.C.P.E., at Sierra Leone, on April 6, aged 28.

**Brougham**, S., M.R.C.S., at Falmouth, on May 20, aged 72.

**Gilleland**, W. L., M.D., at Castle-street, Hereford, on May 21.

**Ritchie**, D., M.D., at Dalgairn, Cupar Fife, N.B. [(late Deputy-Inspector-General of Her Majesty's Bombay Medical Service), on May 24.

## POOR-LAW MEDICAL SERVICE.

⁂ The area of each district is stated in acres. The population is computed according to the last census.

### RESIGNATIONS.

*Braintree Union.*—The Finchingfield District is vacant; area 8387; population 2441; salary £50 per annum.

*East Retford Union.*—Mr. Johnstone has resigned the Scrooby District; area 2572; population 373; salary £2 per annum.

*Faversham Union.*—Mr. Adams has resigned the Fourth District; area 11,640; population 3572; salary £69 per annum.

*Helston Union.*—Mr. Joseph Williams has resigned the Third District; area 18,862; population 9308; salary £53 per annum.

### APPOINTMENTS.

*Dewsbury Union.*—John Whitworth, M.R.C.S.E., L.S.A., to the Workhouse.

*Hay Union.*—Joseph E. Smith, M.R.C.S.E., L.S.A., to the Herefordshire District and the Workhouse. Adam L. Bogle, L.F.P.&S. Glas., M.R.C.S.E., to the Radnorshire District.

*South Shields Union.*—Jacob S. Denham, M.R.C.S.E., M.D.Glas., to the Workhouse.

**Parliamentary.**—In the House of Commons, on Wednesday, May 30, the Nuisances Removal Bill was read a third time and passed.

**New Distinction Conferred on a Physician.**—The *Gazette* of Friday, May 25, contains the appointment of William Mackenzie, Esq., M.D., C.B., Deputy Inspector-General of Hospitals, Madras establishment, to be a Companion of the Most Exalted Order of the Star of India.

**Usefulness of Medical Members in Parliament.**—Sir M. Farquhar was seized with an attack of illness on Monday evening, and fell down in one of the lobbies of the House of Commons. In the course of a few hours he was so far recovered as to be removed to his home under the care of Dr. Brady and Mr. Clement, M.P.'s.

**Recovery from Drowning.**—At Newport, Isle of Wight, a child of three years fell into a millstream, and was not taken out until it had been more than ten minutes in the water. It was, however, restored to life in an hour and three-quarters by Mr. Porter, who acted upon the directions of the Lifeboat Society.

**The Charterhouse.**—The Governors of the Charterhouse have appointed Dr. Frederic J. Farre, F.L.S., Physician of the Charterhouse. Dr. Farre was captain and gold medallist of Charterhouse School about the year 1822, and graduated 32nd wrangler of St. John's College, Cambridge, in 1827, proceeding M.D. in 1837. In 1838 he became F.R.C.P., in 1841, 1842, and in 1854 was a Censor of the College, and in 1846, 1847, 1848, a member of the Council. He was lecturer on Materia Medica at the College 1843-5, and is Physician and lecturer on Materia Materia to St. Bartholomew's Hospital, Consulting Physician to the London Ophthalmic Hospital and to the West City Dispensary.

College of Science for Ireland.—The Commission on the College of Science for Ireland, appointed by the Lords of the Committee of Council on Education, met on May 17, and has held several meetings during the past week. The following members attended:—The Earl of Rosse, Lord Talbot de Malahide, Dr. Carpenter, the Rev. B. M. Cowie, Professor Frankland, Mr. Gregory, M.P., Colonel Harness, R.E., Professor Huxley, Professor Jukes, Sir R. Kane, General Sabine, Professor Sullivan, Professor Tyndall, and Captain Donelly, R.E.

Sutton and another *v.* Imoff and Another.—The partner of the plaintiff in this action was Mr. John Potter Sargeant, whose name, it will be recollected, was recently erased from the list of members of the Royal College of Surgeons, and from the Medical Register. The action arose out of the transactions which led to the conviction of Sutton and Sargeant for forging the label of Messrs. Broadwood, the pianoforte manufacturers. After a protracted trial the jury separated, without being able to agree on a verdict.

Ladd *v.* Fennemore—Nisi Prius, Westminster, May 26.—This was an action brought to recover a sum of £21 for Surgical attendance upon the mother of the defendant, and services rendered in curing her of a fracture of the leg. The defendant denied his liability to pay more than seven guineas, which sum was brought into court. The plaintiff, however, claimed 20 guineas, being, as he alleged, the amount agreed upon between himself and the defendant. The defendant denied *in toto* that any such agreement as that set up had been entered into, and on this point the evidence of the plaintiff and the defendant was, as Mr. Justice Keating observed, "unhappily" contradictory. The jury found a verdict for the plaintiff for £13 13s., being the difference between the sum paid into court and the amount which the plaintiff said that the defendant had agreed to pay. Immediate execution was granted.

On May 28, at a meeting of the Royal Dublin Society, Dr. Mapother read a valuable paper on labourers' dwellings, which was followed by a discussion on the sanitary condition of the working classes, and the best means of promoting their health and comfort.

Charge of Criminal Abortion.—At the Birmingham Police Court, on May 25, Ellen Elizabeth Owen, 37, better known as Madame Owen, of Lease-lane and Summer-lane, Birmingham, herbalist; Wm. Vernon Smith, 54, Surgeon, residing in Harding-street, and Wm. Bromfield, were charged with conspiring together and inducing a young woman named Elizabeth Ellsmore, 22 years of age, to procure abortion. The girl is said to be suffering from the effects of an operation alleged to have been performed by Smith, and as her life seemed to be in danger, her deposition was taken by a magistrate. It was to the effect that she had applied to Owen at the instigation of her paramour Bromfield, and taken two quantities of pills given her by Owen, that these had produced no effect, and that then she had undergone an operation at the hands of Smith, and had been subsequently delivered of twins. The prisoners were remanded. ⁂ The girl has since died. We do not find the name of W. Vernon Smith in the Medical Directory.

Workhouse Medical Officers.—The Poor-Law Board has recently addressed to the Medical officers of the London Workhouses a series of questions concerning the present accommodation, nursing, and treatment of the sick poor in workhouse infirmaries, and having asked for suggestions on the subject, the Medical officers met on Wednesday in conference at the Freemasons' Tavern, and agreed upon certain principles which should guide their answers. A resolution was passed unanimously that pauper nurses were insufficiently trained and untrustworthy, and should be substituted by paid nurses. On the subject of space it was resolved that not less than 1000 cubic feet of air and 80 feet of area per bed could be asked for to sick paupers, that being the allowance of sick convicts, and less than the allowance of sick soldiers. In military Hospitals 1200 feet is the minimum, and the London Hospitals give from 1500 to 2000 feet. The present average in infirmaries of workhouses is about 500 feet, often less, and 30 to 40 feet of area per bed. As to light, they asked for one window to two beds, which is the military allowance. One Medical officer said that he had only one to 4½ beds, and others had less light than that. Instances were quoted by Medical officers present to illustrate the importance of having resident Medical officers, and of relieving the Medical officer from the charge of providing the drugs which he prescribes. In order to carry out these requirements and to give day rooms to the infirm it was stated that every workhouse in London would require to be considerably enlarged, and that a majority would need to be reconstructed in a manner to fit them for receiving sick persons.

Royal College of Surgeons.—The Fellows of this Institution have just received the annual invitation to attend in the hall of the College on Thursday, the 5th day of July, to proceed to the election of two Fellows into the Council in the room of Messrs. James Luke and John Hilton, who go out by rotation, but who are eligible for re-election. Enclosed in the circular are extracts from the charter relating to these elections, from which it appears that unless any new candidates are brought forward within ten days from this date (June 1), the whole will be a *pro formâ* affair, and will end in the re-election of the above-named gentlemen. The names of certain Fellows have been mentioned as likely to be nominated; but at the hour of going to press no candidates had appeared. From an examination of the roll of the Fellows, the following names appear according to seniority—viz., Messrs. Travers, Erasmus Wilson, Holthouse, Gay, Ure, De Morgan, Dixon, Hewett, and Charles Hawkins. In the provinces, appear Carden, of Worcester; Jordan, of Manchester; Jackson, of Sheffield; Parker and Middlemore, of Birmingham; Hey and Teale, of Leeds; Smith, of Bristol; Long, of Liverpool; Embleton, of Newcastle; Hammond, of Cambridge, etc.

The College Fellowship.—The first Professional examinations under the new regulations, for the Fellowship of the Royal College of Surgeons of England, commenced on Tuesday last, when six senior and four junior candidates offered themselves, to all of whom the following questions were submitted on the first day in Anatomy and Physiology, viz.:—1. Describe the head and neck of the femur, and the trochanter major in the child. What are the blood-vessels and nerves which supply them? and enumerate the changes which take place in these parts until old age. 2. Describe the various means by which the urinary organs and their appendages are maintained in their position, and all the differences which exist between them in a male child and in an adult. 3. Describe accurately the course of the tendons at the inner and outer ankle and in the sole of the foot, their insertions and relations, and all the functions these tendons perform. 4. Give an account of the structure of the spinal cord. Enumerate the experiments which have been performed with the view of ascertaining its functions. 5. Describe the minute structure of the skin and its appendages, and the functions they perform. 6. By what means is the heat of the animal body produced, regulated, and maintained? On May 31, in Pathology and Surgery:—1. Describe the causes, the symptoms, and the progress of acute inflammation and necrosis of the femur, the several means adopted by nature to effect a cure, and the Surgical aid you would employ. 2. Describe the various fractures which may occur to the neck of the femur, the trochanter major, and the acetabulum, with the symptoms and the appropriate treatment in each case. 3. How are fractures of the base of the cranium caused? What symptoms usually accompany these injuries? What effects may they produce on the brain and cerebral nerves? What treatment would you adopt? 4. Under what circumstances would you consider it advisable to perform the operation of ovariotomy? Describe what would be the best manner of proceeding, the means by which you would secure the bleeding vessels, the difficulties and the dangers which attend this operation, the after treatment, and the proportion of cases which prove fatal. 5. Under what circumstances is it necessary to remove the astralagus? Describe the difficulties which attend this operation, and the probable results. 6. Describe the various diseases of the iris and the accidents to which it is subject, the effects they produce, and the constitutional and Surgical treatment you would employ for their cure or relief.

Jacksonian Prizes.—The Council of the Royal College of Surgeons has just announced the following as the subjects for the above prizes for the present and succeeding years, viz.:—*Jacksonian Prize of Twenty Guineas.*—There are two subjects for prizes for the present year, 1866—namely, "Ovariotomy; Pathology and Diagnosis of Cases suitable for the Operation, with the Best Method of Performing it, and the Results of recorded Cases;" and "Fractures into Joints; their Modes of Union, with the Treatment and Result. The Dissertation to be illustrated by Cases, Preparations, and

Drawings." There are also two subjects for prizes for the ensuing year, 1867—namely, "The Injuries and Diseases of the Jaw, including those of the Antrum, with the Treatment by Operation or otherwise; the Dissertation to be illustrated by Preparations and Drawings;" and "The various Deformities resulting from Severe Burns on the Surface of the Body, the Structural Changes occasioned by these Injuries, the best Modes of Preventing Deformities, and the Treatment, Operative or otherwise, adapted to Correct them; the Dissertation to be illustrated by Cases, Drawings, Photographs, and Casts.——*The Collegial Triennial Anatomical Prize of Fifty Guineas.*—The subject of this prize is "The Anatomical Structure of those parts of the Eyeball which are contained within the Sclerotic and Cornea; with illustrations drawn from each of the Five Great Divisions of the Vertebrata." The dissertations for these prizes are to be sent in on or before Christmas Day, 1866 and 1867 respectively.

PRESENTATION TO A MEMBER OF THE MEDICAL PROFESSION.—The members of the Liverpool Medical Institution have recently presented a valedictory address to James Dawson, Esq., F.R.C.S., of Wray Castle, Windermere, who was one of the chief promoters in founding the Institution some thirty years ago, and who has ever since maintained a warm interest in its progress—having on several occasions given liberal donations towards different objects for the improvement of the building. The address, engrossed on vellum and illuminated in the highest style of art by Messrs. W. and J. Audsley, of Liverpool, and handsomely bound in morocco, was as follows:—"To James Dawson, Esq., F.R.C.S. We, the undersigned, members of the Liverpool Medical Institution, cannot allow the occasion of your ceasing to hold the office of President to pass away without recording our high appreciation of the valuable services you have rendered in the long period of twenty-six years during which you have occupied that important official position. We desire gratefully to acknowledge the cordial co-operation and the substantial aid you have from time to time afforded us in carrying out various efforts to increase the efficiency of the Institution with the rise and progress of which your name has been so honourably and so usefully identified; and we gladly avail ourselves of this opportunity of recognising the due regard for the duties as well as for the privileges of Professional reputation and success evinced by you, in thus maintaining in your retirement from the active duties of your Profession, and in the removal from the scene of your early labours, an unceasing interest in the prosperity of a Society which has proved so valuable and so useful to the Medical Profession of your native town. With every sincere wish that you may yet be spared to enjoy much happiness in your peaceful retirement. We remain, dear Sir, your faithfully." (Here follow eighty-seven signatures.

THE following are the last week's Cattle Plague Returns.

| Census Divisions. | 1. Attacked. | | | Back cases reported in the week ending May 19, 1866. | 2. Result of reported Cases from the Commencement of the disease. | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Week ending May 5. | Week ending May 12. | Week ending May 19. | | Attacked. | Killed. | Died. | Recovered. | Unaccounted for. |
| Metropolitan Dist. | 14 | 10 | 11 | .. | 7980 | 3492 | 3717 | 318 | 453 |
| South Eastern Co. . | .. | .. | .. | .. | 4853 | 1681 | 2537 | 465 | 170 |
| South Midland Co. | 242 | 221 | 203 | 48 | 19990 | 8012 | 10056 | 1536 | 386 |
| Eastern Counties . | 74 | 80 | 73 | 1 | 11279 | 5264 | 4831 | 788 | 396 |
| South Western Co. | 1 | .. | 1 | .. | 1686 | 618 | 791 | 206 | 71 |
| West Midland Co. . | 275 | 247 | 216 | 85 | 14035 | 5543 | 6077 | 1452 | 963 |
| North Midland Co. | 433 | 446 | 378 | 279 | 18143 | 10141 | 6244 | 1216 | 542 |
| North Western Co. | 541 | 490 | 761 | 2485 | 65839 | 19516 | 34933 | 7515 | 3875 |
| Yorkshire . . | 203 | 146 | 144 | 25 | 34235 | 7599 | 18343 | 5930 | 2363 |
| Northern Counties. | 110 | 129 | 42 | 19 | 8507 | 4802 | 2613 | 974 | 118 |
| Monmouthshire & Wales . . . | 37 | 81 | 48 | .. | 8141 | 1001 | 5790 | 1053 | 297 |
| Scotland . . | 77 | 62 | 55 | 47 | 46681 | 6096 | 28075 | 10696 | 1814 |
| Totals . | 2007 | 1912 | 1932 | 2989 | 241369 | 73765 | 124097 | 32149 | 11448 |

This Return shows that 1932 attacks were reported to have occurred during the week ended May 19, being an increase of 20 on the previous week.

A considerable, but varying, number of "back cases" are reported every week. These cases, however, do not necessarily relate to the previous week only; they generally comprehend arrears of from six to eight weeks, and, in some instances, a longer period.

*Note.*—4 Inspectors who reported cases last week have not reported in time for this return—viz., for the county of Cambridge, 2; Cumberland 1; and Salop, 1. These inspectors returned 51 cases last week.

# NOTES, QUERIES, AND REPLIES.

◆

He that questioneth much shall learn much.—*Bacon.*

We are compelled to postpone Dr. Beale's reply to Dr. Moxon's observations till next week.

*A Candidate.*—The list of those gentlemen who underwent the examinations on Tuesday, Wednesday, and Thursday for the Fellowship of the College of Surgeons cannot be published until after the names have been submitted to the Council by the Court of Examiners.

*A Reader.*—Whilst there are in Dublin such eminent Surgeons as Mr. Hargrave, Mr. Butcher, Mr. Tufnel, Mr. Smyly, and others, it would be extreme presumption on our parts to prescribe for you without seeing the case.

*A Provincial Fellow.*—You will not be entitled to vote at the ensuing election, in consequence of not having signed the bye-laws. We are informed that a great number of Fellows have neglected this duty. Write at once to the Secretary, who will let you know at what meeting you can attend for this purpose before July 5.

*Curiosus.*—See a very amusing book called "Life in Normandy." You will find there an account of the *poulp pieuvre*, *alias* gigantic cuttlefish, *alias* kraken. That such a creature could drown and eat a man, or sink a ship, is quite certain, if it were large enough. It is merely a question of dimensions.

*Mr. Thelwall, Farndon.*—Nothing can be done. The woman's death seems accounted for, and there is no charge against any one. There is consequently no *locus standi.* The conduct of the legal authority does not seem to have been courteous towards the Medical attendants nor such as to secure the fullest account of the facts; but the one point is a matter of taste; for the other he is responsible to the Court of Queen's Bench, if it were worth while to apply to that Court, which it seems not to be.

### THE ARMSTRONG TESTIMONIAL—RUDMAN *v.* ARMSTRONG.

The following subscription has been received—A Sympathiser, Bermondsey, 10s.

### CHOLERA LITERATURE.

*Book Notices.*—The lengthened reports which we have felt it expedient to give of the debates in the Medical Council have sadly interfered with our duties, so far as they relate to notices of new books and pamphlets. Cholera literature begins to accumulate, whether relating to theory, prevention, or treatment. Dr. *Duncan*, of Kirkcaldy, sends us a sensible pamphlet on Sulphurous Acid Gas as Prophylactic and Curative.—Dr. *Hearne*, of Southampton, strenuously argues for the Non-Contagiousness of Cholera, and the Absurdity of Quarantine. We would refer Dr. Hearne to some most able Memoranda on Asiatic Cholera by Dr. *Wm. Budd*, a Physician whose sagacity is now beginning to be appreciated. Dr. Budd originated the doctrine that cholera (and typhoid) spread by the diffusion of the excretions of the patients. Dr. Hearne will, we think, find all his exceptional and non-contagious cases accounted for by Dr. Budd. "A Memorandum of a Plan of United Action in the Case of an Epidemic of Cholera to be Communicated to Vestries and District Boards by the Metropolitan Medical Officers of Health" blows a loud blast in harmony with Dr. Budd. It bears the *imprimatur* of about forty Medical Officers of Health, and seems to have been drawn up with great care.—Dr. *Burrall* sends a very practical and sensible little volume on Asiatic Cholera (W. Wood and Co., New York)—quite a *resumé* for the practical man who wants to know what to believe and do. He does full justice to English writers.—Mr. *Harry Leach* gives us some Brief Notes of the last Epidemic of Cholera in Turkey. Non-intercourse and treatment of diarrhœa are well insisted on as preventives. Dr. R. J. *Spitta*, M.D. Lond., has issued some Brief Remarks on Cholera, with Practical Rules. He believes that the cholera poison enters the alimentary canal; that there it excites local symptoms, intense irritation, sickness, purging, rice-water stools, etc.; but that, if absorbed into the blood, it there produces the real blue Asiatic cholera, with its symptoms of collapse. Hence the treatment of the premonitory stage is one thing, that of the true cholera blood disease another. Dr. Spitta's pamphlet is so clear, logical, and sensible, that it is well worth a shilling, more particularly as it is short and can be read and digested in ten minutes. Dr. *Austin Flint's* Lecture on the Theory of Elimination as applied to epidemic cholera in the *Medical Record* of New York, May 1, 1866, is a well-planned, heavy, and well-delivered blow at Dr. G. Johnson's theories. He believes "that the practice which the theory of elimination requires is likely to lead to an incalculable loss of life." The current numbers of the same journal contain a series of lectures on cholera by *Dr. A. Clark*, in which Dr. Johnson's views of collapse are treated with great respect, as deserving full criticism, but not absolute acquiescence. Dr. Clark evidently is not satisfied as to the state of the lungs—the very corner-stone of Dr. Johnson's theory, and says, "In a somewhat critical examination of the reports of the post-mortem examinations of many Physicians intrusted with Cholera Hospitals the possibility of 'extreme anæmia' of the lungs in the algide stage had not occurred to my mind till I saw the papers of Dr. Johnson."—*L'Union Médicale* contains an interesting abstract of recent cholera literature in France.

### ON THE PRESERVATION OF VACCINE LYMPH.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—It is satisfactory to find from your editorial abstract that Dr. Müller, of the Berlin Vaccine Institution, has made practical observations upon the best way of attaining to so important a result as the preservation and storing of vaccine lymph, which observations agree exactly with my own, published exactly sixteen years ago in your journal. I enclose copies of several such communications upon the subject for your perusal, leaving you to decide whether their republication at this time would be attended by any public advantage. It seems to me that no more valuable use could be made of your pages than by opening them in any way you prefer, for the investigation of the best methods of providing for the supply of vaccine lymph, which question is quite the initial problem for the framers of Vaccination Acts to settle.

As soon as I had carefully proved that mixing the vaccine virus with pure glycerine did not (if properly done) impair its efficacy, I called the attention of the Presidents of the London Colleges of Physicians and Surgeons (the late Dr. Paris and Mr. Cæsar Hawkins) to the case of a child I vaccinated with lymph mixed with glycerine six months previously. This was, in every respect, a genuine, well-developed case of the vaccine disease. Since that period I have had no communication upon this subject with any persons officially connected with the Vaccine Board; but now that Dr. Müller is working in the same field, this very important matter is likely to be thoroughly canvassed, and it will, probably, be determined by those whose duty it is to look into it, whether we propose a practicable and safe solution of this question of supply. I have, in common with many of my Medical friends, who could bear testimony to the fact, over and over again proved the comfort and advantage of possessing a reliable stock of lymph during the prevalence of epidemic small-pox. To be spared also, even in ordinary times, the constantly recurring annoyance of seeking for wet lymph in a hurry, and very often unsuccessfully, will be deemed no small boon by the harassed Practitioner, Poor-law or private. Moreover, to be enabled from the same stock of preserved lymph to supply a friend in his emergency is a peculiar satisfaction. I have little to add to the account you published of my mode of procedure, though, of course, long practice gives more accuracy in carrying it out. I prefer (though I do not attach much importance to this) the use of undiluted glycerine for admixture with the lymph. Put into a bottle and immersed in hot water for a few moments, it loses its syrupy consistence and becomes quite limpid and fit for mixing. The tendency of the mixed lymph, however, being to thicken again by keeping, it may readily be rendered moister, when any portion of the stock is wanted for use, by holding such portion over the steam of hot water, or by breathing upon it; then a stir with the point of a silver probe perfects it.

I am, &c.,

27, Nottingham-place, W., May 24. R. R. CHEYNE, F.R.C.S.

COMMUNICATIONS have been received from—

J. JACKSON; G. S. BRADY; A READER; W. THELWALL; PATHOLOGICAL SOCIETY; EPIDEMIOLOGICAL SOCIETY; APOTHECARIES' HALL; C. B. GARRETT, M.D.; W. PARKER, M.D.; INQUIRER; W. O. EASTWOOD, M.D.; R R. CHEYNE.

BOOKS RECEIVED—

Turner on Malformations of the Organs of Generation—Dr. Dewar on the Application of Sulphuric Acid Gas to the Prevention of Contagious Diseases—Memorandum on a Plan of United Action in the Case of an Epidemic of Cholera—Dr. Hearne, Cholera Non-Contagious, and the Absurdity of Quarantine Regulations Demonstrated—Waring on the Purgative Action of Certain Euphorbiacious Seeds—The American Medical Journal, April—The New York Medical Journal, April—Spetta's Brief Remarks on Cholera—Leach's Brief Notes on the last Epidemic of Cholera in Turkey—Williams on the Recent Advances in Ophthalmic Science—Edwards's Tables of Patients under Treatment in St. Bartholomew's Hospital—Burrell on Asiatic Cholera—The Poor-Law Surgeon's Vade Mecum—Macadam's Chemistry of Common Things—Hartwig's Harmonies of Nature—Macpherson on Cholera in its Home—Squire's Companion to the Pharmacopœia—The First Annual Report of the Staffordshire Lunatic Asylum—Thomson's Notes on the Prison Dietaries in Scotland—Basham on Dropsy—Bogg's Thèse pour le Doctorat en Medécine—The Australian Medical Journal, March—Dunn on the Mercurial and Non-Mercurial Treatment of Syphilis—Annandale on Surgical Appliances and Minor Surgery—Browne on Sisterhoods in Asylums.

## VITAL STATISTICS OF LONDON.

*Week ending Saturday, May 26, 1866.*

### BIRTHS.

Births of Boys, 1022; Girls, 963; Total, 1985.
Average of 10 corresponding weeks, 1856-65, 1819·5.

### DEATHS.

| | Males. | Females. | Total. |
|---|---|---|---|
| Deaths during the week .. .. .. | 805 | 723 | 1528 |
| Average of the ten years 1856-65 .. .. | 590·1 | 546·4 | 1136·5 |
| Average corrected to increased population.. | .. | .. | 1250 |
| Deaths of people above 90 .. .. .. | .. | .. | .. |

### DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

| | Population, 1861. | Small pox. | Measles. | Scarlatina. | Diphtheria. | Whooping-cough. | Typhus. | Diarrhœa. |
|---|---|---|---|---|---|---|---|---|
| West .. | 463,388 | 1 | 7 | 4 | 1 | 11 | 8 | 2 |
| North .. | 618,210 | 10 | 7 | 4 | 2 | 19 | 16 | 2 |
| Central .. | 378,058 | 3 | 7 | — | — | 12 | 11 | 2 |
| East .. | 571,158 | 9 | 18 | 8 | 2 | 18 | 16 | 4 |
| South .. | 773,175 | 5 | 22 | 8 | — | 48 | 9 | 6 |
| Total .. | 2,808,989 | 28 | 61 | 19 | 5 | 108 | 55 | 16 |

### METEOROLOGY.

*From Observations at the Greenwich Observatory.*

| | |
|---|---|
| Mean height of barometer .. .. .. .. .. .. .. | 29·836 in. |
| Mean temperature .. .. .. .. .. .. .. | 52·0 |
| Highest point of thermometer .. .. .. .. .. | 68 9 |
| Lowest point of thermometer .. .. .. .. .. | 37 8 |
| Mean dew-point temperature .. .. .. .. .. | 40·0 |
| General direction of wind .. .. .. .. .. | E.,N.E.,E.N.E. |
| Whole amount of rain in the week .. .. .. .. | 0·00 |

### BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, May 26, 1866, in the following large Towns:—

| Boroughs, etc. | Estimated Population in middle of the Year 1866. | Persons to an Acre. (1866.) | Births Registered during the week ending May 26. | Deaths. Corrected Average Weekly Number.* | Deaths. Registered during the week ending May 26. | Temperature of Air (Fahr.) Highest during the Week. | Temperature of Air (Fahr.) Lowest during the Week. | Temperature of Air (Fahr.) Weekly Mean of the Mean Daily Values. | Rain Fall. In Inches. | Rain Fall. In Tons per Acre. |
|---|---|---|---|---|---|---|---|---|---|---|
| London (Metropolis) | 3067536 | 39·3 | 1985 | 1400 | 1528 | 68·9 | 37·8 | 52·0 | 0·00 | 0 |
| Bristol (City) . . | 163680 | 34·9 | 104 | 73 | ‡84 | 71·7 | 40·4 | 53·5 | 0·02 | 2 |
| Birmingham (Boro') | 335798 | 42·9 | 222 | 163 | 123 | 70·7 | 38·5 | 52·9 | 0·00 | 0 |
| Liverpool (Borough) | 484337 | 94·8 | 326 | 281 | 371 | 70·1 | 42·6 | 54·5 | 0·00 | 0 |
| Manchester (City) . | 358855 | 80·0 | 168 | 203 | ‡158 | 74·8 | 34·0 | 54·5 | 0·00 | 0 |
| Salford (Borough) . | 112904 | 21·8 | 76 | 57 | 84 | 72·1 | 38·2 | 53·3 | 0·00 | 0 |
| Sheffield (Borough) . | 218257 | 9·6 | 165 | 115 | 155 | 70·6 | 37·2 | 50·9 | 0·00 | 0 |
| Leeds (Borough) . | 228187 | 10·6 | 231 | 116 | 155 | 74·0 | 33·5 | 51·7 | 0·00 | 0 |
| Hull (Borough) . | 105233 | 29·5 | 76 | 49 | 54 | .. | .. | .. | .. | .. |
| Nwcastl-on-Tyne, do. | 122277 | 22·9 | 73 | 65 | 64 | 66·0 | 40·0 | 52·3 | 0·00 | 0 |
| Edinburgh (City) . | 175128 | 39·6 | 106 | 84 | 92 | 76·7 | 36·0 | 53·9 | 0·00 | 0 |
| Glasgow (City) . . | 432265 | 85·4 | 371 | 252 | 239 | 69·6 | 38·5 | 53·6 | 0·00 | 0 |
| Dublin (City and some suburbs) . | 318437 | 32·7 | 190 | †156 | 152 | 70·4 | 36·2 | 52·7 | 0·00 | 0 |
| Total of 13 large Towns . . . | 6122894 | 34·4 | 4093 | 3014 | 3259 | 76·7 | 33·5 | 53·0 | 0·00 | 0 |
| Vienna (City) . . | (1863)<br>560000 | .. | .. | .. | Week ending May 19.<br>396 | Week ending May 19.<br>.. | .. | §<br>49·6 | .. | .. |

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·886 in. The reading rose to 30·23 in. on Monday, and fell to 29·46 in. on Saturday.

The direction of the wind was chiefly north-east.

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* The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.

† Registration did not commence in Ireland till January 1, 1864; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in that city were the same as the averages of the rates in the other towns.

‡ The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

§ The mean temperature at Greenwich during the same week was 48·1°.

## APPOINTMENTS FOR THE WEEK.

*June 2. Saturday (this day).*

*Operations* at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free Hospital, 1½ p m.

ROYAL INSTITUTION, 3 p.m. Professor Huxley, "On Ethnology."

4. *Monday.*

*Operations* at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.

EPIDEMIOLOGICAL SOCIETY, 8 p.m. Election of Officers. Dr. Dickson, R.N., "On Scurvy in the Merchant Navy."

ODONTOLOGICAL SOCIETY, 8 p.m. Meeting.

ROYAL INSTITUTION, 2 p.m. General Monthly Meeting.

5. *Tuesday.*

*Operations* at Guy's, 1 p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; St. Peter's Hospital for Stone, 3 p.m.

ANTHROPOLOGICAL SOCIETY OF LONDON, 8 p.m. Meeting.

ROYAL INSTITUTION, 3 p.m. Professor Ansted, "On the Application of Physical Geography and Geology to the Fine Arts."

6. *Wednesday.*

*Operations* at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m. Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.

7. *Thursday.*

*Operations* at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.

ROYAL INSTITUTION, 3 p.m. Professor Huxley, "On Ethnology."

8. *Friday.*

*Operations*, Westminster Ophthalmic, 1½ p.m.

ROYAL INSTITUTION, 8 p.m. Professor Frankland, "On the Source of Muscular Power."

# GENERAL MEDICAL COUNCIL.

### NINTH DAY.—SATURDAY, MAY 26.

The Council resumed its sitting to-day at one o'clock.

The minutes of the previous meeting were read and confirmed.

The **PRESIDENT** mentioned that a letter had been received from Mr. Ouvry, their solicitor, addressed to the Registrar, in which he said he had delivered the President's letter to Sir George Grey's private secretary, and impressed upon him the importance of an early appointment being made.

The first business on the programme was the adjourned consideration of the Report of the Pharmacopœia Committee.

The **PRESIDENT** reminded the Council that they dispersed on the previous evening when Dr. Apjohn was in the middle of his speech on this Report, and that accordingly he (Dr. Apjohn) should have resumed his statement this morning, but as he had not yet arrived the better course would be to go on with the consideration of certain portions of the Report, and when Dr. Apjohn arrived he could continue his observations. He (the President) had found the original copy of the memorial from the Chemical Society, which had been mislaid, and as considerable importance was attached to this document, and as it would tend to illumine the discussion on this subject, he would call upon the Registrar to read it for the benefit of all of them.

The **REGISTRAR** then read the letter in question. [A copy of this document appears in Dr. Apjohn's statement of the previous day, and therefore it is not necessary to reproduce it here.]

On the motion of Dr. **QUAIN**, seconded by Dr. **STORRAR**, it was resolved that this memorial be entered on the minutes.

Sir **DOMINIC CORRIGAN** asked for an explanation of the last paragraph of the Committee's Report, in which they stated "that they had not hitherto had occasion to draw upon any portion of the funds placed at their disposal by order of the Council." The import of that seemed to be that, although they had not withdrawn any portion of the funds, yet some liabilities had been incurred; and if it were so that should be stated.

Dr. **QUAIN** said the Committee had not incurred any liability whatever.

Dr. A. **SMITH** thought any person reading the Report would draw the same conclusion from the last paragraph as Sir Dominic Corrigan had done. His anxiety was that there should be no misconception out of doors.

The **PRESIDENT** intimated that they had better consider, in the first place, how far it would be practicable to alter the resolution passed last year, to the effect that it was desirable to have a proof copy of the Pharmacopœia in the hands of the members of the Council at least a month before their meeting, so as to meet the altered circumstances of the case.

Dr. **STORRAR** said a resolution had been placed in his hands which expressed the views of some of the members of the Committee. It was as follows:—"That as soon as the proof of the new edition of the Pharmacopœia is ready a copy of it be sent to each member of the Council, with instructions that he will, within one month, return it to the Secretary of the Pharmacopœia Committee, with such observations as he shall see fit to make thereon, to be submitted to the Pharmacopœia Committee; and that the Pharmacopœia Committee shall, after due consideration of such observations, hand over the proof, when finally approved, to the Executive Committee for publication." He then moved the adoption of this resolution.

Dr. **ALDERSON** seconded the motion, which was at once agreed to.

Dr. **APJOHN** entered the room at this stage of the proceedings, and after some little recrimination between the members of the Committee on a point of no public moment, and which seemed to arise out of a misunderstanding, he resumed his statement. After referring cursorily to what he stated on Friday, he considered the class-books in general use, wherein, he said, they had the fact confirmed that the teaching of chemistry on the unitary system had made but little progress. An excellent treatise on chemistry was published some years since by Abel and Bloxam, and much used by students in this city and elsewhere, and in it formulæ were used in accordance with the old table of equivalents. But the most comprehensive work (and in many respects it was an admirable one) was the treatise of Dr. Miller himself, which was found in the hands of almost every student. They would, no doubt, be anxious to know what was his system of notation. Until a very recent period he (Dr. Miller) did not teach chemistry on unitary principles, and of the three volumes of which his work consisted, one alone—the second—appeared at present in the unitary dress. These facts, he thought, did not sustain the statement in the letter of the President of the Chemical Society that "the system of notation at present adopted in the British Pharmacopœia is constructed in conformity with views which are rapidly disappearing from chemical teaching in this country." He should now turn to other evidence in support of the view of the subject which he had taken, and which he was desirous should be sanctioned by the authority of the Council. He held in his hand one of the most important and valuable works on theoretical and practical chemistry which had ever appeared in this country—namely, the "Dictionary of Chemistry and the Allied Branches of other Sciences," by Mr. Henry Watts. Many of those present were no doubt acquainted with the comprehensive nature of this Dictionary, and of the ability with which, generally speaking, the different articles had been written, and it was obviously not out of place to inquire how Mr. Watts had dealt with the question of notation. He would explain to the Council in his (Mr. Watts's) own words the course which, after due deliberation, he had thought it necessary to adopt, and the various reasons by which he had been actuated in taking this course. Mr. Watts said:—"In order that the work may, as far as possible, truly represent the present state of scientific chemistry, it has been found absolutely necessary to make the modern or 'unitary' scale of atomic weights the basis of the system of notation and mode of exposition adopted. Especial care has, however, been taken that the treatment of all articles which are likely to be consulted, for the sake of practical information, by manufacturers or others not exclusively employed in chemical pursuits, shall be such as to make them readily intelligible to all who possess a general knowledge of Chemistry, though they may not have followed closely the recent developments of the theoretical parts of the science. Hence, in all such articles as acetic acid, antimony, copper, etc., the formulæ were given according to the old notation, as well as according to that which is adopted in the rest of the work." The authority here quoted was one of considerable weight. It bore very expressly upon the course which he intended to propose, and he trusted it would receive more attention from the Council than had been accorded to it by the Pharmacopœia Committee, upon whom it did not seem to make any impression. It was not necessary to embark upon a discussion of the merits of the unitary system. The President and members of the Chemical Society did not require them to adopt a system which (to use their own words) "is still under discussion." What they did ask of them was to forego the use of symbols and equivalents altogether until the discussion was closed, lest the adoption of the ordinary system should retard the progress of certain views which those gentlemen entertained, and to which they attached immense importance. He had no antipathy whatever to these unitary views, and would say nothing against them, except that they involved more of hypothesis than those they were intended to displace, that they were with much more difficulty acquired by the student, and that forty-nine-fiftieths of existing chemists were unacquainted with them. That he had no insurmountable objection to unitary chemistry might, he thought, be inferred from the fact that in a letter he had written to Professor Miller, in reply to one which he received from him in relation to his letter to the President of the Medical Council, he had declared his readiness to support a proposition for giving in the Pharmacopœia the new formulæ as well as the old, of placing them side by side, and of thus allowing teachers and students to elect which of the two they would use. He had even gone further than this, and stated to Professor Miller that he would prefer the adoption of the unitary views in their integrity to the very retrograde proposition of banishing entirely from the Pharmacopœia the use of equivalents and symbolic notation. If this latter proposition should be carried out, their national formulary would be a sort of list of secret medicines, which might with propriety emanate from a college of quacks, but would be quite unworthy of the British Medical Council. He might, no doubt, be told that the constitution of therapeutic compounds might be expressed by the old percentage or numerical method; but would any person competent to express an opinion on the subject venture to assert that that method was comparable with that in which a formula was used? Every candid person would acknowledge the vast superiority of the latter by reason of its brevity, its clearness, the facility with which it was retained in the memory, and the facility which it gave to their explanation of the reactions of chemical substances on each other in the processes by which several pharmaceutic compounds were prepared. But there was another phase of the question to which he would solicit attention. The President and Council of the Chemical Society might correctly state that "the Pharmacopœia was necessarily the test-book on which the examinations of students of Medicine and pharmaceutical pharmacy were based." Such was unquestionably the case; and from it he adduced the conclusion that they could not banish from the Pharmacopœia such practical results of the fundamental doctrines of chemical science as atomic weights and symbolic formulæ without bringing the standard of chemical knowledge for Medical students to a very low level indeed. These views he had attempted to enforce upon the other members of the Pharmacopœia Committee, but without success. He thought he had made some impression upon Dr. Sharpey; but even he voted against him. With respect to Dr. Christison, whose abilities and attainments he respected, he did not expect any support from him; for some years since, before the appointment of Professor Playfair to the chair of Chemistry in the University of Edinburgh, he had heard him state that he did not consider it necessary that Medical students should be acquainted with symbols, and that such knowledge was not required of them at the degree examination. As respected Dr. Quain, the remaining member of the Committee, he certainly did not anticipate any assistance from him in relation to the question under consideration; nor could he do more than conjecture how he would have voted, for when matters were ripe for a division he (Dr. Quain) had a Professional call, and the winding-up of matters was left to the other members of the Committee. The result he had already stated to them; and, dissenting from it on grounds which he considered warrantable, he had brought his appeal before this Council. In pursuance of the course he had taken, he now begged to propose the following resolution —"That it be an instruction to the Pharmacopæia Committee to give for each therapeutic compound, of definite constitution, occurring in the forthcoming edition of the Pharmacopœia, two formulæ—the first being that in ordinary use at present, the second being one constructed in accordance with the more recent views of what is called the 'unitary system.'"

**Dr. A. Smith** seconded the resolution.

**Dr. Andrew Wood** said he had made up his mind that if the old notation was to be adhered to he could not vote for it, because if the new notation was to take its place, as he had reason to believe it eventually would, and they adopted the old notation, they would be actually putting a drag on the knowledge of students and keeping them back; whereas, if they put in both systems of notation, the student would have them before him, whichever prevailed. He thought the Pharmacopœia would suffer in a scientific point of view if either was left out altogether.

**Dr. Christison** said that from what he had seen of the Pharmacopœia, all the proofs of which, with the exception of the Appendix, had passed through his hands, he felt convinced that if it was not satisfactory to the Medical Profession, it ought to be. In the former Pharmacopœia there were a few very decided errors; but from very careful inquiry amongst his friends in Scotland and Ireland he found that the new edition was deemed satisfactory generally by Practitioners. Throughout England there was a growing inclination to esteem their Pharmacopœia much higher than at first. He thought a great deal of the opposition manifested at the outset arose from the inevitable fact that Practitioners were obliged to depart from the old practice and to take up with the new. The Medical Profession would be reconciled to these changes by lapse of time; and so far as he could see the second edition of the Pharmacopœia would be welcomed generally by the Profession. When the Pharmacopœia under which Practitioners and druggists were at present prescribing was first methodised, the question of the introduction of chemical notation was agitated. Dr. Apjohn had alleged that the students of the Edinburgh University were not examined in, and not acquainted with chemical notation. That was a very strong statement, and was not true. The students of the Edinburgh University were not only examined in chemical notation, but were exceedingly well acquainted with it. In taking up the Report of Dr. Andrew Wood and Dr. Alexander Wood who formed the deputation of the Scottish Branch Council on examinations for degrees in Medicine in the University of Edinburgh, he found that one of the questions propounded by the Professor of Chemistry was, "solve the following equations, putting the proper values in the place of m and n:—

1. $nHCl + SbS_3 =$
2. $Fe_2O_3 3SO_3 + mNH_3 + nHO =$
3. $Ag + nHOSO_3 =$

**Dr. Apjohn** said his observations referred to a period anterior to the appointment of the present Professor.

**Dr. Christison** would come to what was of more consequence—namely, the merits of the question. He thought their Pharmacopœia should be a scientifically practical book, but not overloaded with what was merely scientific, and not of direct practical use for the Practitioner in Medicine and Pharmacy. Dr. Apjohn had stated that the Pharmaceutical Chemists, of Dublin, used the chemical notation, but he (Dr. Christison) doubted whether that was really the case. It was stated that various chemical teachers finding this in the Pharmacopœia were obliged to use the old symbols when they did not believe in them, but that certainly appeared to him to be very hard indeed upon the teacher. When the question of symbols came before them under the jurisdiction of the present Committee, there was a great deal of good-humoured discussion upon the subject, and luckily it occurred to some one that as the French Pharmaceutists were occupied with the Parisian Codex the Committee should agree to do just what the French were doing. That was the compromise they came to. A short time afterwards there came this remarkable letter from the President of the Chemical Society, not asking them to decide which notation should be introduced, or whether they should introduce two or more notations, but impressing upon them the desirableness of dispensing with the use of chemical symbols altogether. He begged the Council to observe who were the authorities who had given this opinion. They were all the principal authorities in chemistry in Great Britain; there were very few chemists, indeed, of any note who were not members of that Society. If that letter had been received at the time the Committee came to compromise, he should not have fallen in with that compromise, but should have resolved to leave to far better judges than they (the Committee) were, to decide what symbols should be adopted in chemical symbolical representation. After much discussion, the Committee came to the opinion that his view was right, and that chemical notation should be avoided in the present edition of the Pharmacopœia. Dr. Apjohn still differing from this view, he (Dr. Christison) proposed that Professor Redwood should be called in. There were very few men in the country who united so accurate a knowledge of chemistry, not only its science but its practical details, with an accurate knowledge of Pharmacy, or who was better acquainted with the condition of the chemical schools of the country than Professor Redwood. Having the whole case put before him, he did not state that he thought one thing or another, but he gave them a positive opinion that under present circumstances he would strongly recommend them not to introduce any symbolic notation in the Pharmacopœia. In the face of these expressions of opinion, how could the Pharmacopœia Committee come to any other conclusion than that to which they arrived—namely, that they had better wash their hands of this symbolic notation? This notation would give a colourable scientific appearance to the work, but why give scientific formulæ which were not of practical utility? It was said that it was a good exercise for students, but the Pharmacopœia was not designed to teach chemistry; it was produced to teach Pharmaceutical chemists how they were to prepare Physicians' and Surgeons' prescriptions, and the strength of the various articles they were in the habit of dispensing. Under these circumstances, he said he did not see any reason to alter the opinion he had formed upon this subject.

**Dr. Apjohn** was rather surprised, he said, at the course Dr. Christison had taken. It was very obvious that he (Dr. Christison) had changed his opinion, and the only way in which that change could be understood was in virtue of the force of the memorial from the Chemical Society.

After some further observations, the resolution was put to the Council, and carried, there being 11 votes for and 8 against.

**Dr. Acland** desired to submit an instruction to the Pharmacopœia Committee with a view of getting rid of a difficulty which, he was told, might occupy some time if brought on in any other way. His motion was, "That it be an instruction to the Pharmacopœia Committee to take steps to ascertain whether any or what limits have been imposed by the Medical Acts on the reports and investigations which the General Medical Council might see fit to obtain, or direct, into the properties of the medicines and compounds of which the Council is required to furnish a list, and especially whether the Council is limited by the Act to inquiries as to the composition of articles in Materia Medica, and the means of preparing and compounding them." He said he wished to avoid taking legal opinion, and should be satisfied with the decision arrived at by the Pharmacopœia Committee. The Act desired them to make "a book containing a list of medicines and compounds, and the manner of preparing them, together with the true weight and measures by which they were to be prepared and mixed; and containing such other matters and things relating thereto as the General Council shall think fit." So that he could not conceive the Committee would require legal opinion. It rested with them entirely to do as they "think fit." He hoped the Council would not think he was "stealing a march" upon them by bringing this forward at the present time.

Dr. Paget seconded the proposition.

Sir D. J. Corrigan suggested that Dr. Acland should withdraw this motion, as the Pharmacopœia Committee had quite enough on their hands without getting legal opinions.

Dr. Christison stated that there was an important branch of the inquiries referred to in the motion of Dr. Acland, to which he thought no doubt could exist the Council possessed the power of applying their funds. This was—inquiries by physiological experiment, for the purpose of determining the conditions of vegetation, modes of preparation, and means of preservation, by which vegetable remedies might always possess due strength, and, above all, uniformity of strength. Such inquiries might be conducted by experiments with Medicinal doses upon the functions of the human body, but more generally with poisonous doses of the more potent vegetable remedies on animals, the results in the latter way being more free from fallacy. Inquiries of this kind were much needed in the present day, because most of the rules for collecting, preparing, and preserving vegetable remedies were loose, unsatisfactory, and not a few erroneous. He had turned his attention many years ago to the subject, when he had more leisure than now for such researches, and had since returned to it from time to time. The results he obtained certainly astonished him, and convinced him that the whole matter required new and more exact investigation. He would venture to detain the Council with a single illustration. In the first edition of his work on Toxicology, published in 1814, Orfila mentioned that he had found many old extracts of powerful vegetables inert, or nearly so, as met with in the shops of the pharmaceutic chemists of Paris. The experiments of Orfila to this effect created a great distrust of the form of extract in the case of active medicinal plants, whose active parts had thus been proved to be very fugacious; and, although improved methods of preparing extracts had since improved undoubtedly both their strength at the first, and likewise their endurance, all well-informed Physicians still entertained, not without reason, great distrust of extracts, and of other preparations derived from extracts. Recently, however, he had himself found that, under certain conditions of preparation, even the extracts which Orfila had ascertained to be fugacious retained their virtues apparently for a very long time unimpaired. Many years ago he found that a carefully-prepared alcoholic extract of hemlock,—a plant whose properties assuredly were very apt to be lost in various circumstances,—was not in the slightest degree impaired in energy, as a poison to the lower animals, in the course of nine years. Last winter he made trial of two extracts of hyoscyamus prepared twenty years ago—the one from the annual, the other from the biennial variety of *Hyoscyamus Niger*, by the late Mr. Jacob Bell in the now usual way by evaporation of the expressed juice, with constant stirring, by steam-heat without boiling; and he found by trial on several persons that both of these extracts, though they had not been kept with any particular care, equally and quickly caused dilatation of the pupil, when introduced in a state of solution into the eye. He also tried at the same time an extract of belladonna of great age—one of the vacuum-extracts of the late Mr. Barry, who first introduced this particular form into pharmacy. The specimen belonged to the collection left by his (Dr. Christison's) predecessor in the University of Edinburgh (the late Dr. Duncan), and bore Mr. Barry's own label, with the date 1819. Nevertheless, repeated trial on several persons proved that, when introduced in small quantity into the eye forty-seven years after it was made, this extract occasioned as prompt, extreme, and eduring dilatation of the pupil as any recent, well-prepared extract. He could mention numerous other illustrations of the importance of studying with more attention than had ever yet been done by Physicians, pharmaceutic chemists, or even Professors of Materia Medica, the influence of time, mode of preserving, methods of preparing, and, above all, the influence of numerous circumstances connected with vegetation, on the activity of vegetable remedies. But he must not detain the Council with more details. All investigations on this subject were clearly within the province of the Council and its Pharmacopœia Committee, and the expense of them was as clearly chargeable against the funds of the Council; and few persons would doubt their important bearings on Medical practice, or that it might become expedient for the Council to carry on or encourage such investigations. As to the other branch of physiological inquiry included in Dr. Acland's motion—namely, into the therapeutic action of medicinal doses of remedies—an inquiry which could be carried on only, or chiefly, by trials on patients, especially in Hospitals—the competency of the Council to undertake that branch at the charge of the Council funds was a different question, into which he did not feel it desirable that he should enter at the present time.

Dr. Andrew Wood said he gave Dr. Acland more credit for his perseverance than for his discretion in desiring that they should become a body to make physiological experiments in regard to the action of medicines on the human body. If they were the British Association, the Medico-Chirurgical Society, or a scientific body in any respect, it would be quite right they should do so. But they were a body appointed to discharge quite another function, and if Dr. Acland did not think they had quite enough to do without making experiments, he must be the only member of the Council, he should think, who entertained that opinion. The experience of the past eight days showed them they had little enough time to go through their own proper duties. He did not see the use of getting the opinion of counsel, because they had a perfect right to devote any sum of money they chose to the preparation of the Pharmacopœia in its legitimate and *bonâ-fide* sense, and they were quite entitled to carry out such investigations as those suggested by Dr. Christison with regard to the growth of plants, from which drugs were derived. That would be germane to the Pharmacopœia. But when they were asked to select a number of people, and make experiments upon them, the Medical Council were asked to enter upon the wide field of inquiring into and giving utterance to their opinions regarding the practice of the Medical Profession; and that was not their function. Although the phraseology of the present motion was different from that of the motion brought forward on the first day of this session, yet the purport of it was identical, under a change of name, *Ecce iterum Crispinus*. He felt sure Dr. Christison was not aware of the *mare magnum* into which they were going to sail; and once on such an ocean, how they were to get out of it again he did not know. Let them stick to their functions. Let them perfect the registration and education of Medical Practitioners; let them apply their power to visiting the licensing bodies, in order that they might see how those bodies performed their duties. If when they had done what they ought to do, and their session occupied only four or five days, and they were thus enabled to save a great deal of money, he should then hope to go to the Profession and say, we shall now be glad to reduce the fee to £3 or £2, as the case may be," and that would give them greater satisfaction than it would to spend money for purposes other than those for which the Council was instituted. At present they had little money enough to carry out their proper function. Let the British Association carry out their own experiments.

Dr. Stokes said that he should like to know what their powers really were. All that Dr. Acland asked was that inquiry should be made by the Pharmacopœia Committee to ascertain whether or not the Council had the power of voting money for the purpose of making such experiments as those mentioned by Dr. Christison.

Dr. Alexander Wood remarked that Dr. Andrew Wood had now completely changed his tone and admitted the legality of Dr. Acland's proposition, but denied its expediency. (Dr. Andrew Wood: "No, no.") One of the most important duties laid down by the Act of Parliament was the preparation of a National Pharmacopœia; and it might perhaps turn out, when the discussion of the exciting subjects connected with education and registration had passed away, that, after all, the preparation of a National Pharmacopœia, of a scientific nature, and worthy of the character of the Council, might not be the least important function they had to discharge. Now, he did not confess to be competent to decide whether such experiments were essential for the making of a Pharmacopœia or not; but if such an authority in this matter as Dr. Christison, Dr. Apjohn, or any member of the Committee, were to come to the Council and say he considered it essential that certain physiological experiments should be made either by themselves or some committee of the British Association, he should be inclined to listen to such a suggestion. He should like to know whether they were debarred by law from making a grant for that purpose. As the motion stood, he should vote for it; but supposing it were to be immediately followed by another, to the effect that they should vote money for the purpose, he should be opposed to it. He felt sure that, if by any experiments, undertaken by a competent body, they could improve the practice of Medicine, it would be a legitimate object for this Council, and would be welcomed over the kingdom far more than those interminable discussions about registration and the other matters with which their Minutes were filled, and which, after all, were not nearly so important to practical men who composed the great body of the Profession.

Dr. A. Smith thought it quite unnecessary at the present time to discuss whether the Pharmacopœia Committee had the power of applying the money of the Council to the investigation of any matter belonging to the preparation of the Pharmacopœia. That question had long been practically settled. When the Pharmacopœia was first being prepared, it would be found upon the Minutes of the Irish Branch Council that twenty-five guineas were paid to Mr. Scott, an able chemist in Dublin, for analysing a packet of James's Fever Powder, which had been made for sixty years, so that the Branch Committee of London had paid money for the investigation of certain questions in pharmacy. Therefore the power did exist, and they had established that fact by sanctioning this grant, which had been followed by others. With regard to the other part of the subject, he thought it impossible they could bring therapeutical investigations of the physiological action of drugs within the meaning of the clause in the Act, which said they were to construct "a book containing a list of medicines and compounds, and the manner of preparing them, together with the true weights and measures by which they are to be prepared and mixed, and containing such other matters and things relating thereto as the General Council shall see fit." The words "relating thereto" must apply to the antecedent portion of that paragraph, and to nothing else. He did not think it necessary to waste more time upon the subject.

Dr. Acland then replied. In respect to the duty they owed to students, some of the things which had been advanced by Dr. Christison were amongst the most important points which engaged the attention of students, and, as Dr. Alexander Wood had said, some of those that required to be most taken up. Whatever the decision of the Council might be, he would have gone a long way to have heard what Dr. Christison had stated. He felt strongly on the subject before, but after what he (Dr. Christison) had said he did not see how they could have a doubt of its importance. It was quite true this matter emanated from one of the sections of the British Association last year, over which he was president. He simply desired that, being charged with the construction of a National Pharmacopœia, they should make it as perfect as possible. The Council had decided that what he proposed on a former occasion was not within their power, and all he asked them to do now was to put it in their power, in order that they might exercise it if they saw fit. He could not agree with Dr. Andrew Wood that the Pharmacopœia was altogether a secondary matter in the affairs of this Council. What Dr. Alexander Wood had said about it was the truth. If there was only great work which, if this body continued, it would have to do, it would be to perfect as far as possible the list of medicines and compounds and the manner of preparing them. He was not asking for £250 for this year or the next, but was simply desirous to know whether they had the power to make these experiments, and if they had not to take steps to introduce them into the Amendment Bill.

Dr. Quain said the Pharmacopœia Committee was not authorised to consult lawyers. That was a duty which belonged to the Executive Committee. He suggested whether Dr. Acland had not better substitute the words Executive Committee for Pharmacopœia Committee. He should vote against this duty being assigned to the latter Committee, inasmuch as they would be unable to perform it for want of time.

Dr. Acland would have no objection, he said, to alter his motion as suggested.

Sir D. J. Corrigan objected. The question before them had nothing to do with the Executive Committee, but the Pharmacopœia Committee.

The motion was then put, when there were 9 votes for and 9 against.

The President remarked that, as he had not voted, he could not, he believed, according to the Act, exercise the privilege of giving the casting vote. If he had voted when the resolution was put, he might exercise the privilege of recording a second vote when the numbers were equal. The motion, therefore, was not carried.

Dr, Acland asked for the names to be taken down.

This having been done by the Registrar,

Dr. Apjohn moved that that portion of the Committee's Report which said that no unnecessary delay had taken place be omitted. He was understood to intimate that there had been unnecessary delay.

Dr. Christison mentioned that there had been a delay in the production of the Pharmacopœia, but that delay, so far as he was aware, could not have been avoided, inasmuch as Mr. Warrington had been so unwell for a considerable time that he could not discharge his duties.

Dr. Quain said it was very hard indeed to accuse the Committee of unnecessary delay.

Some discussion took place on this part of the Report, the members of the Committee at first being inclined to criminate each other, but after a few explanations it appeared that each had done the best he could to forward the work, and that the delay had arisen purely from the immense amount of labour necessary, and the difficulty of the undertaking.

Dr. Christison observed that, although he was nominally chairman of the Committee, he regarded Dr. Quain as the moving party who had charge of the Pharmacopœia. He (Dr. Quain) had taken a great deal of trouble, and must have consumed a large portion of his time upon it.

The President said that, in the absence from London of Dr. Christison, chairman of the Committee, he had, in his right as President, attended the meetings of the Pharmacopœia Committee in London, and he had endeavoured to give them what assistance he could. He thought it was the bounden duty of the members in London to express their great obligations to Dr. Quain, who had been indefatigable in his endeavour to expedite the progress of the work. There was not the least doubt there had been delay, and the question was whether it had been unnecessary or not. When they considered the large amount of correspondence they had had with Drs. Christison and Apjohn, without whose assistance and advice those in London could not have done anything, they would see that in a work of this kind, which had to be conducted partly in London, partly in Dublin, and partly in Edinburgh, delay was inevitable. As far as the London members of the Committee were concerned, there had been no unnecessary delay. At times they had had to wait for communications from Dr. Christison and Dr. Apjohn, but when they had received those communications they had always been amply repaid by the value of the information afforded.

Dr. Apjohn withdrew the motion for the omission of the sentence in question.

Dr. Alexander Wood then proposed, and Dr. Acland seconded, "That while the Council regretted the delay which has taken place in the production of the Pharmacopœia, and are satisfied that it has not arisen from causes over which the Committee had any control, beg to acknowledge its thanks to the Committee for their exertions."

After some discussion this motion was withdrawn.

On the motion of Dr. Christison, seconded by Dr. Quain, the Report of the Pharmacopœia Committee was adopted.

The Council adjourned at four o'clock.

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### Tenth Day.—Monday, May 28.

The Council re-assembled at the usual hour, the President in the chair. The minutes of Saturday's meeting were read and confirmed.

The first business on the programme was to consider the report of the Committee appointed on Friday, May 18, 1866, to take into consideration a letter from the Secretary of State for War. The Committee suggested that the following communication be forwarded in reply :—

Sir,—I am directed by the General Medical Council to acknowledge the receipt of your letter of the 26th, in which you inform me that Lord de Grey requests the Medical Council will favour him with their opinion as to the particular initials which should be used to designate the several Medical qualifications described in the table appended to the Medical Act, and for which abbreviations are therein laid down. For example, Licentiates of the King and Queen's College of Physicians in Ireland, in the Table of Abbreviations appended to the above-named Act, are thus described, "Lic. K. Q. Coll. Phys., Ireland." What initials should be used in this and similar cases?

With regard to the first question, the General Medical Council submits that it is only necessary to follow the precedent already existing in regard to the title "Surgeon" in the Army List. The title or qualification "Surgeon" (for it is both) does not mark the particular College or University which has conferred the required qualification, but leaves that to be ascertained by the Medical Register, published under Act of Parliament.

In like manner, in regard to Medical qualifications, the initials "M.D." or "M.B." are inserted after Surgeons' names, indicating that they possess such qualifications, without distinguishing the particular Universities from which these titles are obtained.

It appears to the General Medical Council that, following these precedents, it is only necessary in like manner to insert after the names of Surgeons having Medical qualifications from any one of the Royal Colleges of Physicians of England, Ireland, or Scotland, or from any University giving a licence in Medicine, the letters, "Ph.," signifying Physician, indicating that the qualification is that of Physician, in like manner as in the initial letters, "M.D." and "M.B.," not distinguishing the particular College or University from which the title "Physician" is obtained.

These observations apply equally to the only other initial letters proposed in the case of licentiates of Apothecaries' Companies of England and Ireland, viz.: That the initial letters "Ap." should be inserted in like manner, indicating the qualification without distinguishing the particular Company from which the qualification has proceeded.

With regard to the second question, viz. :—

"In the case also of a Surgeon who possesses more than one Medical qualification the Council is requested to specify which should be selected for insertion in the Army List. Suppose, for illustration, a Licentiate of the King and Queen's College, Dublin, is also a Doctor of Medicine of the University of Edinburgh, or a Member of the London College of Physicians, or a Licentiate of the Society of Apothecaries; which of these Medical qualifications is to have precedence, and by whom is this to be decided?"

The General Medical Council does not apprehend any difficulty.

The case put of a Surgeon having more than one Medical qualification is, and will be, of frequent occurrence in the Army. It is not uncommon for an Army Surgeon to have two Medical qualifications, one of "M.B." or "M.D." of a University, and another "Ph." from a College of Physicians.

It is only necessary to signify that one Medical qualification alone will be inserted, leaving it to the discretion of the Surgeon himself as to which he would select, or whether he would select any. A Surgeon who has two Medical qualifications—for instance, one from a Royal College of Physicians, and another from a University, may desire to have "M.D.," the University qualification, after his name; while another similarly circumstanced, may desire to have "Ph." after his name, designating that he is a Physician.

It is also of ordinary occurrence, and is a practice very much to be encouraged, that Army Surgeons take advantage of opportunities from leave of absence, or from being stationed where there are celebrated Medical schools, to acquire a Medical qualification higher than they had on entering the Army, and such Surgeons the General Medical Council apprehends would, of course, have the liberty of substituting from time the higher qualification for the original qualification inserted.

In conclusion, I am to observe that the additional initials proposed to be inserted in the Army List would be only two, viz. :—

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| Ph. . . . . . . . . | Physician. |
| Ap. . . . . . . . . | Apothecary. |

The total initials required as indicating Medical qualifications would then be only four in number :—

*Already Admitted.*

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|---|---|
| M.D. . . . . . | Signifying University graduates, without specifying particulars. |
| M.B. . . . . | |

*Proposed to be Added.*

| | |
|---|---|
| Ph. . . . . . | Signifying Physician in like manner, without specifying particulars. |
| Ap. . . . . . | Signifying Apothecary in like manner, without specifying particulars. |

The General Medical Council hopes this simple proposal will meet with the approbation of the Secretary of State for War, as doing impartial justice to all parties, and removing the repeated complaints that have reached it on the subject, as explained in the former correspondence.

D. J. Corrigan, Chairman of Committee.

Lt.-General Sir E. Lugard, K.C.B., Under Secretary of State for War.

Sir D. J. Corrigan moved the adoption of the Report.

Dr. Smith seconded the resolution.

Dr. Parkes thought it would be exceedingly impolitic to accede to the proposal of that Committee. He did not think there was a single Army Apothecary who would desire to put "Apothecary" after his name, and for this reason, that the term "Surgeon," as used in the Army, always included a Medical degree or Medical licence. Under the Committee's proposal the name of an Army Surgeon was to appear, "Surgeon and Apothecary," and another name might appear, "Surgeon and Physician," which would at once lead the members of the Army to suppose that those gentlemen had different qualifications, the one being superior to the other. He thought there would be a very strong objection indeed on the part of all Medical men in the Army to use the term "Apothecary," and he objected on principle to its introduction in the Army List. The initials proposed for Apothecary were "Ap.," so that after the name of the Medical officer would stand the letters, "Surgeon and Ap.," and thus the Medical officers in the Army would be considered to have some relation to certain animals from which they were not desirous to claim descent. Then with regard to the initials "Phn.," no one would suppose they meant "Physician," and therefore he did not think Sir D. J. Corrigan had done wisely in dropping the initials "Phs." In avoiding Scylla he had drifted into Charybdis. In the Minutes of vol. iii., page 314, they would find this resolution of the General Medical Council, "That it is the opinion of the General Medical Council that it would not be advisable to insert the letters "Phys.," etc.; and if they sent the letter proposed to the Under-Secretary of State for War they would be receiving a reply asking them to reconcile the letter of July, 1864, and that of May, 1866. On the receipt of such a letter this question of initials would pass into the limbo of those great subjects which had so long agitated this Council. No great question, such as registration or education, could be settled under a period of eight years, and in that time every member of the Council who was not of Carlyle's opinion, that "silence is the first virtue of man," would have an opportunity of expressing his views upon this great question of "Phs." and "Phn."—phiz and fun. (Laughter.) The members of the Committee might be acquainted with a novel called the "Initials," and he could not help thinking they were anxious to furnish a second edition of that book. Possibly Sir D. J. Corrigan might have a still higher literary ambition, and wished to write a comedy, or, as was more probable, a farce, bringing in as *dramatis personæ* the members of the Council and the Under-Secretary of State for War. (Laughter.) He hoped Sir D. J. Corrigan would not press this matter to the inevitable discomfit of the authorities; and with a view to test the opinion of the Council, he would propose as an amendment, "That the Registrar acknowledge with thanks the receipt of Sir E. Lugard's letter, and inform him that on further consideration the Medical Council has decided not to urge the matter referred to in Sir Edward's letter on the attention of the Secretary of State for War."

Mr. Syme seconded the amendment.

Dr. Smith thought no more confusion could arise by the adoption of the letters "Ap." than from such initials as "K.G." or "C.B." He should support the motion.

Dr. Andrew Wood said that if the letters "Ph." and "Ap." were really affixed to the names of gentlemen in the Army List, instead of their looking upon it as a boon, they would be asking why the Council had exposed them to such a thing? The best plan would be to adopt the amendment.

Mr. Cooper also supported the amendment.

Mr. Hargrave thought the statement made by Dr. Parkes was entitled to great weight, as he was so thoroughly conversant with the feeling of the Medical officers in the Army.

Dr. Storrar supported the amendment. They must consider there was not only a difference between a graduate of a University and a member of the College of Physicians, but there were also differences of a very important character in those respective Colleges. In the College of Physicians there were Fellows, Members, and Licentiates; and if these were all mixed up together under the initials "Phn.," possibly it would create a jealousy, inasmuch as a Fellow of the College of Physicians would not like to find himself designated exactly the same as a common Licentiate; that applied to other colleges also; therefore he thought the wisest course was to adopt the amendment of Dr. Parkes.

Sir D. J. Corrigan, in reply, said that as the generic term "Surgeon" included all denominations, whether Fellows, Members, or Licentiates, so "Ph.," would include, as a generic term, all other qualifications. He reminded the Council that in drawing up the Report the Committee were only answering an inquiry from the Secretary of State for War. With regard to the observations of Dr. Parkes, he (Sir Dominic) felt really hurt. That gentleman had said he supposed he was not going to write a novel, but bring out a farce, in which the Secretary of State for War and the Director-General were to be amongst the characters.

Dr. Parkes: No, the members of the Council.

Sir D. J. Corrigan said that was all the worse, for before it was an insult to one, and now it was an insult to twenty-one. (Laughter.) He had never written a farce in his life, and if he did do so, it would certainly never be to hold up to ridicule a man holding such a high position as the Secretary of State for War, though he might probably think it worth while to introduce his friend Dr. Parkes. (Laughter.) There was another part of Dr. Parkes' speech which was the bitterest censure he ever heard upon the Medical department of the Army. He had said that the letters "Ap." would be distasteful to them, and that any letters signifying "Apothecary" should be omitted. Was this Council to be a party to enabling the Army Medical Department to receive qualifications which they would be ashamed to avow? If the Medical authorities of the Army wished to conceal the appendage signifying "Apothecary" let them do so; they would not be obliged to use it. Dr. Parkes had altogether overlooked the sentence in the Report, which said, "It is only necessary to signify that one Medical qualification alone will be inserted, leaving it to the discretion of the Surgeon himself as to which he would select, or whether he would select any." On page 2 of the Army List there were no less than sixteen abbreviations, some of them consisting of four initial letters, and there was appended to each an explanation of what it meant. It was absurd to say that "Ap." would look like "ape," or that "Phs." was "phiz." On the same principle they might say that "M.D." was "madman," or that "C.B." was "cabman." (Laughter.) The simple question before them was, in what manner were Medical qualifications to be inserted? To that question the Committee had endeavoured to reply as fairly as they could, on the principle that all parties were to be treated with equal justice.

The amendment was then put, and there were 12 for and 4 against.

Sir D. J. **Corrigan** required that the names and numbers of those who voted, and of those who declined to vote, be taken down.

The **President** was about to put the amendment as an original motion, when

Dr. **Quain** said he would propose an amendment upon that, to the effect,—"That it be recommended to the Secretary of State that, under the difficulties of adapting initials capable of indicating the qualifications possessed by all Army Surgeons, to omit all initials as indicating Professional qualification."

Mr. **Hargrave** seconded this amendment.

Dr. **Andrew Wood** said they were asked to pass a disfranchising clause; but were they prepared to brave the tremendous clamour and declamation that would be made to the Council if they advised any such thing? He implored gentlemen not to vote for the amendment.

Dr. **Alexander Wood** did not see what this Council had to do with the way in which the Army List was published. The Council had no right to dictate to the Secretary of State for War, nor had they any right to assume an attitude of hostility to the Universities by striking out the University qualifications.

The amendment was then put and lost, there being 16 votes against and 4 for. The motion of Dr. Parkes was then carried by 14 votes against 4.

Dr. **Parkes** asked that the names of those who voted should be taken down.

The next business was the consideration of Reports on Visitations of Examinations.

[*** These Reports are very voluminous, and occupy no less than 116 pages.]

Dr. **Alexander Wood** congratulated the Council on the result of the first attempt. No man could look at these reports without being satisfied that they had done considerable good, and that they were susceptible of doing a great deal more good. He thought the result of the visitations of examinations by the Council had been highly satisfactory; and if they went on in the way in which they had begun, it was quite possible they would convince those who were most doubtful of the success of them that, after all, they were much more useful than they could have supposed. If he entertained the opinions so strongly stated at that table by Sir D. J. Corrigan as to the utter uselessness of this Council, the kind of Medical legislation he should go in for would not be a Royal Commission to examine this Council or any other body as to what was the best Bill, but an Act of Parliament which, without superseding the Examining Bodies who grant the degrees, should appoint visitors of these examinations with powers very similar to those given to the examiners of the primary schools throughout the country. The reports of the Branch Councils of England were highly satisfactory. One effect of these full reports would be that the examining bodies, who were really in earnest in wishing to raise their standards of examination, would look into them and see in what way they could improve their examinations. When he looked into these reports, he found there were special points to which attention was called by the visitors. What were they to do with these special points? Were they to let them remain in the Reports to be seen or not, as the case might be, by the bodies to whom they referred? Or, would it not be a better plan if, in the kindest and most friendly spirit, they appointed a Committee to extract from these reports those parts of the method of conducting the examinations, or the examinations themselves, which might appear to the visitors to be defective, and send them down to the various bodies, not as an injunction or a command, but as giving them power to see what to a looker-on, with all the advantage of being deputed by this Council, what appeared to be the weak point in their examination? In the second place, the Branch Councils should be requested to continue the system for another year, and if possible to amplify their reports a little. And thirdly, a Committee should be appointed to-day to report on the following day (it would not be an arduous duty) upon the various suggestions made by the visitors of examinations, and that those suggestions should be embodied in a separate report in the shape of recommendations to be sent to the various bodies. It would then be one of the duties of the visitors of examinations next session to say whether the bodies had concurred with the Council in their opinion as to the defective points in the examinations, and whether they had altered their examinations to correspond thereto. In the event of their refusing to alter, he would not say what step they should take. There were certain defects which ought to be dealt with seriously, but not this year. They should give an opportunity to the various bodies to amend their defects next year, and if the defects should be again reported upon as existing, it would then be for the Council to consider whether these bodies should not be dealt with in some special manner. They might exercise that famous power—the power of moral suasion,—which he must say had proved its efficacy in many a well-fought battle at that table. He then moved, "That the Reports of the Visitations of Examinations be received and entered on the Minutes."

Mr. **Syme** seconded the resolution, and was much gratified to hear what Dr. Alexander Wood had said with regard to them.

Mr. **Hargrave** said that several candidates who had been rejected at the examinations in Ireland had gone to the Royal Colleges of Surgeons of Edinburgh, and received their diploma. He thought the examinations there were too lenient.

Dr. **Andrew Wood** said he was surprised last year when Sir D. J. Corrigan moved a resolution, the effect of which was, if possible, to cripple the efficiency of their visitations; but he was thankful that, notwithstanding that resolution, the members of that Council, with one or two exceptions, had discharged their duty, under the circumstances, to the best of their ability. He, therefore, did think it was a hard thing that Sir Dominic should bring forward a motion refusing payment to those that did their duties in that Council at the very time that he refused to perform those duties himself.

Sir D. J. **Corrigan** rose to a point of order. The resolution to which Dr. Andrew Wood referred was not under discussion. He did not refuse to do the duty at that time, but he refused afterwards for certain reasons.

Dr. **Andrew Wood** did not think Sir Dominic should be so thin-skinned, as he was not so nice in regard to other people. All he could say was—

> "Let the galled jade wince, our withers are unwrung."

Now, the great thing on the present occasion was, what was expected from the visitors. In Scotland they felt great difficulty indeed in knowing exactly what was expected of them. (Hear, hear.) They did not know whether they were expected to report a mere bald statement of the facts, or whether they were expected to observe all the details of the examinations. He had no doubt whatever that they would be very severely criticised; that, whereas some would be characterised as reports which had gone into the whole matter, others would be characterised as bald and useless. He trusted the public and the Profession would not judge from this year of what the visitations would be in future years; and he hoped they would be enabled, by instructions from this Council, as to the duties that were expected of the visitors, to bring before the Council and the Profession next year such reports as might redound to their credit. If he were called upon to specify what branch of these visitations was calculated best to secure the ends they had in view, he should say it was the reports which had been brought up by the English deputation. On the other hand, some of the reports were extremely partial; less information had been given, because the visitors had not taken much trouble in regard to some of the bodies; and a cursory examination of these reports might lead to the idea that the bodies so reported upon were not so fully up to the duty which they had to discharge, or not so fully carrying out the measures which were necessary for testing the candidates for these diplomas. The body which he represented at this Council had been only partially reported upon. But so far as they were concerned their desire was to court the utmost publicity—not that they were anxious to magnify their own examinations or to say they were perfect, for he did not believe they were more perfect than were the examinations of the other bodies represented round that table. In page 6 of the English Returns he found an important and useful fact. It was the Report of Dr. Storrar and Mr. Cæsar Hawkins on the Royal College of Physicians of London, in which it was stated, "The College has altogether ceased to hold any preliminary examination of candidates for the licence, requiring proof of its having been undergone elsewhere." He thought that was an omen for good. Following that up, he might state what was happening in his own body. Before the passing of the Medical Act, and before the resolutions of this Council came into effect, they were called upon every year to examine 350 men in preliminary education. But he was happy to state that year by year since that period they were continually finding fewer men coming up to their preliminary examinations, and more men were going into the preliminary examinations of the University. He thought that was an omen for good. Dr. Andrew Wood then alluded to one or two facts in regard to the Scottish reports. At page 61, the report on the examination for degrees in Medicine of the University of Glasgow, by himself, Dr. Christison, Dr. Alexander Wood, and Professor Syme, they stated by whom the examination was carried on, and then said, "We observed, however, that during a considerable part of each examination there was no one present excepting the examining Professor and the candidate. We think it would be an improvement, were it so arranged that no examination should be conducted unless in the presence of not less than two Professors, or one Professor and one non-Professional examiner, one of whom should take jottings of the subjects of examination. This would be more satisfactory, both to the Professor and the candidate. Several of the Professors expressed to us their anxious wish that such an arrangement should be made imperative." That was what they reported on July 25, 1865, and if they turned to the next visitation at Glasgow on the 18th April, 1866, they would find it stated that the following rule had been introduced:—"It is expedient that at least two examiners be present during the examination of each candidate; it being at the same time competent to examine in presence of a greater number, or of the entire Board, in special cases." He quoted this to show that, by a sort of moral suasion, and without any enforcement by this Council, if they went in a liberal, proper, and generous way to the different bodies and made their suggestions, depend upon it, they would find them carried out. He read the resolutions he intended to propose to the Council, and would bring forward after the reports had been received and entered on the minutes. They were as follows:—"That the visitation of the examiners, preliminary as well as Professional, of the qualifying bodies, by the Branch Councils, or such of their members as they may depute, be continued during the ensuing year; that the reports of the visitors shall apply to every part of the examinations of each body, and shall include a statement of the facts observed, and of the opinions of the visitors as to the efficiency of the examinations, as also such remarks and suggestions on defects in them as circumstances may indicate; that the reports of the visitors be submitted in the first instance to the Branch Councils; and that thereafter the Branch Councils shall direct them to be printed and circulated confidentially amongst the Members of the General Council, so that they may be in a condition at the meeting of the General Council in 1867 to consider them maturely."

The President suggested that Dr. Andrew Wood might find the resolution to be sufficient for his purpose.

Mr. Cæsar Hawkins said they could not as yet form any comparison between the Reports, because those Reports were all drawn up on different systems. Dr. Storrar and himself had taken the same view of their duties as Dr. Acland and Dr. Paget had done—namely, that they were entitled to see that no one obtained a diploma who had not been subjected to examination, but they did not think it to be their duty to point out a single suggestion to the College of Physicians. If they entered into details in connexion with every body, as Dr. Andrew Wood had done with regard to one body, their discussion would be interminable, and they would have no chance of getting through it. He thought they might leave the Reports to circulate among the various bodies, and not enter on any other point. The visitations, if continued, ought all to be conducted on one system, so that a comparison might be instituted between them. There were a great number of bodies, some of which were teaching and others only examining establishments, and in the former of these there was a chance that the students would be examined by their own teachers, and all these circumstances ought to be borne in mind. Then, again, some men were better able to judge of one particular examination than they were of another, and he doubted whether the examinations carried on by the Branch Councils would ever be very useful.

Dr. Alderson believed that the visitations tended to elevate the examinations.

Dr. Thomson expressed his firm conviction that very great good must ultimately, and indeed very soon, result from the faithful and efficient carrying out of the system. With regard to the University of Glasgow, which had been referred to, it gave him very great satisfaction when his colleagues agreed to a rule that more than one examiner should be present. He thought this ought to be, not for the purpose entirely of avoiding any appearance of partiality on the part of the examiner, but for the advantage of the examiner himself. Whenever he had been engaged in performing the duty he had always felt very much embarrassed if he had to do it alone, and he was certain that he could do it more efficiently, both as regarded himself, the candidate, and the public, if others were present. He did not court publicity in examinations, but thought it was of great importance that there should be more than one examiner present. The question of exemption from examination on account of previous distinction in classes was one which might fairly be brought up. The first arose, he believed, in the University of Edinburgh, where the majority of the Senate were opposed to the system. Such was not the case in the University of Glasgow, where the majority of the Professors were in favour of it, but into this question he would not enter. The greatest oppression under which both the Profession and the students now laboured was the frequent repetition of examinations, and, whatever course might be decided upon for the future, he hoped that some credit would be given to the students for their conduct during their period of study. The system at present pursued at Glasgow was only a tentative one, and he felt that all the Professors would duly consider the remarks which had been made by the persons who had visited the examinations.

Mr. Cooper believed that in the Society of which he was the representative the examinations were eminently practical.

Dr. Fleming thought it would be well if some more definite plan were adopted for conducting examinations. He would not give an opinion as to the advisability of substituting class examination for other examinations. He knew how well Professor Syme conducted his examinations, and how he was acquainted with all the students, and knew precisely what each one was fitted for.

Dr. Paget, while admitting that it would be a good plan to continue the inspections for another year, wished it to be understood that the plan was a very imperfect one. The Act of Parliament under which they acted was passed for the purpose of equalising privileges, and they ought, therefore, to equalise the qualifications. It would be right for the visitations to be made in such a way as to enable them, in some measure, to compare the different degrees and qualifications in the respective countries, and not the English with the English, the Scotch with the Scotch, and the Irish with the Irish. He could not help noticing that the University of Glasgow was the only licensing body in Scotland, with the exception of the Professor of Surgery in Edinburgh, which had clinical examinations. If more was required from Medical students in clinical examinations, they would be more attentive to their clinical studies.

The motion for the reception of the report was then carried unanimously.

The President being obliged to leave the meeting, Dr. Alderson took the chair.

Dr. Andrew Wood proposed, and Dr. Thomson seconded, the resolution which he had already read.

Sir D. J. Corrigan moved the following amendment:—"That visitation of examinations carried out by members of the General or Branch Medical Councils being a reciprocal visitation by the representatives of the several licensing bodies of one another's examinations is faulty in principle, and therefore can never command confidence. That any visitation of examinations would be worthless which did not include every examination, inasmuch as partial visitation could only testify as to the actual examinations visited—necessarily a very small proportion—and be no evidence whatever of the character of the examinations not visited, the larger proportion; that visitation of every examination would be impracticable, inasmuch as, in addition to preliminary examinations, there are annually about three thousand five hundred Professional examinations in the United Kingdom for degrees or licenses." His first objection to the visitation which had been carried on, and which was now proposed to be continued, was on principle. Their degrees and licences had been impugned. Men utterly ignorant of Anatomy, Surgery, Materia Medica, and English had up to the present moment been let loose upon the public. The Army and Navy Boards had very properly acted in this matter, by saying that such was the state of the men who were passed by the licensing bodies, every one of which bodies was represented at that table, that they dared not trust the lives of her Majesty's soldiers and sailors to their care; that, though there might be some whom they could trust, there were many they could not, and, under these circumstances, they felt obliged to institute an examination for themselves, in order to eliminate the unqualified students who were passed by the licensing bodies; and yet, if they looked to the reports of the visitations, which he voted for putting upon the Minutes, because they were the most valuable documents they had ever had, they would find that in every case the visitors expressed themselves satisfied that no persons were improperly passed in the subjects in which they had been examined. This was very satisfactory, but it was very strange in the face of the act of the Army and Navy Boards. Under these circumstances, what did they propose to do? They proposed to adopt a course which, as far as he knew, was without parallel in any body, from the House of Commons down to the smallest corporation in the kingdom. Their degrees being impugned by one of the highest authorities in England, they now proposed to inspect themselves, and the principle upon which they were going was that of the old Scottish proverbs—"Caw me; caw thee." "Hawks don't pick out hawks' een." When, some years ago, certain of the rotten boroughs in the country were impugned, did the parties impugned sit round a table and say they would inspect one another, and that they would send out a report which would show that they were the very model of purity? Yet this was exactly what they were proposing to do. Supposing some years ago, when the managers of the lunatic asylums were impugned, those managers had inspected and reported upon themselves, would the public have been satisfied? Why should they have an inspection of themselves by one another? He wanted them to look beyond the little circle of Medicine and of the licensing bodies, and to mix more with the world, and try to assimilate their proceedings to those of the world outside. He was sorry to say that many members of the Profession seemed to live in a world of their own, and it was a great misfortune that they did not mix more with men who were concerned with other important businesses in life. Supposing when the various boards of guardians were impugned they inspected themselves, would such a course inspire public confidence? Some years ago the conduct of the paid magistrates in Ireland was called in question; and if they had inspected themselves what would have been said? If, when the captains of emigrant ships were charged with neglect, would it inspire public confidence if they inspected and reported upon themselves? When the charges were lately brought against railway directors, would those directors have inspired public confidence if they had reported upon themselves? This was his objection to this system of visitation, that the parties who were on their trial were the persons who were going to try themselves. His second objection was, that it was impossible to carry the visitations out, inasmuch as there were 3500 examinations in the course of a year. Supposing they took 500 of those, were they willing to accept those as samples of the rest? If they had a basket given them with 500 eggs in it, would they, because fifty of them turned out good, take it for granted that the 450 were also good? When he looked to the reports, he found that only five days had been spent in visitation.

**Dr. Andrew Wood** said that he was in Edinburgh ten days himself.

Sir **D. J. Corrigan** stated if that were the fact it ought to have been stated. He knew of a case where the examination occupied only half an hour, and only two persons were present—namely, the President and the Secretary of the College. This was in a College that was represented at that Council; and he held a letter in his hand from the candidate, but he would not then mention his name, because it might seriously interfere with the young man. This reminded him of an occasion when he had to inspect a lunatic asylum. He found a number of women, all very nicely dressed, having clean wristlets, and very comfortable; but on saying to one of them that he was glad to see them so, she replied—"You are a Royal Commissioner, I think?" He answered that he was, and asked her how she knew; and she then said—"Don't you go to be a fool; we're not rigged out in this way every day!" Examinations could be "rigged out," too. His third objection to the system was, that it was one which was opposed to and at variance with the common-sense rule that was applied by the world outside. If a man wanted to test the purity of gold he would not examine how it was made, nor who was the maker, but would test the article itself. They ought to test the result, and not the process. When the Army and Navy Boards wanted to test the efficiency of the candidates, they did not inspect the bodies who had licensed them, but they examined the candidates themselves. If they carried the motion adopting this system, they ought properly to follow it up by sending a communication to the Army and Navy Board telling them that they were wrong in testing the article produced, and that they ought to test the process by which it was produced. When the Government wanted guns they never asked the makers to report upon themselves; but they tried the various guns, and then decided, and the same with armour plates. The London University—a body of whose proceedings he would ever speak with approbation—did not examine the schools and accept reports on, but they examined the pupils from those schools, and so tested, not the process, but the result; and this was what they all ought to do. If his amendment were accepted, he should follow it up by a proposition for carrying it into effect by appointing a body of examiners altogether independent of the Council to examine the candidates who had been passed by the several licensing bodies. It might be said that they had no power to make students come before them; but under the Act of Parliament he thought a very wide discretion was left to the Council as to the means by which they were to ascertain whether the qualifications possessed by any body were sufficient to ensure competency. There were three classes of men to be dealt with—one class who would be able to pass the body he proposed; another class who would fail, and then try again; and then a third class who would be afraid of it altogether. Since the last Session he had thought long and seriously on this matter, and he had come to the conclusions which he had now laid before them.

**Dr. Aquilla Smith** seconded the amendment.

**Dr. Alexander Wood** thought of great importance that the statements made by Sir Dominic Corrigan should not go forth without a complete answer being given to them, inasmuch as it would be a most damaging thing if such a speech were to go out without the contradiction which it naturally called forth. Sir Dominic Corrigan seemed to have forgotten altogether the Act of Parliament under which they acted. The duty which the Act imposed upon them they were striving to the best of their ability to perform. He himself differed to a certain extent from the conclusions which had been arrived at by the Council with reference to the best means of carrying out their duty, and he had proposed another plan, but he could not admit the justice of any one of the analogies which Sir Dominic Corrigan had used. His first statement was that the Council wished to justify itself before the country with regard to the men who passed. He knew of no such motive, their only object being to improve the examinations, and to ensure that candidates should be properly examined, and he cared not whether the means they took to do this approved themselves to the country or not. The amendment, like others which Sir Dominic Corrigan had for years past put forward, endeavoured to show that they were an incapable body, but he did not suggest any remedy for their incapacity. Sir Dominic said the other day that all the bodies were antagonistic to one another, but now, when it suited his purpose, he wanted to make out that they were willing to praise one another. He appealed to the reports to show the anxiety of the men who were engaged in making the visitations to do their duty. It was perfectly true that there were a vast number of examinations every year, and that it was impossible to overtake them; but would the body which Sir Dominic Corrigan proposed be able to do it? Besides this, what power had they to bring students before them for examination? None at all! Another thing was that Sir Dominic Corrigan had referred to the Army and Navy Boards, as if they were the best judges of their examinations; but with all due respect to those gentlemen, he felt bound to say that it was not the best students who went before them, for as long as a man had a chance of decent and respectable employment in this country, he would not go to the Army and Navy Board to ask for it. In an address delivered not long ago at a University he heard a Professor tell the students that in the army they would be least regarded and worst paid, and he advised them not to go into it. He cordially supported the motion of Dr. Andrew Wood.

On the motion of Dr. PARKES, seconded by Dr. STORRAR, the standing orders were suspended till a quarter past six.

The amendment was then put and lost, only two hands being held up for, and fifteen against it. The motion was carried.

It was proposed by Dr. STORRAR, seconded by Dr. ANDREW WOOD, and agreed to, that the Council meet to-morrow at one o'clock.

### ELEVENTH DAY.—TUESDAY, MAY 29.

The Council met to-day at one o'clock, in accordance with the resolution passed yesterday.

In the temporary absence of the President the chair was taken by Professor Syme.

The minutes of yesterday's meeting having been confirmed,

Dr. EMBLETON brought up the following amended Report of the Committee on the Registration of Medical Students, and moved its adoption, which was seconded by Mr. HARGRAVE:—

*Report.*

1. The Committee, having taken into consideration the working of the system of registration of students of last session, find that in each division of the kingdom there have been a certain number of students unregistered, in consequence of the difficulty of making the new regulations sufficiently understood by the students and their friends, and by the authorities of the several Universities, Schools, and Hospitals; but they believe that this difficulty is likely to be materially lessened in future years, and they recommend that the Council should leave the several Branch Councils to make such exceptions in reference to the year 1865 as may seem to them advisable, enforcing the regulations strictly for the future.

2. The Committee have also considered "the cases of students admitted to registration who have not passed the Examination in Arts or only a portion of such examination," and they find that in certain schools several students have been allowed to commence their recognised Medical education before having passed a Preliminary Examination in Arts; but they do not find that any student has actually been registered before having passed the Preliminary Examination.

The Committee strongly disapprove of the above irregularity on the part of Schools, and recommend that in future the whole of the Preliminary Examination should be required to be passed at one time, and that before either registration be allowed or Medical Education be commenced; and this recommendation, from the assurances they have received, they believe will now be literally complied with.

With respect to the students concerned, the Committee see no other course open to them than that of advising the Council that, under the circumstances named, they should be left to the favourable consideration of the Branch Councils, for they consider that it would be hard that, in the first year of a new system of registration, students should suffer through the irregularities above referred to.

3. The Committee have also paid attention to the "letter from Dr. Steele, Registrar of the Branch Council for Ireland, with an application from a student to be registered," and recommend that, as the registration of Medical students has been placed under the charge of the Branch Registrars, the decision in this case be left to the Branch Council for Ireland.

4. The Committee have carefully gone over the whole of the regulations respecting the registration of students, as laid down by the Council during the last session, have remodelled them in accordance with existing circumstances, and beg leave to submit them in the following form for the approval of the Council, believing as they do that, having been made more simple and clear, the new regulations will be found well-adapted to secure for the future a correct register of Medical students.

*Registration of Medical Students, 1866.*

The following regulations have been adopted by the General Medical Council, in reference to the registration of Medical students:—

1. Every Medical student shall be registered in the manner prescribed by the General Medical Council.

2. No Medical student shall be registered until he has passed a Preliminary Examination as required by the General Medical Council.

3. The commencement of the course of Professional study recognised by any of the qualifying bodies shall not be reckoned as dating earlier than fifteen days before the date of registration.

4. The registration of Medical students shall be placed under the charge of the Branch Registrars.

5. Each of the Branch Registrars shall keep a Register of Medical students according to the subjoined form.

*Form for the Registration of Medical Students.*

| Date of Registration. | Name. | Preliminary Examination and Date. | Place of Medical Study. |
|---|---|---|---|
| | | | |

6. Every person desirous of being registered as a Medical student shall apply to the Branch Registrar of the division of the United Kingdom in which he is residing, according to the annexed form, which may be had on application to the several qualifying bodies, Medical Schools, and Hospitals; and shall produce or forward to the Branch Registrar a certificate of his having passed a Preliminary Examination, as required by the General Medical Council, and a statement of his place of Medical study.

*Form of Application for Registration as a Medical Student.*

I hereby apply to be registered as a student in Medicine, in conformity with the regulations of the General Council of Medical Education and Registration of the United Kingdom, for which purpose I submit the following particulars:—

| Name of Applicant. (To be written in words at length.) | | Preliminary Examination. | Date of Preliminary Examination. | Place of Medical Study. |
|---|---|---|---|---|
| Surname. | Christian Name. | | | |
| | | | | |

Applicant's Signature ..................
Address ..................
Date of Application ..................

To the Registrar of the Branch Council for............

N.B.—The above form of application, duly and legibly filled up, must be forwarded to the Registrar, post free, and be accompanied by a certificate of the Applicant's having passed a Preliminary Examination, as required by the General Medical Council; and a statement of his place of Medical study.

Students who have commenced their Professional studies more than fifteen days before the 2nd October, 1865, are not required to be registered by any Branch Registrar.

7. The Branch Registrar shall enter the applicant's name, and other particulars, in the Students' Register, and shall give him a certificate of such registration.

8. Each of the Branch Registrars shall supply to the several qualifying bodies, Medical Schools, and Hospitals, in that part of the United Kingdom of which he is Registrar, a sufficient number of blank forms of application for the registration of Medical students.

9. The several Branch Councils shall have power to admit special exceptions to the foregoing regulations as to registration, for reasons which shall appear to them satisfactory.

10. A copy of the register of Medical students, prepared by each of the Branch Registrars, shall be transmitted, on or before the 31st December in each year, to the Registrar of the General Council, who shall, as soon as possible thereafter, prepare and print, under the direction of the Executive Committee, an alphabetical list of all students registered during the year, and supply copies of such authorised list to each of the bodies enumerated in Schedule (A) to the Medical Acts, and through the Branch Registrars to the several Medical Schools and Hospitals.

11. The several qualifying bodies are recommended not to admit, after October, 1870, to the final examination for a qualification under the Medical Acts, any candidate (not exempted from registration) whose name had not been entered in the Medical Students' Register at least four years previously.

In the case of candidates from other than schools of the United Kingdom, the Branch Councils shall have power to admit exceptions to this recommendation.

⁂ The Branch Councils are desired to take every means to make these regulations known to the Medical students at the various Medical schools.

Dr. AQUILLA SMITH said that before this Report was adopted he had a motion to make upon it, the object of which would be to get a better definition of the column in the Register, which was headed "Place of Medical Study." Looking over the list in the Students' Register of "Places of Medical Study," which might be said to be so far recognised, he found that their number was 39—namely, 26 in England, 7 in Ireland, and 6 in Scotland, but there were certain places mentioned in the list as being recognised which he had no recollection of having ever been recognised by the Council. Some of the places mentioned were under the head of Colleges—Newcastle-upon-Tyne, Queen's College, Birmingham, Sydenham School, Birmingham, Bristol School, Leeds School, Liverpool School; and under the head of Provincial Hospitals there were the Sussex County Hospital at Brighton, the General Infirmary at Hull, etc. The Council would know that many of these places had never been recognised by the Council as "places of Medical study," and he thought it was the duty of the Council to define what a "place of Medical study" was. The matter was very important with regard to all the future steps of study to know that students had spent a certain period of time in Medical study, and if they could not get complete registration they had better stop the whole thing. He would, therefore, propose as an amendment that before the adoption of the Report it was expedient for the Council to define what a "place of Medical study" was.

Dr. ALEXANDER WOOD thought the subject was of too much importance for them to enter upon it then, and that it would be best to adopt the Report, and for Dr. A. Smith to bring up the matter again next year. He suggested, therefore, to Dr. Aquilla Smith to withdraw his amendment.

Dr. A. SMITH said he wished his amendment to appear upon the Minutes, but, acting on a suggestion which had been made to him, he would withdraw the amendment, and afterwards propose it, with a slight alteration, as a substantive motion.

The motion for the adoption of the Report was then carried.

Dr. A. Smith proposed, and Dr. Alexander Wood seconded, the following motion:—"That it be delegated to the Branch Councils to report to the next meeting of the Medical Council as to whether the column headed 'Place of Medical Study' in the form of Register of Medical students now adopted should in future define more clearly the manner in which it is to be filled up, and if it is their opinion that it should, to suggest what appears to them to be the best means of doing so."

This resolution was agreed to.

The President here resumed his duties as chairman.

The Registrar next read the following letter from the Metric Committee of the British Association for the advancement of Science:—

> *To the General Council of Medical Education and Registration.*
>
> 10, Farrar's Building, Temple, May, 1366.
>
> Gentlemen,—We are desired by the Metric Committee of the British Association for the Advancement of Science to seek your aid in promoting the practical adoption of the Metric Weights and Measures Act, passed in 1864, being the 27 and 28 Vict. c. 117, "An Act to render permissive the use of Metric Weights and Measures in the United Kingdom." Although this law is of a permissive character only, yet it allows full scope for the extensive application of the new system, and we trust that every opportunity will be seized for resorting to it, with a view of putting an end to the manifold defects and inconveniences of the present practice.
>
> We understand, with pleasure, that such an opportunity now occurs for introducing the metric decimal system into Medicine and Pharmacy, since the British Pharmacopœia, published in January, 1864, is about to appear in a second edition. The objection formerly urged to the introduction of the metric system side by side with the imperial, in all the formulæ for the preparation of drugs and chemicals, that the metric weights and measures were not yet sanctioned by the Legislature, is now removed by the passing of the Act; and we hope, therefore, that your Council will give its sanction to the proposed useful addition.
>
> In submitting to you the desire of the Metric Committee of the British Association, that the knowledge of the Metric System may be promoted in Medicine and Pharmacy, we would only add that, for international purposes, and especially for the use of foreign Practitioners, and of British chemists in foreign countries, the ready comparison of the imperial with the metric weights and measures will be of great practical value; and, moreover, will tend to give effect to a reform expected to be highly useful to this country, and of extensive influence in social and international intercourse.
>
> We have the honour to be, gentlemen,
> Your obedient servants,
> John Baring, F.R.S., LL.D.,
> Chairman of the Committee.
> James Yates, M.A., F.R.S.,
> Member of the Committee.

Dr. Alexander Wood said he should move that the letter be referred to the Pharmacopœia Committee for their consideration, and that they be requested to report upon it at the next meeting of the Council.

Dr. Apjohn objected to the motion, because it would delay the publication of the Pharmacopœia till the Committee had had time to prepare and present their Report.

Dr. Sharpey said he would propose a resolution which he thought would be better than that of Dr. Alexander Wood. It was as follows:—"That the General Medical Council are not prepared to adopt, in its full extent, the suggestion of the Metric Committee of the British Association, but the Council will direct that a complete comparative table of metric and imperial weights and measures, with instructions for their mutual conversion, shall be inserted in the forthcoming edition of the 'British Pharmacopœia.'"

Dr. Parkes said he had himself written to the Chairman of the Pharmacopœia Committee on the subject, and had received a reply that, although the Committee would not bring the system into the work, they would probably introduce a full table of the comparative French weights and measures. No doubt this would be of great use to gentlemen in the army, who were in the habit of using the metric system. He was very anxious to see it done, but it could not be brought into this Pharmacopœia except in the short way he had mentioned.

Dr. A. Smith supported Dr. Sharpey's motion.

The original motion was withdrawn, and Dr. Sharpey's resolution was seconded by Dr. Apjohn, and carried unanimously.

The returns of examinations from the Medical Department of the Navy were next considered.

Dr. Andrew Wood said the Council, the Profession, and the licensing bodies ought to be extremely obliged to the Navy Department for granting these returns, which unquestionably tended to bring out the fact that men had been passed by the licensing bodies who failed when they came to the Navy examinations. But it must be remembered that all those who had thus failed had probably passed their examination by the bodies at least four years ago. He did not despair, in the face of these returns, but believed that all that was being done by the Council was being brought to bear upon the examining bodies, and if three or four years hence similar returns should be laid before them then they would have reason for very great regret and for believing that they had not done their duty, but not till then. It was of very great importance that they should get all the details. He would therefore propose the following resolution:—"That the Director-General of the Medical Department of the Navy be respectfully requested to furnish in future the Council with copies of the questions proposed to candidates for Navy Medical commissions, in the same way as is done by the Army Medical Department authorities."

Dr. Fleming seconded the motion.

Dr. Alexander Wood had no objection to the motion, but wished to say a few words, because he had noticed that year after year they had been sliding into a very dangerous position with regard to this matter. They had received these returns and entered them on their Minutes as though they were to be applied to test the efficiency of the various licensing bodies. He did not at all admit that they were so, and if they were to be put on the Minutes for that purpose he objected. What was the position which those bodies occupied? A gentleman presented himself at the College who had previously undergone a preliminary examination by one of the bodies recognised by the Council. They did not then examine into preliminary education at all, but only Professional, and he had known cases where the spelling was bad, but the examiners felt that they could not reject the man because of that, because he had been accepted by the first body. But he had a still stronger objection. Every one who had been connected with examinations knew that a great deal depended on the way in which questions were put and of the state of mind of the candidate. Some examiners, too, were much more stringent than others, and it often happened that as a man grew old the less stringent he became. He mentioned this because he did not wish it to go forth that the Navy examinations were a crucial test of the examinations of the licensing bodies. At the same time, he thought there was a great improvement in the examinations of all the bodies, and he was glad to see that this was the case in the body to which he belonged.

Mr. Syme said he knew of one case where a young man had passed a good examination by a University of Scotland, and yet was refused by the Navy Board, thus showing that men were but fallible.

Dr. Parkes believed that a great deal of good had been done by these returns being furnished. At the same time, he felt bound to say that neither the Army nor the Navy Board would hardly be justified in furnishing the returns in future if the Council was to be made the means of attacking gentlemen who entered into the service.

Sir D. J. Corrigan had listened with pain to the discussion. As long back as May, 1864, it was unanimously agreed to ask for these returns, which were of the greatest value; but he was sorry to see now that unfortunately, from some cause or another, attempts were being made to throw cold water upon them, and to disparage them. If the conversation which had just taken place in the Council reached the ears of the authorities, he should not be surprised to find that the returns in future were stopped. He was exceedingly sorry that a charge should have been brought against them that they had refused to pass a competent man. He had never regarded the returns as a crucial test of the licensing bodies; but they certainly did give the information that those bodies did allow men to enter the Profession who were so ignorant of Latin, English, Anatomy, Surgery, and Materia Medica, that they were not fit to be trusted. Dr. Wood's excuse was, that the bodies who examined in Professional education were not responsible because they did not examine in preliminary education; but they could not get away from this, that these men had been passed in their preliminay education by bodies which were recognised by the Council.

Mr. Cæsar Hawkins reminded the Council that the students who had this year applied for Professional examination had probably never been examined before by any body, and therefore it was no fault of the Council. Allowance must also be made for the memories of the candidates, and it was not at all unreasonable to suppose that men forgot something which they had learned several years before. The returns were of very little value unless they had the examination papers.

Mr. Syme explained that he had made no charge against a public department, but he only wished to show that the best men might be mistaken, and that therefore the returns must not be taken as a crucial test.

Dr. Paget thought it would be a great mistake if the furnishing of the returns should be interrupted. Although it was not a crucial test, yet it was a test of the thing produced, and it was much better to judge of the quality of that than it was of the process by which it was produced.

Dr. Andrew Wood withdrew not one sentence as to these returns being the touchstone of their examinations; and he held, moreover, that if they endeavoured to put aside this touchstone, and shut their eyes to the deficiencies which had been brought to light, they would not be doing that which was compatible with their duty. Let them boldly face the whole matter.

The motion was carried unanimously.

The Returns of the Examinations from the Army Medical Department were next considered, and the following motion was proposed by Dr. Andrew Wood, and seconded by Dr. Fleming—"That the best thanks of the Council be given to the Director-General of the Army Medical Department for the returns which he has been good enough to transmit to the Council, and that he be requested to furnish the Council in future with a statement of the subjects in which the rejected candidates have failed."

Dr. Parkes supported the motion, and said the Director-General was anxious to give the Council all the information they required.

The resolution was carried.

The following Report of the Finance Committee was then presented, and, on the motion of Dr. Sharpey, seconded by Dr. Storrar, was adopted:—

The Finance Committee beg leave to present a statement of the estimated and actual income and expenditure of the year 1865; also an estimate of the income from ordinary sources, and of the expenditure, as far as the Committee are able to judge, for the year 1866.

From the figures in the table it will appear that the actual income of the past year fell somewhat short of the estimate, but as, on the other hand, the actual expenditure is less than what was estimated, there is a small balance in favour of the Council.

In reference to these estimates, the Committee have to observe that it is scarcely possible to judge of the prospective expenditure with any near approach to accuracy, inasmuch as the amount is greatly dependent on the duration of the Sessions of Council, which cannot, with certainty, be determined beforehand.

A statement of the receipts and disbursements on account of the British Pharmacopœia, since the date of the account presented last year, and of the balance in the bank at the credit of the General Council, is given up to January, 1866.

W. Sharpey, Chairman.

| | Estimated Income for the Year 1865. | | Actual Income for the Year 1865. | | Estimated Income for the Year 1866. | |
|---|---|---|---|---|---|---|
| | £ s. d. | £ s. d. | £ s. d. | £ s. d. | £ s. d. | £ s. d. |
| **Fees received by—** | | | | | | |
| Branch Council for England | 2650 0 0 | | 2287 10 0 | | 2300 0 0 | |
| " " Scotland | 750 0 0 | | 591 0 0 | | 600 0 0 | |
| " " Ireland | 800 0 0 | 4200 0 0 | 735 15 0 | 3614 5 0 | 700 0 0 | 3600 0 0 |
| **Dividends received by—** | | | | | | |
| Branch Council for England | 610 0 0 | | 616 17 6 | | 620 0 0 | |
| " " Scotland | 60 0 0 | | 94 7 6 | | 80 0 0 | |
| " " Ireland | 66 0 0 | 736 0 0 | 76 12 9 | 787 17 9 | 70 0 0 | 770 0 0 |
| **Sale of Registers** | | 310 0 0 | | 286 1 6 | | 300 0 0 |
| | | £5246 0 0 | | £4688 4 3 | | £4670 0 0 |

| | Estimated Expenditure for the Year 1865. | | Actual Expenditure for the Year 1865. | | Estimated Expenditure for the Year 1866. | |
|---|---|---|---|---|---|---|
| | £ s. d. | £ s. d. | £ s. d. | £ s. d. | £ s. d. | £ s. d. |
| **Expenses of—** | | | | | | |
| General Council | | 3700 0 0 | | 3339 19 9 | | 3200 0 0 |
| Branch Council for England | 720 0 0 | | 714 5 8 | | 700 0 0 | |
| " " Scotland | 280 0 0 | | 270 11 2 | | 280 0 0 | |
| " " Ireland | 330 0 0 | 1330 0 0 | 341 5 8 | 1326 2 6 | 340 0 0 | 1320 0 0 |
| | | 5030 0 0 | Total Expenditure | 4666 2 3 | | 4520 0 0 |
| | Balance in favour of Medical Council | 216 0 0 | Total Income | 4688 4 3 | Balance in favour of Medical Council | 150 0 0 |
| | | £5246 0 0 | Balance in favour of Medical Council | £22 2 0 | | £4670 0 0 |

## BRITISH PHARMACOPŒIA.—STATEMENT.

*From January 5, 1865, to January 5, 1866.*

| Charge. | £ s. d. | Discharge. | £ s. d. |
|---|---|---|---|
| To Balance due to the Council on account of publishing the British Pharmacopœia, January 5, 1865 | 723 0 7 | By Sale of 29 copies 8vo | 10 14 2 |
| Paid for Reporting on the Progress of Pharmacy:— | | " 572 " 32mo | 118 16 0 |
| Dr. Farre, to October, 1865 | 31 12 4 | | 129 10 2 |
| Dr. Moore, to March, 1865 | 20 0 0 | Balance due to the Council on account of publishing the "British Pharmacopœia" | 656 6 11 |
| Advertisements | 10 6 6 | | |
| Carriage of Parcels and Booking | 0 15 8 | | |
| Banker's Commission | 0 2 0 | | |
| | £785 17 1 | | £785 17 1 |

*Cash Account.—British Pharmacopœia.—January 5, 1866.*

| Receipts. | £ s. d. | Disbursements. | £ s. d. |
|---|---|---|---|
| Balance in the Bank at credit of General Council, Jan. 5, 1865 | 1532 3 5 | Reporting on Pharmacy | 51 12 4 |
| Sales of Pharmacopœia | 129 10 2 | Advertisements, &c. | 11 4 2 |
| | | | £62 16 6 |
| | | Balance in the Bank, January 5, 1866 | 1598 17 1 |
| | £1661 13 7 | | £1661 13 7 |

*Note.*

| | | | |
|---|---|---|---|
| The number sold of the 8vo edition is | 12,866 | The number sold of the 32mo Edition is | 4,602 |
| The number given to Members of Council, Pharmacopœia Committee, Stationers' Hall, British Museum, etc. | 62 | The number given to Members of Council, Pharmacopœia Committee, Stationers' Hall, British Museum, etc. | 56 |
| | 12,928 | | 4,658 |
| Stock on hand | 72 | Stock on hand | 10,342 |
| | 13,000 | | 15,000 |

The Report of the Committee on Returns from the Licensing Bodies was also considered and adopted.

Dr. Alexander Wood proposed a resolution, of which he had given notice:—"That the following addition be made to the Standing Orders of the Council:—

*"Chapter [ ] in Regard to Reports of Committees.*

"That no report from any Committee of the Council shall appear in the Minutes until it has first been printed in the 'Programme of Business.'"

Dr. Paget suggested that all the purposes of this resolution would be answered by a subsequent motion, of which Dr. Fleming had given notice.

Dr. Alexander Wood, at the suggestion of the Council, moved the adoption of the first paragraph of his resolution.

Dr. A. Smith seconded this proposition, which was carried.

The Registrar read a memorial from the County and City of Cork Medical Protection Association, pointing out that the Act of 1858 had fallen short of what was expected from it in its two principal objects—the protection of the public and a really improved system of Medical education. They suggested the expediency of the Council seeking for such modification of clause xli. of the Medical Act as would secure the prosecution of offenders against its provisions; but especially of seeking for the power to establish a uniform curriculum of studies, preliminary and Professional, which should be binding on all the educational bodies of the country.

On the motion of Dr. Storrar, seconded by Mr. Hargrave, it was resolved, "That this memorial be entered on the Minutes."

Dr. Fleming moved, in pursuance of notice,—"That the Executive Committee consist of six members exclusive of the President, instead of four, as at present; that of the six members to be elected, four be chosen from the English, one from the Scottish, and one from the Irish Branch Council." The alteration proposed was merely to add two members to the Executive Committee. The English constitution would remain exactly as it was, having four members and the President an *ex officio* member; and after what fell from the President in his admirable opening address, he had no doubt he would think it an advantage if the Irish and Scottish Branches were represented also.

Dr. Paget thought it would be an advantage to them if the Executive Committee had a little more power than it had had hitherto. The proposal seemed both moderate and reasonable. Instead of adding to the expenses of the Council, it would probably reduce them.

Dr. Alexander Wood moved the previous question, that the resolution be not agreed to. The great danger to be apprehended in this Council was that a small section of it should be delegated with a great part of the important business that came before the Council. As there was a great difference of opinion on almost every question which came before them, he thought their only safety was in keeping the Executive Committee in such a position that it could not take upon itself the functions of the Council in any way in the interval of the sessions. He did not think the addition of two single members—one from Scotland and the other from Ireland—would much improve the matter. The Branch Councils in Scotland and Ireland were small bodies, and were as much divided in opinion on different questions as the Council was. He had heard it stated by an eminent member of the Irish Branch Council that he considered the Amendment Bill wrong altogether; and if they were to refuse to send that member to represent them they would lose a most powerful, a most able, and eminent member of their body. [Sir D. J. Corrigan: "Exactly."] (Laughter.) The less power they delegated to the Executive Committee the safer it would be for the Council.

Mr. Syme opposed the motion.

Dr. A. Smith quite concurred in the principle of Dr. Fleming's motion. With regard to the expenses, he was satisfied it would be a considerable saving to the Council.

Dr. Sharpey said the Act gave the General Council power to appoint an Executive Committee; but he apprehended the Branch Councils could scarcely do that; and they would be called upon to do it in part, if they elected one member from the Scottish and one from the Irish Branches.

Dr. Fleming said the General Council must elect the two members of the Branch Councils. He asked the President to favour them with his view of this question.

The President said he did not think it worth while to occupy the time of the Council with his opinions on this subject, because, at the opening of the session, he did commit himself to an expression of opinion upon it, and that opinion he still entertained. So long as the Executive Committee was composed of members of the English Branch Council exclusively, the General Council ought to be jealous of delegating greater powers to it than it at present possessed; but if any means could be adopted by which they could get a fair representation on that Committee of the other Branch Councils, he thought further powers might be entrusted to it according to the Act of Parliament, and that such an Executive Committee might be able most materially to lighten the labours and shorten the sittings of the Council. If they asked his opinion as the President, he must say he thought one of the great defects in their organisation was that they had no means of carrying on business except through the large body sitting round that table. A great deal of the preparation of business which came before that Council might be transacted by the committee proposed, and, therefore, he thought it would certainly be a step in the right direction, if such a committee were appointed.

Dr. Fleming having briefly replied,

The amendment was withdrawn, and the resolution was put and carried, there being for, 12 votes, and against, 4.

A ballot of the whole Council was then taken for the Executive Committee, and the following members were elected:—Mr. Cæsar Hawkins 17, Dr. Acland 8, Dr. Paget 13, Dr. Andrew Wood 12, Dr. A. Smith 8, and Dr. Sharpey 17.

Dr. Fleming then moved, pursuant to notice, "That it be remitted to the Executive Committee to consider the whole form of procedure, which has hitherto been followed in conducting the business of the Council, and to report, on the first day of next session, any alterations which, in their opinion, would tend to expedite the transaction of business."

Dr. Alexander Wood seconded the resolution, which was agreed to without discussion.

Dr. Andrew Wood said they were all aware that this Council had resolved to propose a Bill for the amendment of the Medical Acts. They were in hopes that by this time they would have had some communication from the Government. Mr. Ouvry saw Sir George Grey's Private Secretary, and impressed upon him the importance of receiving a deputation from this Council, and receiving it during this session; but no communication had up to this time been received from Sir George Grey. It was quite clear that this Council, having prepared the Bill, ought not to separate without taking the proper steps for seeing that it was pressed upon the Government, and, therefore, he begged to propose the following resolution:—"That it be delegated to the Executive Committee to confer with the Government in regard to the proposed Bill for the amendment of the Medical Acts, to press on the Government the expediency of its being adopted as a Government measure, and to take all necessary steps for aiding the passing of the Bill through Parliament." They were aware that in a communication from Sir George Grey, which had been before the Council, a suggestion was thrown out that it might be the duty of the Council to get some private member of the House of Commons or the House of Lords to introduce the Bill. Now, he had taken as deep an interest in the proposed Bill as any man at that table, and he had no hesitation in saying that he believed it to be the duty of Government to take up a measure of that kind, and the more especially as this Bill had been sent to the Council from the Home Office for their observations upon it, and had been sent to them as a constituted body in the country whom they could advantageously consult. He had no hopes of passing a measure of this kind through Parliament, unless it were taken up as a Government measure. It would be beneath the dignity of this Council to put in this resolution anything implying they were willing the Bill should be brought forward by a private member. Some members of the Council, who were opposed to legislation altogether, might not feel inclined to give the Executive Committee power in this matter, but now that Committee had been put on a different foundation, they ought to place a considerable amount of confidence in it. Dr. Andrew Wood then formally proposed the resolution he had read.

Dr. Alexander Wood seconded the motion.

Sir D. J. Gorrigan thought they were all agreed that unless it be taken up as a Government measure it would not be passed. He thought that it should be a distinct instruction to the Committee to abandon it in case the Government declined to take it up.

Dr. Alexander Wood would agree with the suggestion that the Committee should not go forward with the Bill unless it were taken up by the Government, but he objected to tie the hands of the Committee.

The resolution was then amended as follows, and agreed to:—"That it be delegated to the Executive Committee to confer with the Government regarding the proposed Bill for the amendment of the Medical Acts, to press on the Government the expediency of its being adopted as a Government measure, and at the same time to state that the Medical Council are of opinion that, unless the Bill be introduced by the Government, it would be unadvisable to proceed with it."

It was then proposed by Dr. A. Smith, seconded by Dr. Storrar, and resolved:—"That the powers and duties delegated to the Executive Committee, in accordance with sect. 9

of the Medical Act (see Standing Orders, sect. 6) shall be vested in the Committee until the next meeting of the General Medical Council."

Dr. Embleton then moved, pursuant to notice, "That the following be substituted for paragraph 7, Section V. of the Recommendations of the General Medical Council on Education and Examination. 'That each of the bodies named in Schedule (A) to the Medical Acts communicate confidentially to the Registrar of the General Medical Council, immediately after each Professional Examination, the names of candidates who have been rejected; that the Registrar shall then communicate these names also confidentially to each of those bodies; and that no candidate who has been rejected shall be admitted to re-examination by any of the bodies till after the expiration of three months.'"

Mr. Hargrave seconded the resolution.

As an amendment, Sir D. J. Corrigan moved,—"That paragraph 7, Section V., of the Recommendations of the General Council be struck out."

Dr. Storrar supported the amendment, and argued that a student's misfortune in not passing an examination ought not to prejudice him at a subsequent examination.

Sir Dominic Corrigan said that as regarded the body he represented, he was sure if the Council passed the resolution they would not comply with it.

Dr. Thomson said the resolution would have the effect of prejudicing the examiners against the students.

Mr. Hawkins strongly objected to the motion.

Dr. Embleton, in reply, said that certain students were in the habit of going from one part of Scotland to some other, and having been rejected at one place, they passed at another after a very slight examination. His motion was to prevent that.

The amendment was then carried by 10 against 4 votes.

It was about to be put as a substantive motion, when

Dr. Fleming proposed as an amendment that all the words after "bodies" should be left out, but, after some discussion, he withdrew, and the motion of Sir D. J. Corrigan was agreed to.

On the motion of Dr. Embleton, seconded by Mr. Hargrave, it was resolved,—"That the Report of the Committee appointed to rearrange the Recommendations of the General Medical Council on Education and Examination be adopted, and entered as amended, on the Minutes, and afterwards printed in a separate form and circulated as before."

It being six o'clock, it was resolved that the standing orders be suspended.

It was then moved by Dr. Smith, seconded by Dr. Sharpey, and agreed to,—"That a fourth volume of the Minutes of the General Medical Council, the Executive Committee, and the Branch Councils, with a complete Index up to the year 1866, be published without any unnecessary delay."

Dr. Sharpey was reappointed Treasurer.

It was then resolved:—"That the thanks of the Council are due, and are hereby tendered to the Treasurers, Dr. Sharpey and Dr. Quain, for their important services."

On the motion of Dr. Andrew Wood, seconded by Dr. Storrar, it was agreed,—"That the thanks of this Council are eminently due, and are hereby offered, to the Royal College of Physicians, London, for their obliging and courteous accommodation during the present session of the Medical Council."

A gratuity of twenty guineas was voted to the resident officials of the College of Physicians, for services rendered to the Council.

It was moved by Dr. A. Smith, seconded by Dr. Storrar, and agreed to,—"That a gratuity of twenty guineas be given to Mr. Bell, and the same to Mr. Roope, the clerks, in consideration of their extra services during the present session, and extra work consequent on the registration of Medical students, a duty which was not contemplated at the time that Mr. Bell and Mr. Roope were appointed."

It was further resolved, upon the motion of Dr. Paget, seconded by Dr. Embleton,—"That the cordial thanks of this Council are due, and are hereby tendered to Dr. Andrew Wood for his unwearied exertions and invaluable services as Chairman of the Business Committee during the past and present sessions of the Council."

The last motion was proposed by Dr. Andrew Wood, and seconded by Mr. Hargrave,—"That the thanks of the Council are cordially tendered to the President for his kind, courteous, and efficient services during the present session of the General Medical Council."

This resolution, which concluded the business of the session, was carried with great cordiality.

A formal meeting was then held to confirm the Minutes of this day's proceedings, and, these having been confirmed and signed by Mr. Syme, for the President, the Council broke up.

# REPORTS OF HOSPITAL PRACTICE
IN
# MEDICINE AND SURGERY.

## SAMARITAN HOSPITAL.

### CASES OF OVARIOTOMY.

(Under the care of Mr. SPENCER WELLS.)

(Continued from page 591.)

*Case 80.—Non-adherent Cyst—Once Tapped—Ovariotomy—Recovery.*

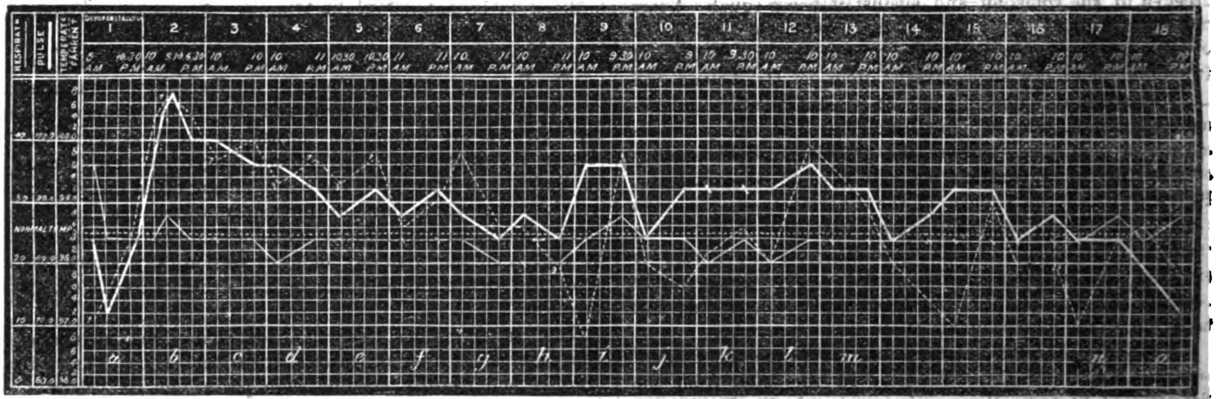
An unmarried household servant, 24 years of age, applied to Mr. Wells in January, 1866, with an ovarian cyst, which filled the whole abdomen. She said she had been quite well till the end of 1864; then she began to feel weak, but continued to work. In June, 1865, her body began to increase, but she kept her place in Ipswich till October. Then she came to London, and went into the Homœopathic Hospital, where she was tapped six weeks after admission, twelve pints of clear fluid being removed, and a tumour on the right side remaining. An abscess formed at the place of puncture, and then she was dangerously ill, keeping her bed for a month after the tapping, on account, as she was told, of inflammation of both lungs. After she left the Hospital she again increased in size; looked ill and was very pale; menstruation was still regular and, as it always had been, rather excessive. Iron and quinine were ordered. On February 6 she looked better and felt stronger, but she had increased an inch and a-half in girth in seven days, and she suffered from increasing pain in the right hip. She was admitted to Hospital on February 26. The catamenia having ceased on the 19th, ovariotomy was fixed for March 7; but the catamenia appeared again on the 6th. It was discovered on closer inquiry that ever since the tapping there had been almost daily more or less uterine discharge. Dr. Jenner having carefully examined the chest and given his opinion that there was nothing in the heart or lungs to interfere with the operation, ovariotomy was performed on March 21. A non-adherent cyst was exposed by an incision extending five inches downwards from the umbilicus; a large cyst was tapped and emptied of nine pints of fluid. The incision was then extended two inches above the umbilicus, and the remainder of the tumour, consisting of a group of small cysts, was turned out entire. A pedicle as broad as two fingers extended from the right side of the uterus, and was so closely connected with the cæcum that the clamp would have produced dangerous traction. Mr. Wells, therefore, transfixed the pedicle, and tied it in two portions with strong silk, cutting off the ends of the ligature short, and returning the tied pedicle into the abdomen. The left ovary was healthy. The wound was closed as usual. The entire tumour weighed sixteen pounds. The patient complained of such severe pain on recovering from the chloroform, that a little more was given, and half a drachm of laudanum was injected into the rectum. The injection was repeated half an hour afterwards, and the patient then became easy. She had no bad symptoms afterwards. All the stitches were removed on the third day after operation, when the wound was well united. Some uterine discharge came on the same day, and continued for several days, and then a yellowish leucorrhœal discharge followed. Some pus was discharged from two stitch points near the umbilicus on the eleventh and twelfth days, all the rest of the wound being soundly healed. The bowels acted for the first time on the twelfth day. The patient left the Hospital in very good health twenty-six days after operation.

*Case 81.—Multilocular Cyst, never Tapped—Ovariotomy—Extensive Omental and Intestinal Adhesions—Recovery.*

A married woman, 46 years of age, mother of eleven children, was sent to Mr. Wells by Dr. Allan, of Guiseley, near Leeds, and was admitted March 24, 1866. The abdomen was filled by an elastic, moveable tumour, in which fluctuation was felt, though indistinctly. The uterus was normal, and none of the tumour could be felt in the pelvis. The general health was good. Her last child was born in March, 1864. A few days afterwards she noticed a swelling in the right iliac region, and three months afterwards she began to feel pain occasionally in the same spot, and this pain became violent at each catamenial period for three or four months. Then the pain ceased, but the swelling went on increasing, slowly at first, but rapidly of late. As there was no cyst large enough to tap with any prospect of relief, it was agreed to perform ovariotomy on April 4, but the catamenia appeared the day before, and continued till the 13th. After a careful examination on the 16th, Mr. Wells diagnosed a compound ovarian cyst apparently free from adhesions to the abdominal wall, and with no close attachment to the uterus or within the pelvis. But a soft crepitus, felt all over the surface of the tumour, showed the presence either of recent lymph or of omentum. The absence of pain and fever almost excluded the possibility of lymph being present over so extensive a surface, and omentum was, therefore, looked for, and found at the operation, which was performed on April 18. Dr. Labbé, of Paris, Surgeon to the Salpetrière, and Dr. Lockwood, of New York, were among the visitors.

The tumour was exposed by an incision which extended from one inch above to eight inches below the umbilicus. Two bands of vascular adhesion, each about three inches long and two inches broad, connected the cyst on each side to the abdominal wall near the linea alba, but in such a way as to permit free movement of the cyst. These bands were tied and divided; the cyst was tapped; some pints of fluid were removed; and the partially emptied cyst drawn out and opened. Many large lumps of fatty fibrine then escaped. All the upper and back part of the cyst was then found to be closely enveloped by omentum and mesentery, with coils of small intestine. These were all carefully separated, and the pedicle was secured between two and three inches from the left side of the uterus by a small clamp, which was fixed outside with some little traction. There was very little bleeding; but four vessels in the omentum, which bled after some shreds had been cut away, were tied with fine silk. The ends of the ligatures were cut off short, and the omentum was returned. One of the bands of adhesion between the cyst and abdominal wall had been treated in the same way. The right ovary was healthy. Eleven pints of fluid were removed. The lumps of fibrine weighed one pound fourteen ounces, and the cyst wall one pound three ounces. The progress after operation was very satisfactory. The only opium given was three-tenths of a grain of acetate of morphia injected under the skin one hour after operation, and fifteen minims of laudanum into the rectum on the first day. All the sutures except the lowest were removed on the fourth, and the lowest on the fifth day. The urine being scanty, high coloured, and depositing mixed urates largely, citrate of potash was given freely, and with good effect. On the sixth day there was some superficial suppuration around the clamp. The clamp was removed on the eleventh day. The bowels acted on the twelfth, and on the sixteenth the catamenia came on with some customary pain. They went through the usual course, and the wound was soundly healed and the patient rapidly gaining strength when she left the Hospital on the twenty-sixth day after operation.

The following chart, on a plan which has been lately used by Mr. Wells, shows the daily range of pulse, respiration, and temperature in this case. The thin white line marks the rise and fall of the respirations, the thick white line of the pulse, and dotted line of the temperature. In the bedside charts used by Mr. Wells these lines are marked with coloured pencils—black, red, and yellow,—and the blank forms have a range of temperature from 94° Fahrenheit to 110°; of pulse from 50 to 160; and of respiration from 0 to 70. The range was so small in this case that it has been unnecessary to print the upper and lower part of the scale. It may be seen that the pulse never rose above 108, the temperature 100·7-10ths, and the respirations 36. The fall simultaneously in pulse, respiration, and temperature after the operation (shock), their rise for twenty-four hours afterwards, and then their gradual fall till the eighth day of observation are very interesting. The rise on the ninth day coincided with the maturation of a superficial abscess near the upper part of the closed wound.



*a*. First observation one hour after the operation, when recovered from the chloroform, at 4 p.m.; 3-10 gr. morph. subcutaneous.

*b*. No pain; sickness; skin moist; tongue moist, slightly furred; an enema with ♏15 laud., at 8 p.m.; urine loaded with lithates; citrate of potash.

*c*. Urine clear.

*d*. Urine slightly loaded with lithates.

*e*. More lithates in the urine. The stitches removed; wound united.

*f*. Urine clearer.

*g*. Suppuration in the wound round the clamp.

*h*. Very little discharge from the wound.

*i*. This sudden fall and rise of temperature cannot be well accounted for except by meteorologic causes. It was observed the same day in three other cases.

*j*. Had meat for the first time.

*k*. Enema in the morning.

*l*. The clamp removed. A small abscess forming at the left edge of the wound about one inch below umbilicus. Bowels not moved since operation.

*m*. Bowels moved.

*n*. Catamenia coming on, which are always very painful.

*o*. Catamenia.

As the rise and fall of temperature is of greater interest than the rate of the pulse, it may be well for the future to show in printing the range of temperature by the brightest line; but for the case-book the coloured pencils are far more convenient and effective. The registered thermometers of Mr. Casella, of Hatton-garden, as recommended by Dr. Aitken, are said by Mr. Wells to be the most convenient and reliable instruments for the bedside which he has yet obtained. But any glass instrument is easily broken, and our manufacturers would do well to turn their attention to the manufacture of some metallic instrument. In Mr. Gauntlett's chronometrical thermometer, by which the temperature of the air of Mr. Wells's ward for operation cases may be hourly recorded, a long hollow cylinder of zinc replaces the column of mercury in glass; and just as in the aneroid barometer a metallic chamber and spring show variations of atmospheric pressure by an index, it must be easy to indicate variations of temperature in a similar manner. Indeed, Mr. Wells informs us that a pocket registering thermometer has lately been made in Vienna not larger than a watch, which, if it prove to be equally delicate and accurate, will replace all fragile glass instruments, for use at the bedside.

AN amateur morning concert will be given at Willis's Rooms on Tuesday, June 12, for the benefit of the London Infirmary for Epilepsy and Paralysis, Charles-street, Portman-square, under the immediate patronage of the Duchess of Grafton, the Duchess of St. Albans, the Countess of Derby, the Countess of Egmont, and other ladies. The programme is very attractive, and many of the most distinguished London amateurs will be amongst the performers.

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Medical Times and Gazette.

## SATURDAY, JUNE 9.

## GENERAL MEDICAL COUNCIL.

The detailed reports of the last three days of the session will be found in another part of the journal; here we need only allude briefly to the most important of the matters discussed or decided on. As we mentioned last week, Saturday, May 26, was occupied wholly by the Report of the Pharmacopœia Committee. The question of chemical notation (we gave last week the resolution which was passed) took up a considerable time, and the rest of the sitting was given up to the consideration of Dr. Acland's proposition—that the Pharmacopœia Committee should ascertain whether the Council has any and what power to obtain or direct reports and investigations into the properties of medicines, etc. The proposal was not acceded to, the votes for and against it being equal. Years hence, when the Council has much less to do and has an overflowing exchequer, it may be very fitting and useful that it should undertake such investigations as Dr. Acland and Dr. Christison recommend; but at present the Council has more than enough on its hands, and so soon as it may find its income exceeding its expenses the propriety and advisability of lowering the registration fee will have to be considered. Before quitting the subject of the Pharmacopœia we must remark that every one will agree with the President in thanking Dr. Quain for his "indefatigable endeavours to expedite the progress of the work." Dr. Quain rarely occupies the time of the Council by any speech-making, but he is one of the most valuable of its working members.

On Monday, May 28, the first business before the Council was the Report of the Committee on the letter from the Secretary of State for War. We mentioned this Report and the result of the discussion on it last week.

Dr. Parkes's speech in support of his amendment, throwing over the whole matter—Committee Report and Council resolutions alike—was very sensible and very amusing, though not exactly complimentary to the wisdom of the Committee; and its chairman, Sir D. J. Corrigan, showed himself rather touchy and thin-skinned about it; Sir Dominic clearly does not like to be tarred with his own brush.

The "Reports of the Visitations of Examinations" were received and entered on the Minutes. The visitations are to be continued, and the next reports, which are to be fuller and more minute as to details, are to be in the hands of the members of Council before its next session. The Reports are much too important and numerous to be commented on at present; but we shall probably take an early opportunity of directing attention to them. The general opinion of the Council is evidently strongly in favour of these visitations, as likely to exercise great and highly useful influence upon the conduct and efficiency of examinations, and to furnish valuable information to guide the Council in making further "recommendations."

But Sir D. J. Corrigan could not resist the opportunity offered for one of his denunciations of the Council and all its works. He moved an amendment to the effect that the visitations are only reciprocal acts of politeness between similarly interested and inculpated bodies, and, therefore, a mere farce, and that examinations cannot be judged from samples, but before you can say whether they are good or bad you must attend every one of the 3500 that are held annually in the United Kingdom. He observed that when rotten boroughs were impugned the parties impugned had not the boldness "to sit round a table and say they would inspect one another, and would send out a report which would show that they were the very model of purity;" that the managers of Lunatic Asylums would not be trusted to inspect and report upon themselves; that examinations might be rigged; and so on, saying, as he always does, many very true things, and applying them very shrewdly, but by no means prettily or politely, and not proposing any better thing in the place of that he denounces. Sir Dominic really has been so combative in spirit this session, and shown apparently so much desire to overturn all that is, without being, as far as we can see, prepared with anything to replace it, that did our little Parliament contain a Whalley we should feel obliged to commend the Baronet to his close surveillance as a suspected Fenian.

On Tuesday the Report of the Committee on the Registration of Medical Students was adopted. The mode and form of registration have been slightly simplified. It is to be hoped that all the licensing bodies will soon be moved to consider that this Council-registration is all-sufficing. At present the unhappy student is grievously tormented and bewildered by the many registrations demanded of him.

The very sensible and respectful memorial of the County and City of Cork Medical Protection Association was simply ordered to be entered on the Minutes. There was no time, we suppose, for the consideration it merited.

The most important business of the day was the adoption of Dr. Fleming's motion to enlarge the Executive Committee by the addition of one Scottish and one Irish member. As now formed, the Committee consists of the President, Mr. Cæsar Hawkins, and Drs. Acland, Paget, Andrew Wood, A. Smith, and Sharpey. They are, among other things, "to consider the whole form of procedure which has hitherto been followed in conducting the business of the Council, and to report, on the first day of next session, any alterations which, in their opinion, would tend to expedite transaction of business."

The rest of the business was almost simply routine, and at the conclusion votes of thanks, in which every one will warmly and heartily concur, were passed to Dr. Andrew Wood "for his unwearied exertions and invaluable services as Chairman of the Business Committee during the past and present Session of the Council;" and to the President for his kind, courteous, and efficient services.

So ended the present Session of the General Medical Council; a Session of unusual activity and importance. A valuable educational recommendation has been carried; and an "Amended Medical Acts Bill" has been again thoroughly discussed, and finally settled. We venture to say "finally," because, though we have no hope of seeing the Bill passed by Parliament this year, we trust that it will not for any reason be thought necessary to discuss any of its details in the Council again next Session. It is a very meagre "Amendment Act," but such as it is, it has so long stopped the way, and has consumed such an immense amount of time, that we are thankful to believe it is got rid of at last. It will not in any degree increase the powers of the Council for the improvement of education; but though it has been frequently said that they now can only make "recommendations" for that purpose, and that they ought to ask Parliament for power to enforce their "recommendations," we believe that any such demand on their part would be perfectly futile and vain. Consider what the conduct of the

Council up to this time has been, and what they have done. They were called into existence in 1858, as "The General Council of Medical Education and Registration of the United Kingdom." They were obliged by the Act to adopt at once a system of registration, they could not delay that; but what have they done for education during these nine years? This is the question which Government would certainly ask, and it would further inquire—"How have you used the powers the Act of 1858 gave you, and in what way have they failed you?" The reply must be—"We have only now, after nine years, agreed on a minimum of subjects to be required as tests of general education in the preliminary examination. We have not yet determined on any scheme of Professional education, or of Professional examination; we have only got so far as to recommend that Professional education shall not commence till after the preliminary examination has been passed, and that it shall continue over not less than forty-eight months. Last year, the eighth year of our existence, we for the first time instituted visitations of examinations. We have had to regret that our 'recommendations' have in various ways and degrees been disregarded by some of the licensing bodies, and that year after year the returns from the Army and Navy Medical Departments have shown that men are continually gaining entrance into the Profession whom it would be dangerous to admit into those Services, but we have never used the power the Act gives us to report any licensing board to the Privy Council, nor in any way have sought the help of that body to enforce our 'recommendations:' we have relied solely on moral suasion."

We need not suggest what the answer of Government would be. It may be that only one talent was given to the Council, but if that talent has been kept so carefully buried, how shall they be intrusted with a greater number of talents?

We have been anxious to represent the labours of the Council each year in the most favourable light possible. We have been honestly desirous of upholding their authority and power in every way, of pointing out any good they effect, and of disregarding or silencing, if possible, any murmurs against them. By instinct and temperament, from associations and education, we have a profound reverence for "constituted authorities," and we have laboured to revere the General Medical Council; but year by year, the work has become harder, the difficulty of believing that they are an authority greater, the task of making excuses for them more and more burdensome. Year after year the same apology has to be offered for them as for a costly establishment belonging to a sister Profession, and with the defenders of the Irish Church the apologist for the Medical Council exclaims, "You do not sufficiently consider the difficulties they have to contend with." But it may be doubted whether, when it has to be annually repeated, such a defence does not become the most complete of condemnations?

The Council has been in existence nine years, and has cost the Profession £58,000—this, we believe, is a fair estimate of the sums paid for registration, for, up to the end of 1859, the Council had received in fees £34,500, and the average amount received in fees each year since, to the end of 1865, has certainly been as much as £3900—and when charged by one of themselves with having "done nothing," all that could be said in the eloquent defence made by another member, was, "They had, considering the circumstances, done a good deal. . . . The National Pharmacopœia had been constructed. The Registration of the Profession had been effected, and now was become a piece of office routine. Much had been done for education. Although all had not been done that might have been done, it was throwing dust in the eyes of the public, who had not a full knowledge of the facts, to announce that nothing had been accomplished." And another Member "could declare most positively that there was nothing more remarkable than the great advance which had taken place in the mental training of Medical students from the very first year in which the question of education was agitated in the Council.

Now grant all this to the full; say nothing about what the "National Pharmacopœia" is, or of how it has been almost repudiated by the Profession—nothing of the defects of uniform registration—nothing about the general advance of education throughout the country—pass by all these objections, and admit fully the defence offered, can it be pretended for a moment that it justifies an existence of nine years, and a cost of £58,000? that it answers in any degree the very lowest and most moderate expectations of the Profession? It is no real reply to urge, as Dr. Acland did, that "the habits of the Practitioners in the country, the habits of students, are not to be altered in a moment, without regard to previous circumstances, involved in vested interests, in existing corporations, teachers, and examiners." The fact that so many of the Council are "involved in vested interests" is, indeed, the strongest of all possible reasons why they should most carefully avoid any suspicion of dilatoriness; but no one has expected or desired any sudden or violent changes in the existing systems of Medical education and examination. It was to be expected, however, that the Council would, long ere this, have determined what changes were desirable, and have fixed a time for their coming into operation. Even had they granted to existing systems long years of grace, the Profession would then have been patient under the heavy tax they pay, for the good coming would have been visible. But as the years rolled on, and session after session the meetings of the Council were almost *vox et preterea nihil*—"neither gods nor men could stand it," and the Profession has become impatient and restive. All educational questions have been committed, re-committed, and re-re-committed, debated and re-debated, with most damnable iteration, though nearly every member of the Council is, or has been, teacher, examiner, or both, and might therefore be credited with a practical knowledge of the whole subject, and with being thoroughly alive to the importance of early legislation on it. And a like lavish expenditure of time has been bestowed on other subjects.

No one will believe for a moment that any one of the eminent men composing the Council has ever deliberately acted purely as the representative of the particular body which sent him there, but it can hardly be denied that now and then the conduct of a discussion has been of a character to afford some colour to such a reproach. Many of the members are calm, persevering, invaluable hard-workers, actuated by the single desire to elevate and improve the Profession, and respecting highly Carlyle's dictum that "Silence is the eternal duty of man;" but some others have yielded more or less largely to the temptations arising out of special endowments of speech and debating power, so that we have not greatly wondered at an observation 'that the business of the Council has been evidently managed on the division of labour principle, England undertaking mainly the thinking and acting, while the sister kingdoms relieved her of the chief part of the labour of talking!'

We thankfully acknowledge, however, that real and important progress has been made this Session, and as the two subjects that have hitherto consumed the largest amount of time may be considered as done with, we may hope that other matters of great and pressing importance will now be dealt with with commensurate earnestness and diligence. In such case the Profession will quickly forget what they may consider the shortcomings of past years.

We admit most willingly then that the Council has been of some real benefit, and has done some real work, but we do most earnestly deprecate, in the interests of the public, the Profession, and the Council itself, the great cost of time and money at which this has been effected. And we venture to entreat the members of the Council to be more uniformly and continuously equal to the position in which they are placed, and the trust committed to them; and to remember that of all the difficulties they have had to contend with, the chief have arisen from within. If they will but, to adapt the words of Dr. Acland, exercise the powers they possess in a calm and judicial manner, and, showing trust and confidence in each other and in the good intentions of the several bodies they represent, seriously and loyally endeavour to work the machinery entrusted to them, they may still win the confidence and esteem of the Profession, and through and by the Profession earn a title to the national gratitude and respect.

## THEORY AND PRACTICE IN DIARRHŒA AND CHOLERA.

We are compelled this week again to give the place of honour to the Medical Council and its proceedings, and to defer the full consideration we had intended of theories of cholera and methods of treatment. Still, we may make room for a few observations, just to clear the way, and serve as food for reflection.

*Curationes morbum ostendunt,* says Hippocrates. Tell us what does good in a disease, and we possibly learn something of the nature of it; for the effects of remedies are as much a part of the natural history of a disease as the pulse, tongue, and temperature. If a theory be propounded which is at variance with known facts as to the action of remedies, or which can be reconciled with the effects of some few remedies of one class only, and which requires the effects of other remedies of other classes, either to be denied or to be explained away, the question comes, which shall we give up—our facts or our theory? Every man must decide for himself, according to his taste and mental habits. For our part, we prefer the facts.

We must not forget, moreover, that no theory of any disease can be absolutely perfect. It can only be provisional; we must accept it, if we accept it at all, with the reservation—"So far as our present state of knowledge enables us to judge." See how triumphant the cell theory was a few short years ago! And what is it now? Our ideas of the composition of the blood, of the action of poisons, of the reaction of poisoned blood on the nervous system, and of this on the several organs, may all be looked upon as very imperfect, and sure to be modified ere long, and therefore as affording no solid basis for practice.

Again, supposing our theory of a disease to be perfect, does it of necessity lead to the correct treatment? It may, or may not; but this can only be decided by experiment. Theory may leave the propriety of any given measure quite a matter of doubt. Take bleeding in the cold stage of ague. It can be defended on theory, and can be shown to be indefensible on theory. It is to experiment that we must resort at last, and we may as well confess this at once.

The very term "elimination," which has been brought so much into use, also requires to be carefully sifted before it can be received as an absolute statement of fact or guide to practice. It is assumed, quite gratuitously, that the serous discharges of cholera are salutary efforts of Nature to get rid of a poison out of the blood; but we may ask—on practical grounds—is this the only way of elimination possible or necessary? We know as fact, from more than one Medical man who has imbibed cholera poison, whose whole body and blood have been impregnated with the nauseous smell, and who has had sickness, depression, and relaxed bowels, that these symptoms have been got rid of, not by elimination—so far as this word means purgation—but by *anti-elimination:* by actually resisting the tendency of the bowels to act; by taking laudanum and brandy-and-water, and, above all, by lying in bed, than which few remedies are more anti-purgative. That elimination by copious serous bowel discharges is necessary for the safety of persons who have imbibed cholera poison, is a proposition which admits of a plain "yes" or "no" answer; and we believe that the voice of the Profession would answer "No."

Again let us say, that if the idea of "Elimination" is set up as one Goddess, to be propitiated with appropriate offerings of sweet savour, "Nature" is another kind of fetish, which inspires tremendous reverence with the ignorant, but which the nineteenth century may surely smash without fear. What is meant by "Nature?" Is there an intelligent principle within us endowed with consciousness, intelligence, and will, which, on certain emergencies, makes such "efforts" as she may consider "salutary?" Are members of the Medical Profession bound to respect her efforts? We hope not, for to us she would seem a lunatic and a spendthrift, or worse. Because a poison has got into the blood, is "Nature" to kill the poor wretch she inhabits by vomiting or purging out all the serum of the blood, and stripping off the epithelium from the small intestines, under pretence that it is a "salutary effort" at elimination? If a rat gets into the kitchen, shall we set the house on fire? It would be about as sane a trick as these fictitious "salutary efforts" of hypothetical "Nature." Demoniacal possession would be no worse. Really it is too bad to have to caution men now against figures of speech and figments of the imagination, as if they were things that exist in the outer world.

Let us look at a parallel case. A woman has in her womb after delivery a piece of placenta or a clot of blood. "Nature" ought to expel them, but does not. Instead of this, then, she "sets up" a spasm of the womb, which prevents expulsion, and a bleeding that threatens the woman's life. Here there is clearly something in the womb to be "eliminated;" we know what it is, and can do it. But let us suppose otherwise: should we stand by, and promote hæmorrhage and spasm as a "salutary effort of Nature;" and beguile ourselves with stories of some women who had died after "natural salutary" hæmorrhage had been suppressed?

We need not, however, go to parallel cases. The experience of the world has shown that when cholera is present, as an epidemic, bowel disorders of every lesser grade are prevalent too. All experience shows the propriety of suppressing these lesser grades. For this purpose there is a great variety of remedies, including

Acids,
Alkalies,
Astringents,
Stimulants and carminatives,
Opiates,
Calomel,
Purgatives,
Enemata,
Meat diet;

and combinations or sequences of more than one of these; and experience shows that when the bowel disorder is suppressed, the patient is comparatively safe. We shall hope next week to resume the subject, and sift the relative value of these remedies, and the cases in which each may be used with benefit. Meanwhile we will only express our regret that Dr. G. Johnson's theories of cholera, elaborated with so much ingenuity, and propagated with so much enthusiasm, seem to us to be not easily reconcilable—so far as the effects of remedies are concerned—with the general experience of the Profession.

## MORTALITY OF NEGROES IN AMERICA.

Our diplomatic officials are labouring with considerable industry and much ability to prove that they can really render valuable service in exchange for such honour and emolument as appertain to their profession. The Foreign Office has made the discovery that well-educated English gentlemen are good for something beyond wearing her Majesty's uniform and being civil to the British paterfamilias on his travels abroad. So the members of the Consular body have been encouraged to observe and report upon such particulars relating to the places where they are accredited as may be useful and interesting to us at home, and the results of these observations are from time to time made public in the usual form.

A collection of such Consular reports will supply future historians with more trustworthy data than have ever before been available, and the Foreign Office is justly entitled to the credit of authorising so excellent a plan.

We have recently seen one of the latest of these reports, giving a comparative statement of the mortality in the City of Charleston, Carolina, in the years 1855 and 1865. Making every allowance for the disorganised state of things in the latter year, consequent on the unhappy strife only then just brought to a close, there is matter for grave speculation in the remarkable difference between the mortality of the City in the two periods. In 1855 Charleston was a thriving and opulent seaport; in 1865 it was but a shadow of its former self. Civil war in its most repulsive and relentless fashion had done its worst, and the City, with its commerce utterly destroyed, was broken down and in ashes. Mr. Consul Walker tells us that its population last year was scarcely more than half the number living there ten years ago. Yet the deaths increased from 1088 to 2068: they were doubled, whilst the numbers living out of which they occurred were diminished one-half in the interval. And this statement refers only to those deaths which occurred in civil life from the ordinary diseases to which the inhabitants are subject. The mortality, which in 1855 was computed at a rate of 1 death to every 50 inhabitants, rose in 1865 to 1 death to every 10 persons living. Dividing the population into two classes, we see that the increased mortality belongs almost entirely to the negroes; for, whilst in 1855 the total deaths comprised 402 whites and 686 negroes, in 1865 the deaths of white persons numbered 509, and of negroes 1508. It is probable—nay, certain—that very many more of these poor wretches died last year than were taken account of, by reason of the confusion then existing; and that consequently the actual mortality was even greater than the very shocking rate above given. Mr. Walker attributes the excessive death rate amongst the negroes in great measure to their habitual improvidence; but that of itself hardly suffices as an explanation. There was, likely enough, great scarcity of food in the city, and the despised race—who only become "our coloured brethren" for platform purposes—would, perhaps, get little benefit at the hands of Yankee soldiers from the "first-come, first-served" principle. Mr. Walker further states that of the 1508 deaths of negroes in 1865, no less than 603 died under five years of age.

And if such a state of things prevails in the green tree, what about the dry? As Mr. Walker points out, if in a town where a certain amount of Medical attendance and Hospital care are within reach, such a high rate of mortality has been possible, what may we reasonably believe has happened in remote districts out of the reach of scientific aid altogether? The death-rate amongst negroes in many such districts, and along the seaboard of North and South Carolina is believed to have been as high as *twenty-five per cent. of their numbers living!*

At this rate the *vexata quæstio* of the ultimate destiny of the negro in America will soon find a solution which will remove all difficulty in the matter: they will be "improved off the face of the earth." And that this solution finds even official acceptance is clear from the general tenor of the remarks on the decline of the coloured race which are to be found in the introduction to the American Census of 1860. There we are told in the plainest manner that the gradual extinction of that people is indicated with unerring certainty and with increasing rapidity, as whether free or slave they become diffused among the dominant race. The "uncongenial climate" causes a high rate of mortality from consumption and diseases of the respiratory system. In Philadelphia during the last six months of 1860 there were 148 births registered to 306 deaths amongst the free coloured; and although general observation discloses more favourable results, yet as a rule the deaths exceed the births of the race. Here is a prophetic view of the future of the negro in America, as developed by the Census returns:—"The extinction of slavery in widening the field for white labour and enterprise will tend to reduce the rate of increase of the coloured race, while its diffusion will lead to a more rapid admixture, the tendency of which, judging from the past, will be to impair it physically without improving it morally." But such a solution as the extinction of the race implies would entail a lasting disgrace upon the American people, who have used these unfortunate blacks for their own purposes hitherto, and who would thus be chargeable with the shame of abandoning them when no further end was attainable by their help.

The statesmen—if there be any—of the United States would find a far nobler sphere of operations in ameliorating the miserable condition of the slaves, to whom they have given freedom, than in political cabals and wrong-headed, unreasoning abuse of Old World institutions. The loss of thousands of human lives over and above the holocausts of the war, will be upon their heads until they cease to turn a deaf ear to the counsels of humanity and the cries of the wretched victims of their overweening vanity and selfishness.

## THE WEEK.

### THE CORONER FOR CENTRAL MIDDLESEX.

The dispute on the subject of the payment of fees to Medical witnesses, which has lately enlivened the columns of the daily papers, has, we think, been founded on a misunderstanding between Dr. Sansom and Dr. Lankester, and we can only regret that the public should have been made umpires in the matter. It is, no doubt, an anomaly that a Medical witness should be asked to sign a receipt for a sum of money which he has never received, and it is equally an anomaly that a Coroner should be called on to pay fees out of his own pocket which he himself will not receive until six weeks after. It is not, perhaps, to be wondered at that the latter circumstance should in process of time have given rise to the former. The controversy, however, has given occasion to Dr. Lankester to recommend, in the columns of the *Times* newspaper, that the Coroner should be "allowed to employ a competent expert at a fixed salary to make all post-mortem examinations, and to call in Medical attendants only where their evidence is necessary." We are afraid that some of Dr. Lankester's opponents may say that the Coroner for Central Middlesex, himself a Medical man, owing his present position to the support of his Medical brethren, proposes that a large revenue should be diverted from the Profession, and that the General Practitioner should be set aside as though unable to make a post-mortem examination. Surely the better way would be to pay the witnesses once in six weeks after their fees have been allowed and handed over by the county magistrates.

### SOUTHWARK MEDICAL ASSOCIATION.

The members of this Society have recently been engaged in investigating certain charges of alleged un-Professional conduct preferred by Mr. Button against Dr. Bonney. Mr. Button, it appears, has been placed in a very awkward position in consequence of the spread of rumours to the effect that he was not a qualified Medical man, and had improperly treated a certain member of a club of which he was the Medical officer. Hence he had been suspended from the duties of his office. Mr. Button placed the matter in the hands of the Southwark Medical Association, which constituted itself a "court Medical." Having at several meetings gone fully into the whole matter, the Association ascertained that Mr. Button had fair ground for complaint, inasmuch as an impression prevailed with the members of the club in question that Mr. Button was not a qualified Medical man; that that impression was founded on false statements; and that Mr. Button was completely exonerated from all shadow of unskilful treatment or neglect of any kind. Mr. Button's name is in the Medical Register, and we have pleasure in adding that he has long won the respect of his fellow Practitioners, and is deserving of the entire confidence of his patients.

### THE COMMUNICABILITY OF RINDERPEST TO MAN.

The following notes have been communicated to us as bearing upon this question. A man named Daniel Woodcock died on the 21st of last September, at Oulton, after seven days' illness with symptoms supposed to be due to the action of Rinderpest poison. He was a strong man, whose duty it was to look after Rinderpest beasts, and bury them when dead. This work he disliked, and the peculiar smell of the diseased animals was a constant cause of complaint with him. A few days before his illness he complained more than usual of this disagreeable odour. On the morning after a harvest home held at this time, which he attended, he was attacked with sore throat and high fever, the tonsils and palate were covered with a thick yellow lymph, sloughing and black discolouration set in, and death speedily took place from rapid exhaustion. The Medical men who saw the case believed it to be diphtheria. The patient himself persisted that it was caught from the diseased cattle. Diphtheria was not prevalent in the neighbourhood, though isolated cases were constantly occurring in the district around, two deaths having taken place in an adjoining parish during the previous month. The present case seems to be one of severe diphtheria. Rinderpest communicates apparently a form of disease which is essentially "herpetic" in character.

### THE HOSPITAL SHIP "BELLEISLE."

The Hospital ship *Belleisle* was towed up from the Medway to Greenwich at the end of last week, and is now moored close to the *Dreadnought*. As one of our old seventy-fours, she has ample accommodation for a large number of patients, and it is satisfactory to know that, by the exertions of the Seamen's Hospital Society, means are now actually provided for the isolation and immediate treatment of any cases of cholera that may arrive in the Thames. It is, indeed, difficult to say how much of good this prospective plan may not eventually accomplish. Some Medical, and many laymen, assert that the mere presence of a hulk brought up the river for such a purpose is calculated to cause a very unhealthy panic; but it must be equally patent to the minds of the most, that, in this question, at all events, it is better to be forearmed; and that if happily the *Belleisle* remain tenanted only by her shipkeeper, we shall not respect the less the principle that has succeeded in bringing her to these moorings, ready for action, to watch and to wait.

### SUCCESSFUL APPLICATION OF DR. RICHARDSON'S METHOD OF LOCAL ANÆSTHESIA IN VETERINARY SURGERY.

The Messrs. Mavor, the eminent veterinary Surgeons, of Park-street, Grosvenor-square, have recently been using Dr. Richardson's method of local anæsthesia in operations on the horse, with the greatest possible success. The first operation was that of firing a mare in one fore-leg; the leg was first shaved, then the ether spray was applied from the knee to the foot until insensibility was produced, after which the actual cautery was carried at least sixteen times over the whole length of the narcotised part. The animal seemed to suffer no pain, remaining quiet the whole time. The second operation was one of firing on the hock joint—a very painful procedure; it, too, was performed with complete success. The iron was passed nearly forty times over a surface averaging three inches in length. A third operation was that of division of the metacarpal nerve on each side, immediately above the fetlock; in this case, the skin having first been made insensible, the nerve was laid bare, and a curved needle with a blunt point was passed under it; then the nerve was directly subjected to the ether spray, without the slightest evidence of pain, and when the nerve structure was entirely frozen and hard the division was made painlessly. In a fourth case after "docking" the ether spray was directed over the cut bleeding surface before applying the actual cautery to stop the hæmorrhage. The effect was most marked, the animal giving no sign of pain under the iron; the bleeding was also as effectually stopped as though the anæsthesia had not been supplied. Mr. Frederick Mavor informs us that some peculiarities are observed in the effects of the ether spray on horses as compared with those on man: thus the skin, instead of blanching, assumes rather a blue appearance, and the nerve tissue undergoes extreme contraction. The anæsthesia is produced within the minute, and more ether is not required than for the human subject. All the wounds have healed well, and not the slightest sign of slough has been observed. As we are promised by the Messrs. Mavor a detailed account of their experiences, we have only on this occasion to congratulate them heartily for having been the first veterinarians to apply the most recent advancement of Medical science to the relief of the inferior creation.

### APPEAL ON BEHALF OF A WIDOW AND SIX ORPHANS BY DR. LETHEBY AND MR. SPENCER WATSON.

We beg to call special attention to this appeal, which will be found amongst the "Notices to Correspondents" in our present number. The facts stated, and guaranteed by names so respected, well deserve to move the compassion of our readers.

### FROM ABROAD.—STATISTICS OF LUNACY IN FRANCE—M. DELPECH'S REPORT ON TRICHINIASIS—LIVING ENCAPSULED TRICHINÆ DATING TWENTY-FOUR YEARS.

A Report on the French Lunatic Asylums has recently been presented to the Emperor, embracing, however, only the septennial period 1856—60. At the end of this latter year there were 56 public Asylums—37 belonging to the departments, 1 to the State, and 19 to the hospices. There were also 42 private Asylums. On January 1, 1835, the period at which statistical accounts were first taken, there were 10,530 patients in these various Asylums, and on Jan. 1, 1861, there were 30,239 patients. These 30,239 were subdivided as follows:—Lunatics 26,450, idiots 3746, and cretins 43. From the year 1854 to 1860 the insane population of the Asylums consisted of 51·90 per cent. females and 48·10 per cent. males. From the year 1856 the patients have been classed according to the probabilities of their recovery, and from the data thus acquired it results that more than four-fifths offered no chance whatever of cure. According to one of the tables given, there were in 1851 24,433 lunatics treated *à domicile*, 34,004 in 1856, and 53,160 in 1861; while the numbers treated in the public Asylums for the respective years were 20,537, 26,286, and 31,054—so that in the 10 years, 1851—61, the total number of lunatics in France had risen from 44,970 to 84,214. Comparing the lunatics with the population, we find that there is 1 male lunatic for every 915 males, 1 female lunatic for every 839 females, 1 idiot for every 796 males, and 1 idiot for every 1034 females. The annual movement of patients in both private and public Asylums during the years 1854—60, has consisted in 68,992 admissions, and 63,277 discharges or deaths. With reference to the respective influence of physical causes (excluding hereditary influence), 15,357 cases are returned during 1856—60 as due to physical, and 10,357 to moral causes. Hereditary influence has been observed in one-seventh of the cases, the same sex—as father to son, or mother to daughter—

usually transmitting it. During the years 1854—60 the recoveries amounted to only 8·69 per cent. among the males and 7·81 among the females. During the septennial period 1856—60 the deaths amounted to 26,560. As a general rule, the number of deaths is relatively considerable during the first two months after admission.

M. Delpech, who recently presented a report to the French Government upon the subject of trichiniasis founded upon his investigations during a visit to Germany, has just made one to the Academy of Medicine upon the same subject after a due consideration of the various documents and works relating to it which have been laid before that learned body. After an elaborate description of all the phenomena connected with trichiniasis, he concludes:—1. The apprehensions which have been entertained on the occasions of the epidemics which have been reported in Germany, are not justified until the present time by a single case occurring in France. 2. The cooking of pork, habitually much more complete in France, explains and assures such immunity, and there is now more reason than ever to insist upon a persistence in this salutary custom. 3. In the absence of an epidemic, or even of isolated cases of trichiniasis, there is no ground for organising any special hygienic measures, and especially for instituting a general and obligatory microscopic examination of the flesh of the pig. Nevertheless, it will not be without utility in reference to studying and examining into the subject, to establish inspectorates in some towns provided with *abattoirs*, in order to exhibit by a formal examination statistical conclusions in relation to the existence, absence, or proportion of trichiniasis in the porcine race. 4. As certain conditions under which the animal is brought up, and special precautions may exert a great influence in regard to trichiniasis, it is desirable that a knowledge of the precautions which should be taken in order to ensure security should be spread by means of circulars amongst the rural population.

In relation to this subject, we may refer to a very curious case related by Dr. Klopsch, of Breslau, in the April number of Virchow's *Archiv*. A lady, aged 38, consulted him in 1857 concerning a tumour of the right breast, and on interrogating her concerning her previous health, he found that this had always been very good except at one period—viz., in 1842—when, while residing at Dresden, she became the subject of severe pains in the joints and limbs, followed by paralysis. After a while anasarca appeared, and continued many weeks. At the end of three months from this her health began to improve, and after four months' confinement to bed she recovered. Later, she married and bore a child, and, in fact, continued in good health, with the exception of occasional muscular pains. The tumour in her breast had appeared since early in 1857, and exhibited the signs of carcinoma, and the glands of the axilla having become slowly affected, while the cancer cachexia was not developed, Professor Middledorpf amputated her breast in May, 1863. Two years later, cancerous infiltration of the axilla having appeared, and the patient's general health being good, it was resolved to excise such parts. While separating these from the subjacent intercostals, Professor Middeldorpf observed that they were beset with white granules, which he suspected to be trichina capsules. Examined microscopically, every portion of the muscle the size of a pin's head was found to contain four or five completely calcified trichina-capsules, trichinæ, on a section being made, being found free and living. This is the first instance on record in which twenty-four years after an invasion of trichiniasis, living trichinæ have been still discoverable. That they really were deposited in 1842 is shown, not only by the symptoms then present and the subsequent good health of the subject, but also by the fact of two of her servants having then died suffering from similar symptoms. It is an interesting speculation how far there is any etiological connexion between the trichiniasis and the cancerous degeneration.

### PARLIAMENTARY. — CAPITAL PUNISHMENT AMENDMENT BILL—LUNACY ACTS (SCOTLAND) AMENDMENT BILL—PAYMENT OF POOR-LAW MEDICAL OFFICERS IN IRELAND.

ON Thursday, May 31, in the House of Lords,

In Committee upon the Law of Capital Punishment Amendment Bill, a discussion arose upon clause 4, which classed murders under two heads—of the first and of the second degree.

Lord Grey objected to this division of the crime of murder, and proposed the omission of the clause.

The Lord Chancellor justified the distinction between wilful murders and others of a less heinous character, by citing the authority of a majority of the judges and of the Commissioners who had reported upon the subject.

After a brief debate, in the course of which Lord Russell and the Duke of Richmond spoke in favour of the clause, and Lords Romilly and Longford against it, the Committee divided, and the numbers being equal, the clause was, according to the practice of the House, declared to be negatived.

Upon the motion of the Lord Chancellor, further progress in Committee was postponed, in order that the Bill as altered might be reconsidered.

In the House of Commons,

The Lords' amendments to the Lunacy Acts (Scotland) Amendment Bill were considered and agreed to.

On Tuesday, June 5,

Mr. M'Evoy moved a resolution to the effect that the time had now arrived for the Government to adopt the recommendations of the Select Committee of 1858, that "Her Majesty's Government should take into consideration the claims of Ireland to a grant of the half-cost of Medical officers of Unions, with the view of providing for the same in future, as is now the practice in England and Scotland," fortified, as such recommendation is, by the Report of the Select Committee on Taxation of Ireland in June, 1865.

The Chancellor of the Exchequer intimated his readiness to grant the concession required, and would make the necessary provision in next year's Estimates. After a short discussion the motion was withdrawn.

## THE MEDICAL COUNCIL AND THE PUBLIC SERVICES.

*(From a Correspondent.)*

THE revelations which have taken place at several meetings of the General Medical Council may be taken as a proof of the unpopularity of our public services. It is simply a libel upon our Profession to represent the "failures" at the Army and Navy Medical examinations as fair specimens of the ordinary run of young Medical men. A certain number of men—thoroughly ill-educated in every sense of the word—have managed to "cram" the necessary amount of information, and, with singular good luck for themselves, but with lamentably bad luck for the public and the credit of our examining Boards, these men have succeeded in obtaining a civil qualification before their mental stuffing has been dissipated. The possession of a diploma is not everything, however. Such men possess none of the elements necessary for success in civil practice. They form a kind of floating Medical population, passing from village to village, never succeeding in acquiring a "footing" anywhere, but eventually, perhaps, becoming assistants to some hard-worked Practitioner. To such men as these the necessities of the Government afford the chance of an opening. They endeavour to cram up a little fresh information, and most miserably go to pieces at the Admiralty or Chelsea.

At the meeting of the Medical Council on the 24th of May last, Mr. Hargrave, in answer to Sir D. J. Corrigan, "maintained that the Report of the Navy Board was not a fair criterion of the attainments of Medical students. It was well known that no young man of gentle birth and good education would go into the Navy and submit to be snubbed by the officers, who, if not tyrannical, were certainly overbearing. . . . . The Navy was rapidly reverting to the state of things existing in the time of 'Roderick Random.'"

Dr. Stokes also made some corroborative remarks, and added "that there had been for some years, from whatever causes, an indisposition among the better class of students to enter the public service. That was certainly the case with reference to the Army, and still more so with regard to the Navy. The result was, that the sweepings of the class of Medical students presented themselves for examination before those Boards, and no doubt amongst them there were many candidates who knew nothing of Latin and very little of English."

We very much fear that this state of things must continue until a change comes over the conduct of the authorities, and our past experience compels us to advise young men not to go up for the Army examination in August, in the "hope that things will mend." If the Horse Guards can get men enough the recommendations of the Committee will be waste paper, and things will remain as they are.

## THE APPENDIX TO THE THIRD REPORT OF THE CATTLE PLAGUE COMMISSIONERS.

(Continued from page 596.)

Dr. Bristowe's report is a very full one, and bears the imprint of very cautious observation. "My notes," says Dr. Bristowe, "were mostly taken down from my dictation while the autopsies to which they relate were in progress, and may be regarded therefore as fairly accurate reproductions of my impressions at the time of examination," but the report also "expresses my more mature opinions on many points on which my opinions were unformed at the time the post-mortem accounts were written," especially in regard to the cutaneous eruption.

*The condition of the skin* first claims attention. Dr. Sanderson and Dr. Bristowe agree closely as to their conclusions upon this point. The eruption resembles somewhat eczema impetiginodes in the more hairy parts; in the less hairy parts, impetigo or a modified small-pox. "I have never yet, however," says Dr. Bristowe, "discovered either a true vesicle or a true pustule, nor have I satisfied myself that true pus is ever secreted (except accidentally) in this disease by any part of the skin or of the glandular tissue connected therewith. The eruption appears to me to consist in congestion (inflammatory, doubtless) of the capillary plexus of the true skin, and of those involutions of that plexus which are distributed upon the sebaceous glands, with consequent desquamation and increased growth of epidermis and superabundant formation and discharge of sebaceous matter and the development of variable proportions of nuclear, pus-like corpuscles." It is a sebaceous accumulation, which, when removed, exposes the true skin, which is congested, this congestion leading sometimes to extravasation. Sometimes the crust is tied, as it were, to the true skin by the sheaths of the hairs, which become hypertrophied. It does not cover over any collection of pus. The follicles are enlarged usually. Microscopically, there is congestion of the capillaries of the true skin without "any development in its substance of abnormal morphological elements;"—shedding of the epidermis and proliferation of the sebaceous cells in the glands and outside the glands forming the crusts, mixed up with nuclear bodies resembling pus corpuscles, but without a distinct cell wall, or apparently a nucleus, changed into what seems to be an aggregation of molecules by acetic acid, and believed to be modified sebaceous cells.

Dr. Bristowe then proceeds to give an elaborate summary of the alterations found in the internal organs. Commencing at the mouth and fauces, he shows that the changes have no relation to aphtha or diphtheria, being due to congestion, separation of epithelium, and hyperactivity of the mucous glands; then discusses the morbid anatomy of the tongue, palate, and other parts, observing that the microscopic examination of "the whitish granular exudation on the lips and gums, tip of the tongue, base of the tongue and fauces, shows that it consists partly of healthy epithelial scales which have become granular, and partly of the masses of nuclear bodies like those observed in connexion with the cutaneous crusts."

The changes met with by different observers in the stomach have been very fully placed before the Profession already. Dr. Bristowe remarks especially, however, upon the sloughs observed in the stomachs and the atrophous state of the follicles—changes "due in the first instance to extravasation of blood and in the second place to the changes which that extravasated blood itself undergoes and to the changes which its presence induces in the tissues amongst and into which it is extravasated; that, in fact, the congestion, the submucous hæmorrhage, the sloughing, and the cicatrisation, are in successive dependence on one another." All observers agree that the lesions of Peyer's patches, characteristic of typhoid fever, are absent. The bronchi and lungs are affected after the same manner as other organs. The frequent occurrence of interlobular emphysema is noticed and accounted for by the peculiarity of the structure of the bovine lung—viz., the abundance of interlobular cellular tissue, and in harmony with Dr. Sanderson's view. Emphysema is very common, too, in the general tract of cellular tissue; sometimes also about the loins around the kidneys. It has been regarded as due to the disengagement of gas from quasi-putrefactive change. This Dr. Bristowe believes to be entirely erroneous, for these reasons:—(1) Its strangeness, if due to decomposition of living tissues; (2) the absence of ill smell, in the gas or tissues amongst which gas is contained; (3) its presence in those tissues least liable to decompose (the cellular and muscular); (4) its non-increase by post-mortem decomposition; (5) the origin at the posterior mediastinum and root of the lungs, as an invariable antecedent to that elsewhere. Indeed, says Dr. Bristowe, "I do not for a moment hesitate to assert, as the result of my observations, that in all cases the emphysema begins in the cellular tissue of the interlobular spaces of the lungs, that it spreads thence to the roots of the lungs and posterior mediastinum, diffusing itself around the base of the pericardium, upwards along the œsophagus and trachea into the neck, and downward along the œsophagus and other parts towards the abdomen," etc. The Report concludes with some general remarks—(1) On the tendency to decomposition observed in animals dead of cattle plague, which varies very considerably, the muscular and cellular structure remaining unchanged after decomposition has commenced in the viscera; (2) the relative frequency with which organs and tissues are affected; (3) the remarkable similarity in the nature of the morbid processes seen in different parts of the body, as typified by the changes in the skin, though there may be a greater proclivity in one part than another to disease; (4) the rapidity of the reparative process; (5) the nature of Rinderpest, its essentially distinct character; (6) the morbid anatomy of the disease in sheep, goats, deer, etc. Lastly, there is an enormous mass of most valuable post-mortem detail and tabulated matter.

We have derived especial pleasure and profit from careful and repeated perusal of Dr. Lionel Beale's Report, which, avowedly devoted to "Microscopical Researches on the Cattle Plague," embraces topics of the greatest interest in the field of pathology generally. The whole of the reports have our most unqualified eulogium, but we are bound to say that Dr. Beale's observations bear particularly upon the facts of diseased conditions in general, opening out as they do in a very special manner what may be called tissue actions as contradistinguished from blood alterations. Dr. Beale's researches, if true in their inferential aspect, must very materially modify present pathological notions as to the cause, especially of inflammatory conditions. Of course, we offer no opinion here. Dr. Beale takes as his starting point the congested state of the capillary vessels so constantly seen in Rinderpest, and proceeds to show that as this is "by no means uniform in all different textures, or of equal degree in every part of the same tissue, while the capillaries of some organs (those between the uriniferous tubules of the kidney, those of the lobules of the liver, those of the mammary, and probably some other glands) are not as much congested as they are often found in healthy animals killed suddenly, it cannot be referred" *to any general impediment in the circulation;* but, on the other hand, congestion would seem to have a local origin, for there are patches of various sizes, "but distinctly separated from one another by uncongested, or only slightly congested, portions of tissue . . . of an intensely dark red colour, of circular form, as though the congestion had commenced and radiated away from a central spot. The result of the congestion is an increased pouring out of nutrient matter and a growth of the germinal matter (usually termed nuclei). *Dr. Beale thinks that whatever causes the local congestion is the cause of Rinderpest.*

1. *Changes in the Vessels and in the Blood.*—The small vessels, arteries, and veins, of congested spots are distended with blood corpuscles; the arteries are at first relaxed, but become subsequently more or less contracted, so that their outline is more or less uneven, the diameter varying very much in the smallest distance, the coats are granular; oftentimes, indeed, there is considerable atrophy. These changes are seen in the annexed illustration (Fig. 1), showing the capillaries of the mucous surface of the fourth stomach, encircling the mucous glands.

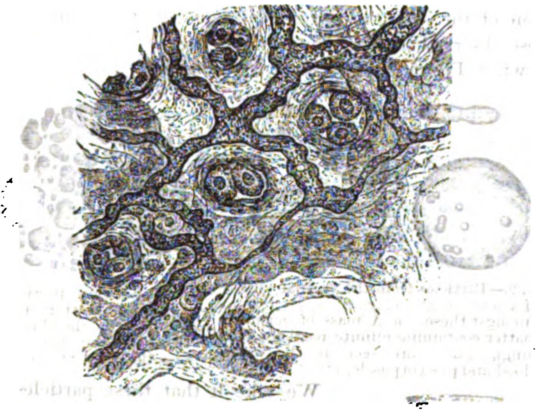

FIG. 1.—Surface of mucous membrane of fourth stomach, corresponding to a thin depressed circular spot like an ulcer: superficial capillary vessels varying very much in calibre, filled with granular matter and minute particles of germinal matter. The orifices of several gastric glands are seen, and the deeper vessels also obstructed on a lower plane. × 350.

In addition to these changes, there is another alteration of most striking character present in every case—viz., *a large increase in the size of the masses of germinal matter in the walls of the vessels.* This is well seen in Fig. 2, which represents a capillary from the connective tissue of the alimentary mucous membrane.

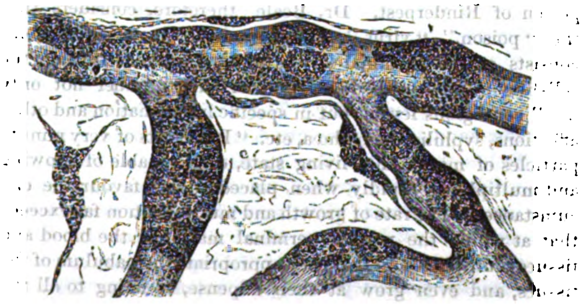

FIG. 2.—The masses of germinal matter of the capillary are very much enlarged, and are dividing and subdividing to form new masses. × 700.

The vessels are sometimes distended with red corpuscles (more or less altered), sometimes filled with a colourless or slightly yellowish fluid; the white corpuscles are always increased in the small veins and capillaries; in addition myelin masses are seen, with germinal matter in large amount

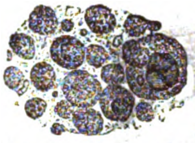

FIG. 3. — Very small masses of germinal matter, interior of small vein. × $\frac{1}{50}$

Fig. 3 represents some of the contents found in a vein in one of the congested spots—organised or germinal material. The germinal matter also of the *epithelia lining* is augmented so much as oftentimes to form projections and interfere with the circulation through the vessels. This germinal matter may actually plug up a capillary, as is represented at B in Fig. 4.

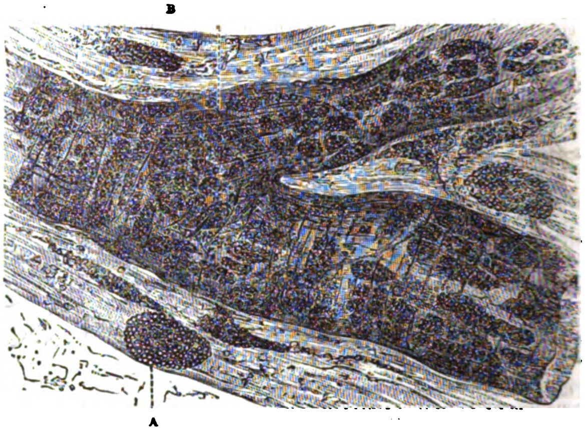

FIG. 4.—Small artery from connective tissue beneath depression of mucous membrane of fourth stomach. Cattle plague. A, Small cells with numerous oil globules; B, A large mass of germinal matter obstructing capillary. × 700.

Dr. Beale discusses the origin of these germinal masses, and thinks they may be enlarged white corpuscles; the adhesion together and subsequent growth of other particles; the growth of germs derived from without; or, lastly, an outgrowth from the lining membrane. The cause, however, of the congestion is at present doubtful; it may be due to the impediment offered by the increase of material just noticed. Dr. Beale notices that inflammatory lymph is not frequently met with, and thinks this is due to the fact that the capillaries become completely obstructed before time has elapsed for the outpouring of liquor sanguinis. In inflammation, however, the stage of dilatation is more prolonged, and the arrest less sudden; as a consequence of this, the thin walls allow the passage of fluid more readily. It would appear, then, that the local congestions produced by the increase of germinal matter lead in turn to an alteration in the composition of the blood and the tissues around. A like increase of nuclear elements is observed in the tissues generally, and also upon the free mucous surfaces, as a consequence of the congestions. The swelling and elevation above the level of the skin are due to circumscribed growths of the elements of the derma and the cuticular cells; the nuclear structures being abnormally in excess, these increase amongst the bundles of the fibrous tissue, making their way, in part, to the surface, in fact, separating the bundles of the areolar structure, and even causing atrophy, by feeding, as it were, on the latter; hence the fibres are replaced by "an amorphous mass of minute masses of germinal matter, varying much in form and products resulting from the decay of some of these particles."

The connective tissue corpuscles increase in size. These changes are well seen in Fig. 6, contrasted with the healthy state shown in Fig. 7.

The germinal masses here appear to be derived from the connective tissue corpuscles, and also from particles introduced from without.

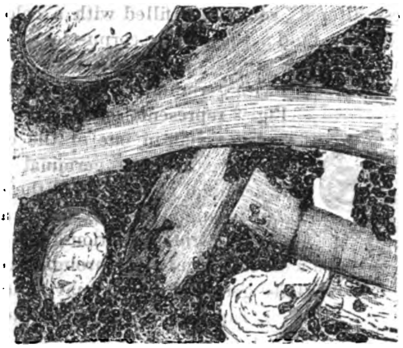

FIG. 5.—Fibrous tissue of the corium or true skin from the softened part of the papule. The intervals between the fibres are occupied with germinal matter, "contagium," growing and multiplying rapidly. × 215.

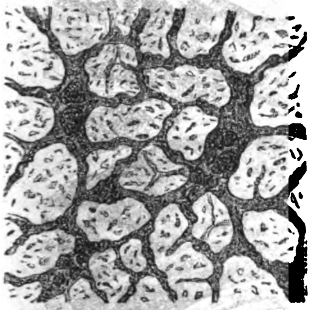

FIG. 6.—Enlarged connective tissue corpuscles. Surface of mucous membrane over epiglottis—Cattle plague just beneath the epithelium. × 700.

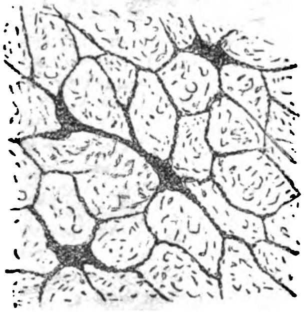

FIG. 7.—Connective tissue corpuscles. Surface of healthy mucous membrane over epiglottis just beneath the epithelium. × 700.

The same increase is found in the cuticle, especially about the middle layers, the true epithelial cells being replaced by the nuclear structures, which invade from the exterior, as seen in Fig. 8.

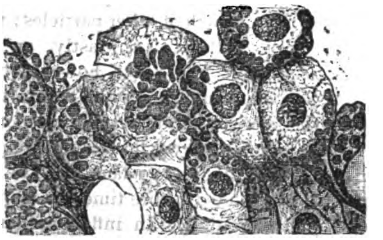

FIG. 8.—Cuticular cells under scab. Eruption on mamma, showing how the cells are invaded by the growth and multiplication of the minute particles of germinal matter (contagium?). × 700.

Dr. Beale gives full details of the special changes of a similar kind in the various secretions and in the alimentary tract, but we have not space to give details. After some remarks upon the general increase of germinal matter formed throughout the tissues of the body, Dr. Beale notices the bearing of this matter upon the question of rise of temperature. "It will have been remarked that the changes which I have demonstrated in connexion with the germinal matter of the tissues generally in *fevers* precisely resemble those observed locally in *inflammations*. In fact, the local phenomena of inflammation precisely correspond up to a certain stage with the general phenomena of fever. The former reach a degree to which the latter cannot attain, because, as it is scarcely necessary to observe, the death of the man or animal must occur long before *general* suppuration could be brought about.

"It is remarkable that while this increase in the germinal matter is taking place, the temperature rises some degrees above the normal standard, and I think that the elevation of temperature in this disease, as well as in fevers and inflammations generally, can scarcely be due to increased oxidation, for both respiration and circulation are often seriously impeded, but attribute it rather to the phenomena occurring during the increase of the germinal matter and connected with this increase. If this is so, it is probable that an increase of germinal matter is *invariably* associated with the development of heat."

After discussing many other interesting points, Dr. Beale sums up thus :—"Without, therefore, pretending to be able to identify the actual *materies morbi* of the cattle plague, or to distinguish it positively from other forms of germinal matter, present in the fluids on the different free surfaces and in the tissues in such vast numbers, I think the facts and arguments adduced tend to prove—first, that it is germinal matter; secondly, that the particles are not directly descended from any form of germinal matter of the organism of the infected animal, but that they have resulted from the multiplication of particles introduced from without; thirdly, that it is capable of growing and multiplying in the blood; fourthly, that the particles are so minute that they readily pass through the walls of the capillaries and multiply freely in the interstices between the tissue elements or epithelial cells; and lastly, that these particles are capable of living under many different conditions—that they live and grow at the expense of the various tissue elements and retain their vitality, although the germinal matter of the normal textures, after growing and multiplying to a great extent, has ceased to exist." But more than this, if we would still wish for some more definite answer, it is clear that we should be most likely to find the contagious material in the secretions of the vagina, the eyes, the nose, or intestines, which are admitted by all to hold the poison of cattle plague. Dr. Beale believes that such particles as we represent in Figs. 9 and 10, the one from the fibrous tissue of the skin, the other from the vaginal mucus. Also those observed amongst the bundles of fibrous tissue already shown in Fig. 5 and in Fig. 8, from the skin.

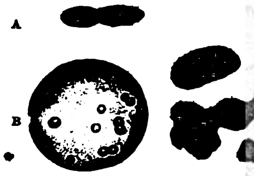

FIG. 9.—Particles from the vaginal mucus of a cow. Cattle plague. A, Bacterium amongst these. B, A mass of germinal matter containing minute particles like fungi. These are seen in the white blood and pus corpuscle, etc. × 2800.

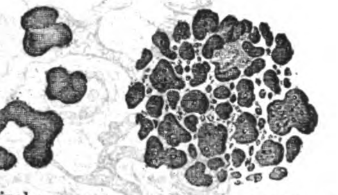

FIG. 10.—Minute particles of germinal matter (contagium?) from the fibrous tissue of the skin, beneath the eruption (Fig. 8). × 1800.

FIG. 11.—A small portion of one of the smallest vessels represented in Fig. 1, showing particles of germinal matter coloured deep red by carmine. × 2800.

We take it that these particles are the nuclear corpuscles noticed by Dr. Bristowe and Dr. Sanderson, especially in the skin eruption. Similar particles are found in the breath and surrounding air of diseased beasts. Hence, though the normal nuclear elements are increased in quantity, there is a large addition of foreign material produced by the growth of substance derived from without the organism. We suppose Dr. Beale would see an analogy between the agency of the various other cells and the poison of Rinderpest. Dr. Beale, therefore, considers that the "poison," "virus," "contagium," "materies morbi," consists of the germinal or living matter constituting the cell-like or nuclear bodies found in such number not only in all contagious fevers, but in specific inflammation and other affections, syphilis, gonorrhœa, etc. "It consists of very minute particles of matter in a living state, each capable of growing and multiplying rapidly when placed under favourable circumstances. The rate of growth and multiplication far exceeds that at which the normal germinal matter of the blood and tissues multiplies, and that they appropriate the pabulum of the tissues, and even grow at their expense," leading to all the many general symptoms of Rinderpest.

Dr. Beale's Report contains many more most interesting questions, but we have attempted to draw attention to the bare outline of the more important points which have an immediate interest to the Practitioner in reference to the causation of epidemic diseases.

Dr. Beale's hypothesis puts into very definite shape the ideas which have long been loosely held as to the influence of organic life in the production of disease. No doubt a large number of chemical actions are at work, and play most important parts in disease, but it is not unlikely that these in their turn are dependent upon the action of living material; it has lately been shown that fermentative changes are dependant upon the *nutritive act* of the torula cells, and in a similar sense it is admissible to entertain the idea that epidemic disease may be in some way connected with the development and increase of germinal growing living matter.

## REVIEWS.

◆

*On the Influence of Physical and Chemical Agents upon Blood, with Special Reference to the Mutual Action of the Blood and the Respiratory Gases.* By George Harley, M.D., F.R.C.P., etc. (*Phil. Trans.*, 1865, vol. ii.)

The following are the points investigated by Dr. Harley:—1. The effect of simple diffusion in producing a change in the mixture of gases confined with blood. 2. The influence of motion on the changes reciprocally exerted upon each other by blood and atmospheric air. 3. The influence of time on the interchange of the respiratory gases. 4. The influence of temperature on the same from 0° C. to 38° C. 5. The influence of the age of the blood, including the effect of the putrefaction. The second part of the paper is devoted to the consideration of the influence of chemical agents, especially such as are usually denominated powerful poisons.

*Annual Report of the Committee of the Manchester and Salford Sanitary Association for* 1865.

This report contains some interesting and important charts, showing upon each for Manchester and Marylebone the distribution of a large number of cases of measles, scarlatina, whooping cough, diarrhœa, bronchitis, and small-pox over the several months of the years 1861-1865. The curves bear out the following statement in the report, "that notwithstanding the differing influence of position, climate, manufactures, occupations, etc., bearing upon the inhabitants of these two places, there is a remarkable correspondence between the undulations of several of the diseases. . . . The close relations existing between even the lesser undulations of the waves of disease at two places so distant from one another and differing so much in other respects, points to the influence of some still mysterious but wide-spread agencies, and makes it evident that neither imperfect sanitary conditions nor simple contagion will account for all the phenomena of their production and propagation."

*Army Medical Department: Statistical, Sanitary, and Medical Reports.* Vol. V., for the year 1863. Presented to both Houses of Parliament by command of Her Majesty. 1865.

The interest of these reports is by no means limited to the several branches of the service, and it is a pity they are not generally read. Amongst other papers, for example, is one by Dr. Parkes on Liebig's Extractum Carnis, embracing the results of a chemical examination of the substance, and those of practical trials in health and disease. He says, "I believe the Extractum Carnis to be a very valuable food for giving nitrogen, salts, and lactic acid; and if its composition is studied, and its combination with other food properly made, it will, I believe, be extremely valuable in disease. For the Military Surgeon it is likely to be very useful in active service, not only for the wounded and sick, but for healthy men. Its small bulk, ease of cooking, savoury taste, and great restorative action would make it most useful in rapid expeditions. As a breakfast before action, as few minutes would prepare it, it would be invaluable, or it might even be eaten cold and as a restorative during exhaustive fighting. If cooked flour and butter be mixed with it, it might be used for many days."—P. 460.

## GENERAL CORRESPONDENCE.

◆

### CASE OF INJURY TO THE BRAIN.

Letter from Dr. Alfred E. Wilmot.

[To the Editor of the Medical Times and Gazette.]

Sir,—Reading in the *Medical Times and Gazette* of April 21 an interesting case of "injury to the brain, with death from extravasation ten days after the injury," in corroboration of the excellent remarks then made by Mr. Campbell de Morgan, I beg to forward for publication the following case of injury to the brain, with death from extravasation on the seventh day:—

D.T., aged 52, a cab-driver, living at Bridlington-quay. On the evening of the 14th of April he returned home intoxicated, and was with difficulty taken upstairs and put to bed (the staircase was very narrow and precipitous, about 10 feet high). On being left alone he got out of bed, and trying to go down stairs, he fell backwards on to his head, descending with great force on the stone floor below. He was rendered immediately unconscious. I was called in about three hours after the accident, and found him in bed completely insensible. His respiration was easy and regular, and skin warm, excepting that of the feet. There was no paralysis of face or limb. Pupils natural, but conjunctivæ quite insensible to the touch; pulse 80, and compressible; deglutition very slightly, if at all, affected. There were two lacerated scalp wounds. He had bled much from the nose and mouth, but it had all ceased when I arrived. At the end of three hours he began to show signs of returning consciousness; he vomited some dark coagulated blood; his conjunctivæ became sensible, his pulse stronger, and he slowly moved his hand to his head.

15th.—Consciousness increased. By persevering in asking questions, an effort at an answer could occasionally be obtained, and he was induced to take some slight nourishment, but immediately afterwards relapsed into his former condition.

16th.—On questioning him he complained of his head aching, and of pain in his left shoulder, which had been injured in the fall. Tongue, foul; pulse, stronger; bowels slightly relieved.

17th.—Is now so far conscious that he speaks voluntarily; makes his wants known in a muttering way; complains of thirst.

18th.—Improving.

19th.—Expressed himself much better, and desirous of getting up. Headache continues; appetite pretty good; skin of natural temperature.

20th.—Had been progressing favourably up to about 8 or 9 this morning, when, from some cause or other (whether he had been moved or had tried to get out of bed, I know not), the breathing gradually became laborious; the right pupil was very much contracted. Most profound coma supervened, and he expired at 4 a.m.

*Sectio Cadaveris Twenty Hours after Death.*—On removing the dura mater, a hæmorrhagic extravasation was found to have occurred below the arachnoid. It covered nearly the whole of the surface of the hemispheres, but was thickest in the left temporal region. When the brain was raised, the extravasation was seen, in the subarachnoid space at its base, to be still more abundant, especially in the right half of the middle fossa of the skull. It extended from the space anterior to the optic commissure, to the spinal cord; and, on dividing the latter organ in the extraction of the brain, a considerable quantity of blood flowed out, or (to borrow a more expressive term) welled up from its subarachnoid cavity. At about the centre of the base of the middle lobe, the brain had suffered a severe laceration, about the size of a crown piece. The cerebral substance at the injured spot had lost its consistence, and presented that peculiar yellowish or fawn-coloured appearance characteristic of softening under those circumstances. The substance of the hemispheres was healthy, and there was no observable abnormality in the ventricles. There was no fracture of the skull. I am, &c.,

Alfred Wilmot, M.R.C.S.E. and L.R.C.P. Lond.
Bridlington, Yorkshire, May 1.

**University Honours to Scientific Men.**—At a Congregation at Cambridge on May 31, the honorary degree of LL.D. was conferred upon Professor Sedgwick, M. Alphonse De Candolle, and Dr. J. D. Hooker.

# MEDICAL NEWS.

◆

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, May 31, 1866:—

Frederick Smith, Westminster; James Shirwen Greene, St. George's, near Wellington; Charles James Cullingworth, Bawtry, Yorkshire; Vincent Edmund Noel, Westbury-terrace, Plymouth; Joseph William Smith, Weaverham, Cheshire; Richard Walter Owen, Withers, Shrewsbury; Thomas Bond, 6, Carey-street, London; Ridgway Robert S. C. C. Lloyd, Doncaster; Herbert Chippes Upton, Petworth-park, Sussex.

As an Assistant:—

William F. G. Wilson Sympson, Fenny Stratford, Bucks.

The following gentleman also on the same day passed his First Examination:—

Charles James Worts, Guy's Hospital.

## APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

CLARKE, F. W., M.R.C.S., L.S.A., has been appointed Medical Officer to the Oxford Lying-in Charity District No. 2.

CLEMENTS, GEORGE, M.R.C.S.E., L.M., L.S.A., has been appointed Resident Medical Officer to the Salford Union.

MURRAY, JOHN, M.B., M.R.C.S., has been elected one of the Resident Clinical Assistants at the Middlesex Hospital.

SPENCER, H. B., M.D., has been appointed Medical Officer to the Oxford Lying-in Charity District No. 1.

## BIRTHS.

ALLINGHAM.—On June 5, at 36, Finsbury-square, the wife of W. Allingham, F.R.C.S., of a son.

ARNISON.—On June 1, at Allandale Town, Northumberland, the wife of G. Arnison, M.R.C.S., of a daughter.

BOWER.—On May 26, at 2, Clarence-villas, Windsor, the wife of E. Bower, M.D., of a daughter.

BOWMAN.—On May 25, at Sunderland, the wife of H. O. Bowman, M.D., of a son.

FORESTER.—On May 25, at Claremont-square, the wife of H. Forester, M.D., of a son.

KINGSFORD.—On June 1, at Upper Clapton, the wife of C. D. Kingsford, M.D., of a daughter.

LYSTER.—On June 3, at 8, Devonshire-road, Princes-park, Liverpool, the wife of C. E. Lyster, M.D., of a daughter.

POTTER.—On May 24, at Collumpton, Devon, the wife of S. R. Potter, M.D., of a son.

POWER.—On June 1, at 43, Upper Seymour-street, Portman-square, the wife of H. Power, M.B., of a daughter.

TANNER.—On May 31, at 9, Henrietta-street, Cavendish-square, the wife of T. H. Tanner, M.D., of a daughter.

## MARRIAGES.

DON—ELLIOTT.—On June 5, at St. Andrew's Church, Plymouth, W. G. Don, M.D., 28th Regiment, to Louisa Jane, second daughter of Captain E. G. Elliott, R.N.

ELLIOTT—HALLEN.—On May 22, at St. Woollas Church, Newport, Monmouthshire, Richard Elliott, Assistant-Surgeon 95th Regiment, to Helena Augusta, youngest daughter of S. T. Hallen, Esq.

FORSHALL—SCRIMGEOUR.—On May 31, at St. Michael's, Highgate, F. H. Forshall, L.R.C.P., to Frances Maria, eldest daughter of W. W. Scrimgeour, Esq.

WATSON—EATON.—On May 24, at Ancaster Church, Lincolnshire, A. M. Watson, M.D., to Fanny Elizabeth, younger daughter of F. Eaton, Esq.

## DEATHS.

HAYNES, R. L., F.R.C.S.E., at 1, Haringey-park, Crouch End, Hornsey, on May 31, aged 57.

NESBITT, F. A., F.R.C.S., at Norwood, on May 24, aged 34.

## POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

### RESIGNATIONS.

*Carnarvon Union.*—Mr. John L. Jones has resigned the Llandwrog District; area 28,457; population 8518; salary £60 per annum.

*Chesterfield Union.*—Mr. Simpson has resigned the Bolsover District; area 10,360; population 2402; salary £20 per annum.

*East London Union.*—Dr. William Lobb has resigned the Aldersgate District; population 6189; salary £65 per annum.

*Ely Union.*—Mr. William B. Buller has resigned the Sutton District; area 16,170; population 3466; salary £40 per annum.

*Plymouth Incorporation.*—Mr. William Dale has resigned the Fourth District; salary £95 per annum.

*Tisbury Union.*—Mr. R. C. Shettle has resigned the Donhead District; area 19,842; population 4151; salary £74 10s. per annum.

### APPOINTMENTS.

*Dudley Union.*—John Smith, M.R.C.S.E., L.S.A., to the Second Sedgley District. Henry Gilbert, M.R.C.S.E., L.S.A., to the Third Sedgley District.

*Hastings Union.*—Daniel M. Forbes, L.R.C.P. Edin., M.R.C.S. Edin., to the Third District.

*Leominster Union.*—James Beavan, M.R.C.S.E., L.S.A. Lond., L.S.A. Dub., to the First District and the Workhouse.

*Stow Union.*—Arthur Pearse, M.D. Edin., M.R.C.S.E., to the Hinderclay District.

*Warwick Union.*—Thomas W. Bullock, M.R.C.S.E., L.S.A., to the Workhouse.

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ROYAL INSTITUTION OF GREAT BRITAIN.—General monthly meeting, Monday, June 4, 1866; W. Pole, Esq., F.R.S., in the chair. Edward Beanes, Esq., C.E., F.C.S., and Robert C. L. Bevan, Esq., were elected members of the Royal Institution. The special thanks of the members were returned to Sir Henry Holland, Bart., for his eighth annual donation of £40 to "The Donation Fund for the Promotion of Experimental Researches." The presents received since the last meeting were laid on the table, and the thanks of the members returned for the same.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—At a meeting of the College, held on Monday, the 4th inst., the undermentioned gentlemen were elected to the following offices for the ensuing year, viz.:—*President*—Richard G. H. Butcher. *Vice-President*—Rawly P. Banon. *Secretary*—William Colles. *Council*—Arthur Jacob, William Hargrave, Robert Adams, James Barker, William Colles, Hans Irvine, Robert Pentland, Samuel G. Wilmot, Thomas L. Mackesy, Rawdon Macnamara, Hamilton Labatt, Benjamin M'Dowell, Edward Ledwich, William Jameson, Alexander Carte, James H. Wharton, George W. Hatchell, Albert J. Walsh, and Edward D. Mapother, Esqrs.

THE body of the lamented Preston King, late Collector of Customs for New York city, was found floating in the Atlantic basin on the 14th ultimo, and identified beyond doubt. It had been six months and a day under the waters of the bay, until the cord by which the bag of shot was fastened had rotted off, when it rose to the surface and floated.

THE Government and people of Nova Scotia are honouring the memory of Dr. Slater, the Physician who lost his life by cholera while devotedly serving on board the plague steamer *England*. The House of Assembly has unanimously voted the sum of two thousand dollars to the widow, and the people propose to raise a monument near the scene of his labours.

IRISH MEDICAL ASSOCIATION.—The annual meeting of this Association was held on Monday, June 4, in the Royal College of Surgeons, Stephen's Green, Dublin. The chair was taken by Dr. Thomas L. Mackesy, President, who in his address called attention to the necessity of adopting prompt measures to ensure the proper preliminary education of those entering upon the study of Medicine and Surgery. He also dwelt upon the immense importance of the Parliamentary representation of the Medical Profession in its collective capacity, and pointed this out as the only means by which there could be proper legislation for the sanitary improvement of towns, as well as on such subjects as infant mortality, the sanitary regulation of factories, the pollution of public streams, the sale of poisons, etc. He showed that the Medical constituency of England, Scotland, and Ireland would be about 19,000, who would send to Parliament gentlemen whose practical experience, knowledge, and social and intellectual standing would be of the greatest advantage to the public at large. The annual report, which was read by Dr. Quinan, Secretary, announced a great increase of the strength and influence of the Association, and reviewed the proceedings of the past year. Several important matters were then discussed, and the following resolutions were passed:—"1. That, convinced as we are by increasing experience of the paramount importance of securing to the country competent Practitioners in Medicine and Surgery, we desire to record our anxious wish to see the powers of the Medical Council so enlarged that we may look with confidence to its enforcing a high and uniform standard of education, both preliminary and Professional, on the licensing bodies throughout the kingdom." 2. "That the sanitary laws are so complicated, and their execution so divided between corporate bodies, boards of guardians, and dispensary committees, as to render them almost inoperative. We therefore feel called upon to urge on the Government the expediency of making them into one Act, and placing its administration under an efficient executive body." Dr. Mapother, in moving the second resolution, said that there were about twenty-two Acts concerning sanitary matters and the improvement of the dwellings of the poor, which were of a most complicated character. In England there was a comprehensive Bill in force, called the Public Health Act, which included all the sanitary legislation required, and which was about to be extended to Ireland, with such modifications as would be though desirable. 3. "That, having a due regard to the interests of the sick poor and the ratepayers, as well as to the interests of the Medical men holding office under the Poor Law and Medical Charities Act, it is the duty of the Irish Medical Association to press with all its might to obtain a legal provision securing to those officers a retiring allowance when from age or infirmity, or length of service, they are no longer equal to the discharge of their onerous duties." 4. "That we cordially agree in the recommendation adopted, and frequently pressed upon Government, by the boards of guardians throughout the country, to the effect that at least one-half of the salaries of the Medical officer should be paid out of the Consolidated Fund." 5. "That the present unsatisfactory state of the law with regard to the remuneration of Medical witnesses, when summoned by the Crown, renders it necessary that a scale of payments should be adopted; and further, we are of opinion that Medical witnesses are entitled to reasonable travelling and hotel expenses." 6. "That this meeting cannot separate without expressing the warm acknowledgment and thanks of the Medical Profession to the press of Ireland, whose able and continued advocacy furnishes us with unanswerable evidence of the justice and importance of our claims." 7. "That the honorary secretary be requested to convey to Sir Dominic Corrigan, Bart., the thanks of the Irish Medical Association, for his late frank and disinterested statement before the Medical Council of those defects which at present tend to impair the character and efficiency of the examinations for Medical and Surgical degrees or diplomas."

THE following are the last week's Cattle Plague Returns.

| Census Divisions. | 1. Attacked. | | | Back cases reported in the week ending May 26, 1866. | 2. Result of reported Cases from the Commencement of the disease. | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Week ending May 12. | Week ending May 19. | Week ending May 26. | | Attacked. | Killed. | Died. | Recovered. | Unaccounted for. |
| Metropolitan Dist. | 1 | 5 | 4 | .. | 7875 | 3398 | 3709 | 318 | 456 |
| South Eastern Co. | .. | .. | 2 | 1 | 4856 | 1684 | 2537 | 465 | 170 |
| South Midland Co. | 230 | 209 | 140 | 7 | 20246 | 8257 | 10065 | 1537 | 387 |
| Eastern Counties | 80 | 73 | 49 | .. | 11328 | 5313 | 4831 | 788 | 396 |
| South Western Co. | .. | 1 | 3 | 61 | 1750 | 652 | 820 | 207 | 71 |
| West Midland Co. | 247 | 216 | 196 | 20 | 14251 | 5762 | 6079 | 1498 | 912 |
| North Midland Co. | 446 | 378 | 246 | 7 | 18396 | 10389 | 6248 | 1218 | 541 |
| North Western Co. | 490 | 761 | 342 | 1725 | 67906 | 21613 | 34953 | 7591 | 3749 |
| Yorkshire | 146 | 144 | 93 | 11 | 34339 | 7697 | 18346 | 5933 | 2363 |
| Northern Counties. | 129 | 42 | 58 | 2 | 8567 | 4862 | 2613 | 974 | 118 |
| Monmouthshire & Wales | 81 | 48 | 42 | 4 | 8187 | 1045 | 5790 | 1053 | 299 |
| Scotland | 62 | 55 | 32 | 41 | 46754 | 6160 | 28082 | 10701 | 1811 |
| Totals | 1912 | 1932 | 1207 | 1879 | 244455 | 76832 | 124073 | 32283 | 11267 |

This Return shows that 1207 attacks were reported to have occurred during the week ended May 26, being a decrease of 725 on the previous week.

A considerable, but varying, number of "back cases" are reported every week. These cases, however, do not necessarily relate to the previous week only; they generally comprehend arrears of from six to eight weeks, and, in some instances, a longer period.

*Note.*—4 Inspectors who reported cases last week have not reported in time for this return—viz., for the county of Chester, 1; Lincoln, 2; and Flint, 1. These inspectors returned 34 cases last week.

ROYAL MEDICAL BENEVOLENT FUND SOCIETY OF IRELAND.—The annual meeting of the above most excellent Society was held in the Hall of the King and Queen's College of Physicians, Kildare-street, Dublin, on Monday, June 4, Dr. Beatty, President of the College, in the chair. The Report was read by Dr. M'Clintock, one of the honorary Secretaries. The deaths of two members of the Central Committee, Dr. Edward Hulton, of Dublin, and Dr. Richard Corbett, of Cork, were referred to. It was stated that the legacies of the late Mr. Carmichael (£4500) and of Dr. Colvan (£500) had not yet been received. The Bombay auxiliary was announced to be in a most prosperous condition, and the zealous and successful services of Drs. Lord and Joynt in connexion with it, were acknowledged with thanks. The funds of the Society exhibited an increase of about £80, as compared with those of the preceding year. The total number of applications for relief were seventy, being about the same as that for each of the last few years. Seven of the present recipients are Medical men; fifty-four applicants claim relief as the widows, and eight as the children of Medical men. The treasurer had received £100 from Dr. Banks, and Dr. Mackesy had added £20 to his original donation. Dr. Bennett moved a vote of thanks to the editors of various newspapers in Ireland who had advocated the claims of the Society. The press, he said, had supported not only this association, but everything connected with the interests of the Medical Profession, and his own experience showed that there was a kindred spirit between the members of the press and the Medical Profession of Ireland. Dr. Dwyer seconded the resolution, which was carried unanimously. Dr. Churchill having been called to the second chair, the proceedings terminated with a vote of thanks to Dr. Beatty.

## NOTES, QUERIES, AND REPLIES.

◆

He that questioneth much shall learn much.—*Bacon.*

*Mr. H. W. Rumsey* is thanked for his communication.

We are sorry that Dr. Lionel Beale's reply to Dr. Moxon is again postponed through press of matter.

*A Fellow.*—In order to be on the safe side, let the papers be sent in to the office this morning (Saturday).

*M.P., Reform Club.*—Dr. Robert Brady, who died in 1700, was chosen representative for the University of Cambridge in that Parliament which met at Oxford.

*F.R.C.S., Cheltenham.*—You should write to the Secretary, as, on inquiry, we find that notices have been sent to all the Fellows whose addresses are known at the College, and residing within the United Kingdom.

*Helminthologist.*—Specimens of the trichina found in the muscles of the patients who died in the London and Middlesex Hospitals may be obtained of Mr. Norman, 178, City-road.

*C.B.*—Our correspondent begs the question at issue. The customary right of Licentiates of the College of Physicians to the title of Doctor—if they choose to adopt it—is at least 200 years old.

The Cincinnati *Gazette* says that pure "essence of coffee" is now made in that city out of the "cheapest, dirtiest molasses," which is boiled until it ropes, cooled in pans, and when hard, broken up and pulverised. Ground rye is then mixed with it, after which it is boxed up, each box being sold at 80c., and labelled "pure essence of coffee."

*List of Parishes in the Metropolitan District Governed under Local Acts.*—St. James, Clerkenwell; St. George, Hanover-square; St. Giles in the Fields and St. George, Bloomsbury; St. Mary, Islington; St. James, Westminster; St. Luke, Middlesex; St. Margaret and St. John, Westminster; St. Marylebone, St. Pancras, St. Leonard, Shoreditch; St. Mary, Newington.

*G. P. R., M.D.*—You will find your inquiry answered in the following lines, which may still be seen on a tombstone to the memory of Dr. Thomas Crossfield in Hendon Churchyard:—

"Beneath this stone a queer one lies,
Who cares not now who laughs or cries.
He laughed when sober, but when mellow
Was a har'em scar'em fellow.
He introduced the use of savin,
In those diseases like to spavin.
He gave to none designed offence,
So *Honi soit qui mal y pense.*"

*Mercury in Hydrophobia.*—An instance has been reported by the *Wolverhampton Chronicle* of an attack of hydrophobia apparently cured by the administration of mercury and the production of salivation. An anonymous writer in the *Times* has also given the following account of the coincidence of recovery with mercurial fumigation:—

"When we were at Ahmednuggur in 1853-4 we were acquainted with Dr. David Wyllie, civil Surgeon there. He told us of a case the day it happened, coming to see us directly after the patient was relieved. That morning a boy was brought into the Hospital suffering from hydrophobia. Dr. Wyllie immediately had a pan of live charcoal brought and placed on the ground under a cane-bottomed chair. The boy was entirely undressed, placed on the chair, and enveloped in blankets. Then several grains of mercury (I forget now many) were thrown on the charcoal, and the fumes so impregnated the boy's body that in a quarter of an hour the saliva was pouring out of his mouth; the rigidity caused by the spasms ceased, and the poison came out of the boy. What happened after, whether the malady ever recurred, I know not; but the boy lived, and so did all other cases treated by Dr. Wyllie when taken in time."

The Profession well know that mercury is a very old remedy in canine madness, but that it has fallen into disuse through frequent failures. Derault, of Bordeaux, James, Losig, and others, believed that they had observed favourable effects from its employment, but it has completely failed since in numerous trials. The Indian case wears an apocryphal aspect. Salivation in a quarter of an hour is somewhat rapid, even when the method employed is fumigation, and the decided statement of the writer as to the exit of the poison stamps his tale as worthy of the same amount of credence as most of the Medical scientific discoveries published in the *Times* newspaper.

*Book Notices, etc.*—Mr. Nugent Charles *Walsh* has just published (Renshaw) "The Medical Officer's Vade-Mecum, or Poor-law Surgeon's Guide; containing the Regulations at present in force relating to the Relief of the Poor in Sickness, and the Appointment, Qualifications, Duties, and Remuneration of Union Medical Officers in England and Wales; with a Note on Vaccination and Public Vaccinators; to which is added an Appendix containing the Medical Acts, Dr. Farr's Statistical Nosology for Classification of Disease and Causes of Death, with other useful matter, and a copious Index." This book, which is a very compact one, must be of great value to every Poor-law Medical officer who desires to know his own duties and responsibilities, as well as those of the Board of Guardians whom he serves. It will give an additional value to this book that its author is barrister-at-law, and holds office under the Poor-law Board. We may add that he is the son of the late Charles R. Walsh, whose memory is dear to all who value the progress of sanitary and social reform.—Mr. John *Storie* believes that flesh and sugar used as food cause increased mortality from diseases of the respiratory organs, and gives us a pamphlet in favour of vegetarianism.—Dr. Henry W. *Williams's* "Recent Advances in Ophthalmic Science," published by Tickner and Field, of Boston, U.S., promises to be a very useful and intelligible guide to the knowledge of astigmatism, iridectomy, the use of Calabar bean, and other topics of modern ophthalmology.—We are glad to receive the *Medical Reporter*, a fortnightly record of Medicine and Surgery, published by Pinckard, of St. Louis. Dr. Maughs's inquiry into "causes why higher organisms are less plastic than lower ones," is of great philosophical interest.—Dr. *Waring* sends us from the *Pharmaceutical Journal* an account of new euphorbiaceous and other purgative seeds. That *lime juice* is a remedy for over-purgation caused by such seeds is an interesting fact.—Dr. W. *Turner* sends a second part of his observations on malformations of the organs of generation, especially on "fœtation" in a rudimentary uterine cornu.—The *American Journal of Medical Sciences* for April, 1866, is as full as ever of valuable matter, new and collected.—Dr. *Edwards* and Mr. *Willett* have published Statistical Tables of Patients under Treatment in St. Bartholomew's Hospital during 1865.

### CHOLERA LITERATURE.

(Continued from page 601.)

IN the *Australian Medical Journal* for March, 1866—which, by the bye, contains a case of tetanus successfully treated by the application of ice to the spine, *with* chloroform and atropine—is a paper on epidemic cholera by Dr. *Dougan Bird*. He thoroughly believes in the transmissibility of the disease by the excretions of the patients, giving in his full adhesion to the doctrines of Snow and Dr. Budd. He asserts summer diarrhœa to be a distinct disease *in toto* from cholera; yet afterwards makes admission to the effect that some diarrhœa is cholera in a mild form, and that the evacuations of some diarrhœa patients will give rise to cholera, especially, as he believes, during the stage of decomposition. He gives small comfort to the people of Melbourne, the soil of which city he describes emphatically as *night soil*. He speaks in high terms of Dr. French's investigation of cholera, and of his theories, which involve paralysis of the heart; and does equal justice to Dr. Chapman, though he repudiates the idea that cholera is caused by heat. As to treatment, he speaks in favour of bleeding; also of brandy and salt; objects to opium in collapse, but decidedly favours the suppression of diarrhœa by that remedy. In the discussion which followed, Dr. Tracy praised the practice he had seen followed by Dr. Buchanan, of Glasgow, viz., a large dose of laudanum by mouth and rectum, hot vapour bath; and white of egg, milk and water, and salt for drink. Mr. Gillbee believed in calomel and opium in large doses. He had treated the disease on board ship. Dr. Girdlestone, who had seen the disease at Merthyr Tydvil, gave an emetic, followed by cold saline drink, heat to the feet, and small doses of laudanum with soda and ipecacuanha. Dr. Black, believing that the disease consisted in paralysis of the sympathetic, would give a scruple of quinine and calomel, and then saline drinks. Dr. Macarthy would simply use ordinary astringents with opiates. Dr. Motherwell had seen many cases in 1832, and trusted to small doses of opium, with pure air. Be it observed, that cholera has never appeared at Melbourne, nor, judging from Dr. Bird's remarks, has Dr. G. Johnson's book reached that place.

(To be continued.)

*Parochianus* wishes us to insert the following return of cost of Medical attendance and nursing in Workhouses:—

| | Medical officer. | Nurses for sick and imbeciles. | Number of beds in sick wards. | Cost per bed per annum for Medical attendance & nursing—about. | | |
|---|---|---|---|---|---|---|
| | £ | £ | | £ | s. | d. |
| Bethnal-green | 160 | 102 | 406 | 0 | 12 | 11 |
| Chelsea | 100 | 50 | 66 | 2 | 6 | 0 |
| Holborn | 125 | 30 | 487 | 0 | 6 | 4 |
| London, City of | 275 | 173 | 317 | 1 | 9 | 0 |
| St. Martin's-in-Fields | 150 | 42 | 48 | 4 | 0 | 0 |
| Shoreditch | 126 | 256 | 263 | 1 | 9 | 0 |
| Strand | 105 | 35 | 40* | 2 | 1 | 6 |
| Lambeth | 300 | 165 | 426 | 1 | 1 | 10 |
| Wandsworth & Clapham | 100 | 40 | 158 | 0 | 17 | 9 |

This shows merely the cost for Medical attendance and paid nurses. The maintenance of the occupants of the beds is not included.

The number of beds is according to the most recent return on the subject.

* All fever cases are sent away.

*The Nitro-Glycerine Explosion in San Francisco.*—"Such a scene," writes the *New York Times'* correspondent, "I never before witnessed. The yard was completely filled with bricks and rubbish. Men, crushed down by beams and timbers, were groaning and imploring release; others were clambering among the ruins, endeavouring to afford assistance. Shreds of flesh and fragments of limbs lay mingled with broken boxes and splinters of wood. . . . . News of the disaster spread rapidly through the city, and all who had relatives employed in the vicinity came gathering around in a horror of suspense and fear. One lady stood at the gate crying, 'My husband, my husband; let me see my husband.' Poor creature! He was literally blown into fragments. Not even the trunk was left entire. It seemed as though the whole body had been rolled through a piece of machinery studded with knives, which, after mincing the flesh, scattered it far and wide, as a farmer in spring sows wheat. Another body was shattered beyond identification, though not to the same horrible extent. At the undertaker's yesterday I saw a basket full of human flesh that never can be identified, as the shreds were picked up in various parts of the yard, and probably belonged to two or three different bodies. Little wonder that the Sepoys had such a horror of being blown from a cannon's mouth; for it indeed looks in such a case as though there would be considerable confusion at the last day in each man's claiming his own. Mr. H. Cox, steward of the Union Club, was among the wounded, probably fatally; his flesh was filled with splinters of wood and pieces of bone like a quiver with arrows, and so intense were his sufferings that on being rescued from the ruins he begged some one, for humanity's sake, to shoot him through the head, or lend him a pistol that he himself might end his misery. Some idea of the force of the explosion can be formed when it is known that in Leisdorff-street, a block east of the scene of the accident, a piece of skull, with the scalp adhering, was picked up, while a fragment of shoulder was seen puttied against the wall, like one of the paper pellets which boys throw about at school. In a store opposite the Express building half a human head, containing the brain intact, was found; in California-street lay a fragment of a skull, nearly 300 feet distant; a tailor working at his bench some 150 feet away was startled to his feet by the explosion, and frightened nearly into convulsions by a human arm which was dashed through the window and deposited amid the snips of cloth that lay before him. In the billiard-room of the Union Club an abdomen hung impaled upon a broken rafter against which it had been hurled. Around on the adjoining roofs lay shreds of human flesh and vital organs. Of course great excitement was caused when it became known that a large amount of the oil is stored within the city limits. At the meeting of the board of supervisors in the evening a resolution was agreed to that the chief of police be directed to destroy it all, wherever in the city it may be. A member represented that there is no law for this, but the *vigilante* element still remains in the breasts of the San Franciscans, and when a thing should be done they seldom stop to consult law. I would not advise your merchants to ship any more nitro-glycerine out here, unless they wish to receive an infernal machine by return mail."

### THE CORRECTION OF INVERTED IMAGES ON THE RETINA.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I shall be much obliged to you if you kindly insert the following in the earliest number of the *Medical Times and Gazette*:—

Why do we see objects *erect* or *upright* from *inverted* images on the retina?

Before I offer my explanation on this much-disputed subject, I shall speak generally of the structure of the retina. This consists, principally, of two distinct portions: first, the expansion of the optic nerve in front; and second, a peculiar apparatus behind, consisting of what are called "cones and rods," and "granules and vesicles," the latter bodies being situated in front of the former. The relative position of the nerve expansion and the hind apparatus has for a long time been misunderstood, but it has at last been finally decided in the way I have described.

It has also been lately known to physiologists that the two portions of the retina are as distinct from each other in function as in structure. The anterior portion, the expansion of the optic nerve, is not at all concerned in receiving primarily the stimulus of light, but this function is exercised only by the posterior portion. This is evident from the facts, that the optic disc (where the structure of the retina consists only of the expansion of the nerve and none of that hind apparatus) is most deficient in the power of receiving visual impressions; while the "yellow spot," where no other structure is present, except the "cones," is the most sensible portion of the entire retina—(Dr. Carpenter, "Physiology," par. 695). From this it follows unequivocally that the stimulus cannot act primarily on the nerve expansion, but only on the posterior apparatus behind, and, therefore, the image of the object that is seen is not formed upon it (the nerve), but upon that apparatus behind it. Consequently, the inverted image formed by the rays of light from the object is situated behind the expansion of the optic nerve, and not in front nor upon it. Now, it can be very easily understood how this inverted image behind the expansion of the optic nerve gives rise to an impression of upright image on it, and is communicated in that condition to the percipient principle.

It is not necessary to enter into discussion on the other explanations which have been given of this phenomenon to make place for this. The explanation of Volkmann and Muller appears to me unnatural, because it is complicated and inconsistent with the simple and straightforward dealing of nature, and that of Dr. Carpenter, although he maintains that an upright image is really what is presented to the mind in vision, is alike complicated, and, therefore, unlike the work of nature. But the above which I have attempted appears much simpler and consistent with that pervading character of all nature's plans of work, which is absolute truthfulness, even in all their bearings, and simplicity. And this is the only recommendation with which it has come to me, and the only ground on which I have accepted it in preference to others.

I am, &c. MATI. LAL MITRA.

4, Cumin-place, Grange, Edinburgh, March 22.

### POOR LAW MEDICAL REFORM.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Permit me, through the medium of your journal, to inform the public vaccinators of England and Wales that I have received a note from a Member of the Select Committee on Vaccination, written in haste, in which it is stated "We have got through the Bill in Committee, have raised the fees—that is, we raised the minimum, the guardians cannot pay less, may pay more." I need scarcely say this is so far satisfactory. As soon as the Bill has been reprinted, I am to have a copy, and shall then be able to lay before your readers further particulars of the changes recommended by the Select Committee to Parliament for adoption.

I am, &c.,
RICHARD GRIFFIN.

12, Royal-terrace, Weymouth, June 2.

⁂ Since the above was in type, we have received a telegram from Mr. Griffin to the effect that the Amended Bill does not fully carry out the above statements.

### APPEAL ON BEHALF OF A WIDOW AND SIX ORPHANS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Will you allow us to make use of your valuable space for the purpose of advocating the cause of the family of a deceased member of our Profession and of entreating your readers to come to their aid? The relation of the following circumstances will, we are sure, be sufficient to show the distressing nature of the case and how deserving of sympathy the subjects of the appeal are.

In September last a Surgeon, whose name we are not at liberty to publish, arrived at Venezuela, in Central America, having been appointed by the Quebrada Railway and Mining Company to Medical supervision of their officials and workmen, and leaving behind him in England his wife and six children, the youngest an infant of less than a year old and the eldest of 12 years of age. Almost immediately after his arrival he was attacked by fever, and died within a fortnight. His wife and family are entirely unprovided for; no pension is allowed them by the company in whose service this gentleman lost his life. They are now living on the scanty charity of relations, who are unable to spare more than a mere pittance for their support, which it is doubtful whether they will be able to continue. The widow has spared no exertions in endeavouring to obtain admission for her children into various orphan asylums, and is sanguine of succeeding in her second application to the British Orphan Asylum; but at present not one of the six children has any provision whatever. The object she has in view is to obtain by subscription a sum sufficient to enable her to open a boarding-house, as she considers that her chances of succeeding in that direction are better than in any other.

Further particulars and the name of the deceased gentleman may be obtained by application to Dr. Letheby, 17, Sussex-place, Regent's-park; the Rev. Robert Jones, incumbent of All Saints, Rotherhithe; the Rev. R. S. Drew, incumbent of St. Barnabas, South Kensington; or to the undersigned.

The Editor of this journal has kindly consented to receive subscriptions, which may also be sent to the undersigned, for the "Widow of a Deceased Surgeon."

We are, &c.
HY. LETHEBY.
W. SPENCER WATSON.

27, Montague-street, Russell-square, W.C., June 6.

**COMMUNICATIONS** have been received from—

Dr. LETHEBY; SPENCER WATSON; SOELBERG WELLS; F. H. MORRIS, M.D.; G. WILLIS; ROYAL MEDICO-CHIRURGICAL SOCIETY; DR. FAYRER; H. W. RUMSEY; F. P.; ETHNOLOGICAL SOCIETY; FIAT JUSTITIA; T. H. D.; APOTHECARIES' HALL; MEDICO-CHIRURGUS; R. GRIFFIN; DR. BALLARD; DR. LIONEL BEALE; DR. B. W. RICHARDSON; MR. E. BELLAMY; DR. TILBURY FOX.

**NEWSPAPERS RECEIVED—**

The Sunday Gazette—Saunders's News-Letter.

**BOOKS RECEIVED—**

Jones's Whom am I?—Circular No. 6 War Department, Surgeon-General's Office, Washington—The Edinburgh Medical Journal, June—The Pharmaceutical Journal, June—Storie's Dietetic Errors of the People—Samelson's Reminiscences of a Four Months' Stay with Professor Von Graefi.

## VITAL STATISTICS OF LONDON.

*Week ending Saturday, June 2, 1866.*

### BIRTHS.

Births of Boys, 1111; Girls, 1025; Total, 2136.
Average of 10 corresponding weeks, 1856-65, 1747·0.

### DEATHS.

| | Males. | Females. | Total. |
|---|---|---|---|
| Deaths during the week .. .. .. | 792 | 748 | 1540 |
| Average of the ten years 1856-65 .. .. | 559·9 | 526·9 | 1086·8 |
| Average corrected to increased population .. | .. | .. | 1195 |
| Deaths of people above 90 .. .. .. | .. | .. | .. |

### DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

| | Population, 1861. | Small pox. | Measles. | Scarlatina. | Diphtheria. | Whooping-cough. | Typhus. | Diarrhoea. |
|---|---|---|---|---|---|---|---|---|
| West .. | 463,388 | 1 | 12 | 10 | — | 11 | 3 | 2 |
| North .. | 618,210 | 8 | 16 | 13 | 1 | 24 | 15 | 5 |
| Central .. | 378,058 | 2 | 10 | 6 | 1 | 17 | 9 | 5 |
| East .. | 571,158 | 9 | 16 | 11 | 1 | 20 | 19 | 4 |
| South .. | 773,175 | 4 | 15 | 8 | — | 33 | 13 | 3 |
| Total .. | 2,803,989 | 24 | 69 | 48 | 3 | 105 | 59 | 19 |

## METEOROLOGY.

*From Observations at the Greenwich Observatory.*

| | |
|---|---|
| Mean height of barometer .. .. .. .. .. .. | 29·633 in. |
| Mean temperature .. .. .. .. .. .. .. | 56·2 |
| Highest point of thermometer .. .. .. .. .. | 75·0 |
| Lowest point of thermometer .. .. .. .. .. | 38·6 |
| Mean dew-point temperature .. .. .. .. .. | 47·0 |
| General direction of wind .. .. .. .. .. .. | S.W., E., S.E. |
| Whole amount of rain in the week .. .. .. .. | 1·80 |

### BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, June 2, 1866, in the following large Towns:—

| Boroughs, etc. | Estimated Population in middle of the Year 1866. | Persons to an Acre. (1866.) | Births Registered during the week ending June 2. | Deaths. Corrected Average Weekly Number.* | Deaths. Registered during the week ending June 2. | Temperature of Air (Fahr.) Highest during the Week. | Temperature of Air (Fahr.) Lowest during the Week. | Temperature of Air (Fahr.) Weekly Mean of the Mean Daily Values. | Rain Fall. In Inches. | Rain Fall. In Tons per Acre. |
|---|---|---|---|---|---|---|---|---|---|---|
| London (Metropolis) | 3067536 | 39·3 | 2136 | 1400 | 1540 | 75·0 | 38·6 | 56·2 | 1·80 | 182 |
| Bristol (City) . . | 163680 | 34·9 | 110 | 73 | ‡181 | 73·9 | 37·7 | 54·4 | 0·23 | 23 |
| Birmingham (Boro') | 335798 | 42·9 | 187 | 163 | 170 | 69·0 | 32·0 | 53·0 | 1·33 | 185 |
| Liverpool (Borough) | 484337 | 94·8 | 386 | 281 | 382 | 68·0 | 46·7 | 55·1 | 0·10 | 10 |
| Manchester (City) . | 358855 | 80·0 | 258 | 203 | ‡225 | 76·6 | 34·0 | 53·6 | 0·02 | 2 |
| Salford (Borough) . | 112904 | 21·8 | 92 | 57 | 49 | 72·5 | 32·2 | 51·6 | 0·05 | 5 |
| Sheffield (Borough) . | 218257 | 9·6 | 174 | 115 | 127 | 70·1 | 36·8 | 52·5 | 0·54 | 55 |
| Leeds (Borough) . | 228187 | 10·6 | 144 | 116 | 133 | 72·0 | 34·8 | 52·3 | 0·49 | 49 |
| Hull (Borough) . | 105233 | 29·5 | 75 | 49 | 30 | .. | .. | .. | .. | .. |
| Nwcastl-on-Tyne, do. | 122277 | 22·9 | 108 | 65 | 62 | 63·0 | 39·0 | 49·7 | 0·14 | 14 |
| Edinburgh (City) . | 175128 | 39·6 | 148 | 84 | 92 | 61·7 | 39·0 | 48·7 | 0·20 | 20 |
| Glasgow (City) . . | 432265 | 85·4 | 357 | 252 | 278 | 60·0 | 34·1 | 48·5 | 0·15 | 15 |
| Dublin (City and some suburbs) . | 318437 | 32·7 | 205 | †156 | 145 | 65·1 | 31·9 | 50·1 | 1·47 | 148 |
| Total of 13 large Towns . . . | 6122894 | 34·4 | 4380 | 3014 | 3314 | 76·6 | 31·9 | 52·1 | 0·59 | 60 |
| Vienna (City) . . | (1863)<br>560000 | .. | .. | .. | Week ending May 26.<br>.. | Week ending May 26.<br>.. | .. | §<br>.. | .. | .. |

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·633 in. The atmospheric pressure rose to 29·81 in. on Wednesday, and fell to 29·51 in. on Friday.

The general direction of the wind was S.W., E., S.E.

* The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.

† Registration did not commence in Ireland till January 1, 1864; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in that city were the same as the averages of the rates in the other towns.

‡ The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

§ The mean temperature at Greenwich during the same week was 52·0°

## APPOINTMENTS FOR THE WEEK.

### *June* 9. *Saturday (this day).*

*Operations* at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's 2 p.m.; Charing-cross, 1 p.m.; Royal Free Hospital, 1½ p.m.

ROYAL INSTITUTION, 3 p.m. Professor Huxley, "On Ethnology."

### 11. *Monday.*

*Operations* at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.

### 12. *Tuesday.*

*Operations* at Guy's, 1 p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; St. Peter's Hospital for Stone, 3 p.m.

ETHNOLOGICAL SOCIETY OF LONDON, 8 p.m. John Crawfurd, Esq., "On Cæsar's Account of Britain and its Inhabitants in Reference to Ethnology."

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8½ p.m. Mr. Balmanno Squire, "On the Influence of Pregnancy, Lactation, etc., on Chronic Disease of the Skin." Dr. T. C. Allbutt, "On Premature Menstruation, and on Myeloid Transformation of the Lung."

### 13. *Wednesday.*

*Operations* at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m. Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.

MICROSCOPICAL SOCIETY, 8 p.m. Mr. R. Beck, "On the Function of some Peculiar Vibrating Hairs on Spiders and Insects."

### 14. *Thursday.*

*Operations* at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.

### 15. *Friday.*

*Operations*, Westminster Ophthalmic, 1½ p.m.

ROYAL INSTITUTION, 8 p.m. Professor Tyndall, F.R.S., "Experiments on the Vibrations of Strings."

## ORIGINAL COMMUNICATIONS.

◆

# ON THE NATURE OF VITAL FORCE

(PARTLY IN REPLY TO DR. MOXON).

By LIONEL S. BEALE, M.B., F.R.S.

I THANK Dr. Moxon for drawing attention to the consideration of the nature of *vital force*, which, as he says most truly, is of paramount importance.

The question must be of interest, not only to physiologists, but to Physicians; for, notwithstanding all that has been recently so very confidently affirmed with reference to the mechanics and chemistry of health and disease, no one is yet able to explain the simplest changes occurring in the healthy body or in the course of disease, unless he admit the influence of phenomena properly called *vital*, no changes like them being known to occur except in things that "live," which were derived from things that lived before them.

If, however, I understand Dr. Moxon's paper rightly, it is an attempt to show that the doctrine which attributes the formation of structures and compounds in living beings to the working of a *peculiar agency totally distinct from every form or mode of ordinary force*, is not irreconcileable with the doctrine which advocates that the forces at work in living things are only *physical and chemical forces*. My own opinion is, that the two views cannot be reconciled. When I use the terms *vital force*, *vital action*, etc., I refer to that which cannot be explained by physics or chemistry. If only the *movements* of living matter can be accounted for by what is now known of physics and chemistry, let the explanation be given. I hold that they cannot, and that it is a mere authoritative dictum, utterly unsupported by evidence, to assert that these movements are due to the operation of mechanical or chemical forces only. No *mechanism* or machinery has been, or can be, demonstrated in the moving matter. Moreover, there is nothing in nature besides living matter which came from pre-existing living matter that moves like it. If the chemico-mechanical school cannot account for these simple movements, is it very likely they can afford us much real information concerning the *formation* and *increase* of such living moving matter? It may be grand to talk about highly complex albuminoid matter in a state of rapid chemical change, and so on; but all this means nothing whatever.

Dr. Moxon thinks that I do not invalidate my opponent's position when I show that "the *mechanical arrangements* by which the *chemist* on the one hand and *living substance* on the other," etc. Now, I have asked over and over again to be shown the *mechanical arrangements* of the living substance; but hitherto no one has been able to see the supposed mechanism. As far as I can learn, living substance works absolutely without any mechanical arrangements whatever. It is incumbent, therefore, upon those who speak of mechanical arrangements to demonstrate them, and if they cannot do so they should candidly confess that the supposed mechanical arrangements in active living matter existed only in imagination, and that therefore the term has no meaning, and ought no longer to be employed in speaking of living matter.

The attempt to make any compromise between views so absolutely conflicting is hopeless, and only leads people away from the consideration of the real matter at issue. It is not a question whether vital force *may be* correlated heat, etc., but if it actually *is so*, as has been affirmed of late years over and over again. And upon this I have only to remark further, that while it has been very positively proved that heat, electricity, motion, etc., *are* correlated, nothing at present known justifies the conclusion that heat, motion, or any other mode of force, and *life*, are so correlated. "Life" seems to direct or condition force, and the idea of force directing force seems absurd; for if force could direct force, might not much of the work effected by machinery be done without it, or, at least, some force setting free arrangement be an efficient and cheap substitute for the human designing, directing, and superintending apparatus?

Again, Dr. Moxon grants (with me?) that the "*simplicity*" of the proceedings in living matter contrast very strikingly with the "*complexity*" of the chemist's proceedings, etc. Now, I think I have stated distinctly that I did not suppose the difference was a difference of simplicity or complexity, but a difference of kind,—an absolute, not a relative difference. I maintain that *chemical* and *vital* changes differ from one another in their essential nature. A mass of living matter will take up matter of different composition around it, and convert it into matter like itself without chemist or apparatus. Will any form of non-living matter do this? The chemist by no means ignores himself in his laboratory, and yet he will not admit anything corresponding to him in what he terms the living laboratory in which the changes go on even without apparatus and under conditions totally different from those present in the laboratory. If the chemist worked with more complicated apparatus than the cell, it would be correct to compare the complexity of the one with the simplicity of the other. But the "cell apparatus" is neither simple nor complex. It exists not.

It is surely premature to refer to "nervous agency" in connexion with this question of vitality. The nerve-cells are made, or make themselves, before they *act*. I shall be happy indeed to proceed in the inquiry to the utmost possible limits, but we ought, I think, to advance steadily step by step. What good can come of discussing about mental activity, until we are agreed as to how the apparatus concerned in the process is produced?

It seems to me that those who wish to teach us anything should begin with simple things and advance gradually to those more complex, and if we are to learn anything about living things in general, surely our instructors should commence with the consideration of the phenomena occurring in the simplest forms of life, or in the earliest and simplest stage of development of a complex creature. Every child can be taught that a little bit of soft transparent stuff takes up matter around it which is not like it, and *converts* this into matter like itself, and so increases in size, and that it divides and subdivides, and thus from one mass, many masses result. This is what goes on in the development of the simplest thing, and in man himself. Not only is the process common to every known form of living matter, but it is *peculiar* to living matter, and is not known to occur in any other state.

A common cold cannot come on without the increase of living matter, which is practically ignored by physicists, chemists, and the Chemico-mechanical School of Medicine. The increase of living matter occurs in all fevers and inflammations. There is not a disease in which such changes are not at work, and every remedial measure we employ does good or harm by bringing about conditions which are favourable or unfavourable to the growth and multiplication of such soft transparent semifluid living moving matter. If the facts can be explained by chemistry and mechanics, let us have the explanation, but if not, let us confess we cannot explain them, or refer them to the influence of vital power until a more satisfactory explanation is discovered.

Why is it that some philosophers exhibit little inclination to begin by inquiring about the simplest living things? One would have thought that this was just the point at which Mr. Mill or Mr. Herbert Spencer would have desired to commence. Here is a thing increasing in size, and then separating so as to produce many like things. How does it increase? Of course, by drawing matter to itself. But by virtue of what *property* does it do so? how does it divide? why does one portion separate from another portion? First, matter seems to draw matter towards it, and then this same matter separates itself, and one portion moves away from another. Simple phenomena easily stated, easily proved, due to antecedent phenomena, and these to anterior occurrences. Doubtless, if it were not that physiology is embarrassed by "natural difficulties" (Mill) (a), these things would have been explained long ago; but if we argue as if we understood them when we do not understand anything about them, we are not likely to gain much by the process, or to teach others anything really worth their learning.

The nature of life must, of course, be studied from every possible point of view, and it would be very unreasonable to offer objections to conclusions arrived at from the psychological side. But as what we call *consciousness* is not absolutely necessary to life, seeing that some things living never exhibit consciousness at any period of their existence, and that all of those in which it is manifested are devoid of it at the earlier periods of life, I think it quite fair to ask that in the first place the phenomena *absolutely essential to life* and of course their antecedent phenomena, should be alone discussed. I think that unless we restrict ourselves in the first instance to the consideration of the matter in its simplest state, we shall soon become involved in hopeless confusion.

To me the *dignity* of vital force is a matter of no importance whatever. I want simply to know why a minute particle of colourless transparent matter is able to make matter like itself out of matter differing from it in composition and properties, and how under certain circumstances it gives rise to matter differing in composition from both. I am told that it does so by virtue of its molecular machinery, and I am told that the matter in which the changes occur is a force-conditioning machine or a laboratory. Then, I remark, if it be a laboratory the various chemicals come together of their own accord, take up their own proper positions, decompose one another, arrange and rearrange their own elements, and so give rise to various compounds, and all this without any apparatus and without any chemist!

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(a) Are not the difficulties *phenomenal* rather than *natural*?

Of course if chemists and physicists should discover any compound capable of increase by making a compound like itself out of matter of a different composition placed in its immediate neighbourhood, and this of continuing the process, or if a machine could be formed which would make another machine like itself out of wood, iron, etc., placed near to it, they would have some reason for comparing living things with lifeless matter, but hitherto the comparisons made will not stand; nor has any object been gained by making them, unless it be an object to lead people to believe that to be an explanation of a fact which is no explanation at all. I cannot account for certain phenomena unless I resort to the hypothesis of the existence of vital power or vital force which differs entirely in its action from any known forms of ordinary force. Some have asserted that they can do so. I beg them to *explain*.

It is useless to say that vital force *may be* another form or mode of heat, unless arguments can be advanced in favour of the possibility. By all means let the idea of *vital power* be upset clearly, decidedly, for once and for all, if this can be done. I hold it because I cannot escape from it; teach me how to explain the facts without it, and I will be taught, but I will not submit to be forced into confusion by force while I retain power to resist. If vitality is to be upset by *force*, the friends of *force* must be fair, convincing by argument, and not attempt to smother thought by unthinking force.

It has always appeared to me strangely significant that those who attribute so much to *force* almost invariably avoid the all-important question of *form*. To say that *form* is due to the character of the machinery which conditions force is no explanation whatever, unless the formation of the *machinery* and the manner in which it acquired its *character* be explained. But *force alone* never formed any machinery whatever and never gave form, order, or character to anything living or lifeless. Will any one venture to say that the influence exerted by the spermatozoon upon the *form* of the new being is due to any peculiar manifestation of ordinary force? Some force-devotees may perhaps regard the most beautiful works of art as well as living creatures as mere force productions, and hold that *form* is the child of *force*. Force is very powerful, but unless a something directs it, will *form* appear? Is not that something the master, are not force and matter his tools, and does not the *form* result from the particular way in which the master works? Whatever name be given to this something, I cannot conceive how it can be a correlate of physico-chemical *force*. We might as well try to prove that the man who made a machine was a correlate of the heat that set it in motion after it was made. Does not "*life*" exist before brain and nerves, the instruments of mind, are formed? If therefore mental activity be a correlate of heat, how can "life," which manifests itself in man's organism before mind is evolved—which sometimes exists independently of mind, but without which mind could not exist, be also a correlate of heat? Life does not necessarily involve mental activity, although we cannot have mental activity without life. Life and mental activity cannot be correlative, but mental activity may be one of the results of the working of vital force or power.

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THE PUBLIC HOSPITAL AT JAMAICA.—The following testimony to the good state of the Jamaica Hospital was recently given at a public meeting in that island by Mr. Harvey, a member of the Society of Friends, who, with Mr. Brewin, was delegated by the Society to make a tour of inspection in the disturbed districts:—"The public Hospital he knew was somewhat dangerous ground to tread upon, but he could not refrain from speaking of the order, cleanliness, and indications of careful supervision he had witnessed there. The site was no doubt bad, and many of the buildings unsuitable; nevertheless, it was a credit to the colony."

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# THE TREATMENT OF CHOLERA.

By GEORGE JOHNSON, M.D., Lond., F.R.C.P.,
Physician to King's College Hospital, Professor of Medicine in King's College.

DR. WHITTLE, in his interesting paper (*Medical Times and Gazette*, May 19, 1866) "On Bleeding in Cholera," after expressing a general concurrence with me in my theory of the disease, refers to certain points of theory and of practice with regard to which he differs from me. I am desirous to convince Dr. Whittle and others that the difference between us is much less than he appears to imagine.

Dr. Whittle doubts whether the vomiting in cholera is the result of an effort to expel the poison, and he intimates that this symptom may be occasioned by sympathy with some distant organ analogous to that which occurs in nephritis, in hydrocephalus, and in pregnancy. Now the objections to this explanation of the vomiting in cholera are, first, the negative fact that there is no evidence of irritation of any distant organ with which the stomach would be likely to sympathise in the manner supposed. Then there is the positive fact that during the progress of cholera a large amount of morbid secretions is poured into the stomach, and it seems reasonable to conclude that the act of vomiting is intended to expel these offensive materials. That these morbid secretions should have an emetic action appears so extremely probable that we have no need to explain the vomiting by an imaginary nervous sympathy.

But the most interesting part of Dr. Whittle's communication is his statement that all stimulants, astringents, and opiates are injurious by *increasing* vomiting and purging; while, on the contrary, calomel stops the vomiting immediately, and after a few doses the purging. Now in the main I agree with this statement, but my explanation of the facts would be different from Dr. Whittle's.

First, I should somewhat qualify the statement that opium *always* increases the purging; it sometimes abruptly stops the purging, but rarely without subsequent ill-effects, such as profound collapse or consecutive fever. In many cases, however, opiates and astringents tend to increase and to prolong the purging. What, then, is the explanation of this? I know of no more probable explanation than this: that they tend to retain within the body a rapidly self-multiplying morbid poison, whose action is that of a strong purgative. What, then, is the *modus operandi* of calomel in quickly arresting the vomiting and purging? Dr. Whittle appears to think that it has some specific sedative action. Now I venture to suggest that the following may be the true explanation. The calomel certainly does not act as a direct astringent; it does not prevent the escape of the morbid secretions from the digestive canal, but rather, by a stimulant action on the intestines, it quickens the expulsion of the offensive materials, and then the purging quickly ceases. This I believe to be the true explanation of the apparent anomaly that opium acts as a purgative, and calomel or castor oil as a sedative or an astringent. In both cases the action is indirect. The opium is indirectly purgative by retaining within the body a purgative morbid poison. The calomel or the castor oil is indirectly sedative or astringent by quickening the expulsion of irritating excreta.

The unexpected and apparently anomalous results of various remedies in cases of cholera admit of no satisfactory explanation if we ignore the existence of a morbid poison which, in all cases, tends to excite an eliminative secretion from the mucous membrane of the alimentary canal, and which in the more severe cases tends to obstruct the pulmonary circulation, and so to cause collapse. This arrest of blood in the lungs gives the explanation of the paradox, that during collapse venesection in suitable cases increases the volume and power of the pulse, while alcoholic stimulants have the opposite effect. Venesection lessens the distension of the right cavities of the heart, and so increases their contractile power. Brandy, on the contrary, appears to increase the distension, which results from the block in the lungs, and thus the contractile force of the right heart is diminished. Less blood, therefore, is transmitted to the left side of the heart, and the volume and force of the arterial pulse are lessened. Here, then, we have the apparent anomaly that during cholera collapse bleeding acts as a stimulant, and brandy as a sedative or depressant. Yet this apparent anomaly admits of a simple and intelligible physiological explanation. In the case of cholera, above all other forms of disease, a correct physiological interpretation of the symptoms is essential for successful treatment and for a correct estimate of the true influence of remedies.

In conclusion, I wish to offer a few additional remarks on the eliminative treatment of epidemic diarrhœa and cholera. And in doing so I beg to say that I am as fully conscious of the weighty responsibility which rests upon any one writing on this subject as is the author of the very able, temperate, and fair review of my book which has recently appeared in this journal. I am aware that many Practitioners cannot think of giving a purgative to a sufferer from cholera without a feeling of dread. I am sure that this dread is mainly the result of an imperfect apprehension of what a purgative is intended to do and of what it actually does. The disease is usually attended with a profuse drain of fluid from the blood. To increase that drain would be mischievous, and might be fatal. A few doses of castor oil do not increase that peculiar excretion which constitutes the purging of cholera. I know that they do not, by actual observation, and if we look a little closely into the matter, we shall see that an ordinary purgative cannot have the effect which is so much dreaded. Let us consider for a moment the physiology of choleraic diarrhœa. A specific poison enters the blood. This is as nearly certain as any proposition in pathology can be. This poison acts as a ferment, and induces peculiar morbid changes in certain blood constituents. While these changes are going on there is often a general feeling of *malaise* and constitutional disturbance before there are any intestinal symptoms. At length after a period varying from a few hours to four or five days, the morbidly changed blood materials are excreted through the mucous membrane of the alimentary canal. The cholera secretions have a disagreeable fishy odour, quite unlike that of any other morbid product; and there can scarcely be a doubt that the blood changes which result in the cholera stools are as peculiar and specific a product of the cholera poison as the blood changes induced by the small-pox poison and the consequent eruption are peculiar to that disease. Moreover, I maintain—and here I speak deliberately, and I am sure with reason on my side—I maintain that castor oil, or any other purgative passing through the intestinal canal, can no more increase the peculiar choleraic discharges than castor oil applied to the skin can increase the eruption of small-pox. To do either the one or the other the drug must increase the specific blood changes, and nothing can effect this but the specific poison of each disease. Opium, as we have seen, may *indirectly* increase the choleraic discharges by retarding the escape of the cholera poison, and so allowing it a longer time to work its destructive changes in the blood. No drug that we know of can directly bring about any such result. But it is sometimes said that an attack of cholera has directly followed the action of a purgative. This must have happened frequently, but it affords no proof that the purgative caused the attack. In such cases we may safely assume that the specific poison of cholera had entered the system, and the zymotic changes induced by it in the blood probably caused the feeling of derangement for which the purgative dose was taken.

What, then, is the object to be attained by emetics and purgatives in cholera? The object is to stimulate the stomach and intestines to eject their morbid contents, which otherwise might be retained and re-absorbed. There is reason to believe that the intestines are more tolerant of the morbid secretions than the blood-vessels are of their morbid contents. Choleraic diarrhœa is often painless; the morbid secretions have but little irritant action on the bowel, which sometimes becomes overdistended and paralysed by its accumulated contents, and still more frequently the choleraic secretions are but slowly and imperfectly discharged without the aid of some artificial evacuant. On these grounds, then, I maintain that the exhibition of such a purgative as castor oil—mild and unirritating, yet quick in operation—is not only a safe, but often, probably, a life-preserving practice.

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**Hydrophobia.**—Two cases have been reported in London during the past week,—one that of a boy, aged 15, who died at the Middlesex Hospital. He had been bitten by a dog many weeks previously. Subcutaneous injection of morphia and the administration of bromide of ammonium were tried, but with no good result. The other was a case of an old lady, aged 80, who died at Islington with all the symptoms of rabies, after a short illness. She had been bitten five months before by a pet lap dog.

# NIGHT BLINDNESS.

## By J. W. HULKE, F.R.C.S.E.,

Assistant-Surgeon of the Middlesex Hospital and Royal London Ophthalmic Hospital.

Professor Laycock's communication in the *Medical Times and Gazette* of April 21 leads me to send a few cases selected from my note-books for the purpose of illustrating the two conditions of which night blindness is the common symptom.

The first is exhausted sensitiveness of the retina caused by prolonged exposure to glaring light, which makes the bacillary layer of the retina incapable of being sufficiently stimulated by twilight for perception.

This affection is common among sailors in tropical seas. Men suffering from it cannot see to do their work on deck after the sun goes down, except perhaps at full moon when the sky is clear; while in a well-lighted cabin their visual acuity is not much diminished. I have examined many cases of this kind without finding any organic change appreciable with the ophthalmoscope. After a few days, or at most a week or two, ashore the night blindness disappears, but subsequent attacks are not unusual when those who have once suffered are exposed to the same cause.

Rest and tonics comprise the treatment. The very frequent occurrence of night blindness in men suffering from scurvy has led to the idea that here it may depend on purpura of the retina, but I have never yet seen this, though I have often looked for it in night-blind scurvy patients. Their liability proceeds from their feebleness, in which the retina shares.

*Case* 1.—A sailor, aged 20, with fair complexion and light blue eyes, applied at the Royal London Ophthalmic Hospital on January 30, 1864. Seven weeks previously, on his homeward voyage from Calcutta, he had become night-blind. He could do his work during the day, but at sunset his sight grew so dim that he could not see things about him on deck; yet in the cabin by candlelight he saw fairly, though not so well as by daylight. On his outward voyage he had had a similar attack. At St. Helena a Surgeon who had examined him reported him a malingerer. There were no objective signs of disease, except perhaps slight anæmia of the retina. Quinine was prescribed. In a few days the night blindness had quite gone.

*Case* 2.—A sailor, aged 22, came to the Royal London Ophthalmic Hospital on January 30, 1864. He was a strong, hearty-looking fellow, with black hair and dark hazel eyes. In July, 1863, on his outward voyage to Calcutta, three weeks before reaching port, his sight after sunset became so defective that on deck he could not see his hand a few inches before his eyes, but in the cabin with a candle he saw well enough; he also saw sufficiently well to get through his work at full moon when the sky was clear. He recovered after being on shore a few days. On the homeward voyage, a fortnight after leaving Calcutta, he again became night-blind, and had continued so. A Surgeon at St. Helena had reported him also a malingerer. He again quickly recovered.

*Case* 3.—A hearty-looking, weather-beaten sailor, aged 32, came under my care at the Royal London Ophthalmic Hospital, July 9, 1862. He said that eighteen days before, while off the Western Islands, he found that after a very fiery sunset he could not see the stars. The sky had been very bright for several preceding days. His shipmates thought he was shamming. He had had two previous attacks of the same kind: the first at Auckland, the second at Calcutta. With the exception of slight injection of the conjunctiva, externally his eyes had a healthy appearance, and with the ophthalmoscope I could not detect any signs of organic disease in the optic nerve or retina. He recovered after being on shore for a few days.

*Case* 4.—A sailor, aged 19, was brought to the Royal London Ophthalmic Hospital May 25, 1865, two days after reaching port. On his homeward voyage from China he had scurvy and became night-blind, unable to see on deck after sunset, but seeing fairly in the cabin by candlelight. His gums were very swollen and spongy, and bled easily. No morbid appearances were discoverable with the ophthalmoscope.

The second condition of which night blindness is a symptom is a contracted state of the visual field depending on structural alterations in the choroid and retina, characterised by very definite ophthalmoscopic signs. The bottom of the eye is overlaid with dots and clusters of black pigment scattered and massed, and often grouped along the course of the retinal vessels. The pigment is a derivative of the choroidal epithelium, and lies on the surface of the choroid, and also among the withered retinal tissues. Between the clusters the epithelium is wasted, and the other tissues of the choroid are seen to be atrophied. These alterations progress from the front of the choroid and retina towards the optic nerve, and they are attended with a corresponding diminution of the area of the visual field, which becomes so small that the patient has not a general view of surrounding objects and stumbles over them at night, though so long as the centre of the retina remains unimplicated, the smallest type can be read in the contracted field. Ultimately, the optic nerve grows anæmic, the entire retina is involved in atrophy, and these final changes are marked by diminution of visual acuteness ending in blindness.

The disease has been named Retinitis Pigmentosa, and the name may be retained if we remember that the primary seat of the affection is the choroid. Usually it begins in early life, and it runs a very slow course, protracted through many years. Liebreich, who devoted much time to its investigation, found that about half the sufferers from it were the children of blood-relations. Hitherto my own inquiries on this point have always met with a negative answer. The disease is frequently traceable to inherited syphilis, and it often affects several members in a family.

*Case* 1.—In the present month, a woman, aged 44, brought two sons to the Middlesex Hospital; the elder, aged about 9 years, had night-blindness and a very contracted visual field, and the younger, 7 years old, had diminished central visual acuteness and a less contracted visual field. In both, the ophthalmoscopic signs of retinitis pigmentosa were well marked. Their mother's history contained evidence of constitutional syphilis. Healthy until her marriage, she had a scaly rash during her first pregnancy, and soon after the birth of the child iritis in the left eye, the sight of which continued to fail till quantitative perception of light only remained. Three weeks before coming to the Hospital, she was seized with tic in the supra and infra orbitar and malar branches of the fifth nerve on the left side, and soon after the left eye squinted inwards. When I saw her the pain had become less severe, but firm pressure upon the supra and infra orbitar foramina brought it on in great intensity. Tested with compasses, the sensitiveness of the surface supplied by these branches of the fifth was found to be much blunted. The upper border of the orbit was tender when firmly pressed. The left rectus externus was completely paralysed. The left pupil was occluded and excluded. The neuralgia and the paralysis were doubtless due to inflammation of the periorbita and fibrous investment of the fifth and sixth nerves; and there could be as little doubt that this, and the iritis, and the rash were consequences of syphilitic infection soon after marriage.

*Case* 2.—A tobacconist, aged 31, of fair complexion, spare build, and middle height, came to the Royal London Ophthalmic Hospital October 28, 1863, with the complaint that his sight, which had always been bad at night, had latterly become less acute than formerly during the day. There were no external signs of eye disease. The right eye read No. 18, the left No. 16 of Jæger's types, at about twelve inches distance, so that the visual acuteness was diminished, still he had not any difficulty in serving his customers in the day-time. In the twilight, however, he was afraid to leave his shop, for his sight was so imperfect that he stumbled against things in his way, and latterly had been obliged to be led. Both visual fields were extremely contracted. That of the right eye mapped upon a black-board at eight inches distance, was nearly circular and two and a-half inches in diameter, while that of the left eye was rather smaller and oblong. The fundus of each eye, from the anterior limit of the choroid and retina, nearly to the disc of the optic nerve, was thickly sprinkled with flocs of black pigment, scattered separately and clustered in groups of the most irregular figure. From its relation to the retinal vessels, this pigment was evidently on the surface of the choroid and in the outer layers of the retina. In each eye the yellow spot was slightly implicated in these morbid alterations, which accounted for the diminished visual acuity. The optic nerves were anæmic; their outline was slightly ragged, and the retinal vessels were small. These appearances unmistakably indicating structural disease progressing from the ora towards the optic nerve, and completely explained the centripetal contraction of the field of vision. The patient told me that his parents were not related; one brother's sight was affected in the same way that his own was, but other brothers and sisters had, so far as he knew, not any visual defect.

*Case* 3.—A labourer, aged 42, who was admitted into the Middlesex Hospital by Mr. Shaw for a node upon the malleolus externus, a tertiary syphilitic ulcer of the leg, and a sarcocele; was transferred to my care because he was night-blind. The visual defect began five years previously and had slowly progressed until he could not walk alone in the twilight. He could, however, read No. 1 of Jæger's types (brilliant). His visual field very much diminished, not uniformly, but very irregularly mutilated. Extensive atrophy and irregular pigmentation of the choroid and retina, corresponding to the mutilation of the visual field, were observed with the ophthalmoscope. He said that his sight had become defective five years before while suffering from a rash following a chancre.

Professor Laycock's cases, I have little doubt, fall in this category. An ophthalmoscopic examination by a competent observer would easily settle this question.

10, Old Burlington-street.

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# REPORTS OF HOSPITAL PRACTICE
IN
# MEDICINE AND SURGERY.

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## ST. GEORGE'S HOSPITAL.

### TETANOID CONVULSIONS OVERCOME FOR A TIME BY APPLICATION OF ICE TO THE SPINE —DEATH—STRUMOUS MENINGITIS.

(Under the care of Dr. JOHN W. OGLE.)

The patient, Henry F., aged 2 years, was a stout, well-made child, of a family free from consumption or other special taint, and had cut fourteen teeth. He had been ailing, with want of appetite and dulness of manner, for eight or ten days, but had not complained of pain in any part. On February 15 he had a powder given to him of some kind or other, obtained at the druggist's. On the following night he slept well, but about 9 a.m. on the 16th he began to be attacked with convulsions, and about 11 o'clock he was brought to the Hospital in a state of general convulsions, but affected chiefly on the right side of the body. At this time he was placed in a hot bath. Dr. Ogle saw him at half-past twelve o'clock, when he was still convulsed; but then it was chiefly the left side that was affected—the left arm, hand, and leg, and the muscles of the face being violently convulsed, in a clonic manner. The eyelids were widely separated, and the eyeballs quite fixed and, to a slight degree, rolling from side to side. The pupils were larger than natural, but of equal size and unaffected by light. The tongue, which could not well be seen owing to fixing of the jaws, appeared to be clean. On touching the surfaces of the eyes or edges of their lids, but little reflex action could be produced. The surface of the body was much above the natural temperature, and the colour of the face was slightly, but manifestly, livid. The respiration was slow, and attended by a degree of moaning. Dr. Ogle ordered an enema with castor-oil and turpentine to be at once given, and the gums to be examined for the purpose of seeing if they required lancing. It was, however, found impossible to open the mouth. He then ordered an ice-bag to be applied and kept in close contact with the back the entire length of the spine. At two o'clock the convulsions were much the same, the right side being now mainly affected, the hands being clenched and the teeth firmly closed. The surface was warm; the head was frequently rolled from side to side on the pillow. The ice application was continued, and gradually the convulsions abated, and the child was considered by the apothecary well enough to be allowed to go home in the evening. The gums, etc., were found to be not swollen.

On the following day, as he was evidently not so well, the child was again brought to the Hospital, under Dr. Pitman's care, and grey powder was given at bedtime. Antimony and salines were also given. On the day after (the 18th) one convulsive seizure took place, affecting both sides of the body, and then the child appeared to be better, no feverish symptoms remaining. It was only noticed that the child had somewhat of a wild, rather staring expression of countenance, the pupils being rather dilated. Nothing further occurred until the morning of the 19th, when convulsions recurred, in which the child died.

On post-mortem examination, the brain was found much and universally congested, and the grey substance dark in colour. The pia mater was universally injected, and many miliary scrofulous deposits were found attached to its inner surface, especially in the great longitudinal fissure, and on the velum interpositum, and on the upper surface of the cerebellum. A small quantity of recent fibrine existed beneath the arachnoïd at the inner side of each Sylvian fissure, the neighbourhood of the optic commissure and pons Varolii being almost free. The lungs contained about five or six small miliary scrofulous deposits; the heart, liver, and kidneys were natural; the spleen also contained a few scrofulous deposits.

*Remarks.*—In commenting upon this case, Dr. Ogle drew attention to several points appearing to deserve notice. In the first place, the *spasm* which existed was such that, at the outset, it seemed to have quite the character of tetanus, or of the convulsion produced by strychnia; and suspicion of the latter was the more strong at first when it was made known that the child had had some kind of powder exhibited previous to the setting in of convulsions; but as it was found on investigation that the convulsions did not occur until several hours afterwards, this suspicion fell to the ground, especially when it proved that the spasm was, to a considerable extent, *unilateral.* This unilateral character of the spasm was also most interesting, considering that, as it ultimately proved, the spasm was connected with a general state of meningitis. At first, owing to the absence of fever, the suddenness of attack, etc., Dr. Ogle thought the case was one of mere congestion of the nervous centres; and, indeed, was even, after all, inclined to suppose that the early convulsions may have coincided with a simple state of congestion prior to the effusion or production of lymph, which, as it was subsequently ascertained, occurred within the cranium. If so, of course the formation of this lymph (considering how speedily death took place after the first symptoms set in) must have been very rapid; but Dr. Ogle pointed out that a very few hours may suffice for the formation of such lymph and so-termed exudation. The substantial relief from the ice application was not a little interesting, and speculation upon the probability of a greater and more permanent benefit from a longer application of the ice could not be resisted. A noticeable symptom was the *lividity* of the face—one evidently connected with some pulmonary congestion. This symptom might have been thought to be the result of interference with the movements of the chest-walls by reason of spasm of the thoracic muscles; but as it was associated with a *slowness*, and at the same time *regularity*, of respiration the juster inference was, that it was the result of some intra-cranial disturbance. The *dilated* state of the pupils Dr. Ogle was more inclined to connect with the general strumous condition of the body than with the cerebral effusion, etc.

## ST. MARY'S HOSPITAL.

### DELIRIUM IN A RHEUMATIC SUBJECT PRECEDED BY NEURALGIA—DEATH BY COLLAPSE ON THE THIRD DAY—IMPAIRED NUTRITION OF BRAIN AND HEART—CLINICAL REMARKS.

(Under the care of Dr. HANDFIELD JONES.)

G. B., aged 43, admitted January 18, 1866. A very broad made man, park-keeper; is quite temperate, according to his wife's statement. Has been in Hospital four times before with rheumatic fever and its sequelæ. Never suffered from rheumatism until he jumped into the Serpentine to save a drowning person; has not been well since. Ill this time three days. Was in Hospital eighteen months ago, and has been well ever since till now. Was taken with pain over the right eye, which continues; had vomiting at same time, or rather dry retching, "which strains him all to pieces." The pain and retching occur mostly at night. Is quite light-headed while the pain is on; "does not know what he is doing: goes quite mad." Hands tremble very much when the vomiting comes on. He says that the vomiting brings on the pain in the head, which is not limited to the brow, but extends some way across the forehead. He feels as weak as possible. Urine scanty, high coloured, just as it was when his joints were affected. Tongue rough, whity. Appetite very bad; has eaten nothing for a week. Bowels open. Sounds of heart normal; also its rhythm, dulness area not increased. Lungs acting normally. Liver rather depressed; extends some two fingers' breadth below ribs. Pupils rather large, conjunctiva not injected. Ordered simple diet, beef-tea, and pudding.

19th.—Became delirious about 10 p.m., so much so that restraint became necessary, and he has been removed to another ward. He is now struggling a great deal with his hands, which are confined, and perspiring profusely. Pulse frequent, soft, and weak. Bowels not open. Eyes not notably congested; pupils were much dilated, but became contracted after a dose of morph. mur. gr.j. last night. Urine scanty and red yesternight; bladder not distended. Liq. opii. sed. ♏xij. was injected subcutaneously, and he was ordered calomel, gr. v., statim; tr. digitalis, ♏xx.; tr. hyoscy., ♏xxx.; aq., ℥j., 2dis horis.

20th.—Was not tranquillised at all by the liq. opii injection, but was very much so by pouring, for about half-an-hour, a stream of cold water on the head, after which he slept for about three hours, and has been tolerably tranquil all day. Does not require restraint. Head markedly hot; eyes rather muddy, not injected. Heart's sounds very weak. Pulse 108, weak and open. Tongue whity. Bowels not open. Takes four eggs daily, besides beef-tea and milk. Podophyllin, gr. ⅓; aloes, gr. iij.; ext. cannabis Indic., gr. ⅓, in pil., h. n.

21st.—Was sleeping quietly when he was visited about 9 p.m., but in the morning was found sinking, and died soon after.

*Post-mortem on 22nd.*—Heart extremely flabby; its muscular tissue of a dull, dirty, yellowish colour; the valves normal, the pericardium universally adherent; it weighed 16 oz., but seemed small in comparison to the size of body. The apex lay just opposite to the fifth rib, and would have beat in the fourth intercostal space. The whole heart was covered by a thin layer of lung, except a very small portion of the apex. The cavities of the auricles contained large black coagula; the right ventricle contained a coagulum, which extended into the pulmonary artery, and was black below, but consisted of decolourised fibrine above; the sinuses of Valsalva contained projections of pale fibrine. The muscular fibres of the left ventricle presented well-marked nuclei, and showed no trace of fatty degeneration; those of the right were thus altered, but not in an advanced degree, nor equally in all parts, some had almost entirely escaped. The lungs were collapsed, and did not appear at all emphysematous. They were extremely congested posteriorly, appearing black and solid in their posterior two-thirds. The kidneys were pale, their surface rather granular; they were rather small. On microscopic examination the tubes were found infarcted with epithelium, but not at all disintegrated; the Malpighian tufts appeared for the most part healthy. The brain weighed only 44 oz., was pale, but firm, the veins were congested, the small vessels empty; there was a large quantity of subarachnoid fluid at the posterior part of the hemispheres; the dura mater lay in folds, not having been well filled by the shrunken encephalon.

*Clinical Remarks by Dr. Jones.*—This man's previous history proves that his delirium was unconnected with alcoholic excess. It also shows, and the post-mortem evidence is confirmatory, that he had been subject to acute rheumatism. The urine on admission was described as scanty and red, as it had been during his attacks of articular inflammation. It was reasonable to regard his present illness as of the same nature as those he had had before, but the great weakness, the orbital neuralgia, the associated gastric disturbance, and especially the cerebral derangement (though I did not witness it on the first visit) should have roused my attention more than they did to the probability that we should not have to deal with an orderly, regular rheumatic fever, but with one of ataxic quality. That the delirium was not owing to uræmic poisoning is, I think, tolerably certain, although I had not the opportunity of examining the urine. The supervention of marked brain disorder in connexion with pain in the head is a point of much interest. As I read the phenomena, it seems to imply that the same pathological condition which had befallen the frontal nerves extended to the hemispheres, and involved their cells and fibres in a like functional derangement. We know that neuralgic suffering is in all such cases as the above a cry of distress, an indication of impaired vital action, and not in any wise of exalted or increased. It is, in fact, as I have argued in my Lumleian lectures, an approach to sensory paralysis. The state of the brain, as revealed by the post-mortem, was quite such as warrants our applying to its delirium Romberg's metaphorical description of neuralgia—the prayer of the nerve for healthy blood. The organ was shrunken, pale, and below the normal weight by at least four ounces. The large amount of subarachnoid fluid present was a clear evidence, and a sort of measure of the atrophy which had taken place.

That this had come to pass during the fatal illness there can be little question; there is nothing to show that the cerebral functions were previously at all impaired. "*Il saute aux yeux,*" we may say, that such a condition of brain as we have just described could be benefited in no other way than by supporting stimulants and nourishing food. The latter was given in fair quantity, the former was withheld, I fear erroneously. I think it very possible that if brandy and milk in combination had been administered largely we might have escaped the fatal collapse. At the same time observe that no measures were employed of a directly lowering kind. Digitalis, you know, in common with many others, I regard as primarily a cardiac tonic, and therefore its exhibition was decidedly indicated by the feeble quality of the heart's action. The cold douche to the head appeared to be markedly beneficial, and by calming the delirium was probably conservative of strength rather than depressing. The collapse did not occur till more than twenty-four hours after it had been employed. The very flaccid state of the heart was, I believe, the result of exhaustion, and was owing partly to the prolonged struggling and partly to the depressing influence of the rheumatic miasm on the nutrition of the muscular and nervous organs. Some fatty degeneration of the right ventricle probably existed previous to the illness, but not enough to influence materially the issue of the disorder. The retching or vomiting which he complained of so much on admission was doubtless chiefly dependent on the orbital neuralgia, just as it is so commonly on the early stage of serious cerebral disease. I would by no means affirm that the majority of cases of what is popularly termed "sick headache" are produced in this way—viz., by a reflex disorder of the gastric nerves consecutive to a primary one of the brain or cranial nerves, but I am sure that instances of the latter kind are not rare. A lady, whom I attended a long time, told me that she used always to suffer with headache and sickness after a day of sight seeing. Here the exciting cause of the gastric derangement was evidently cerebral fatigue, and rest and restoratives were undoubtedly more called for than blue pill and purgatives. I have so often expressed my opinion to you as to the variable and differing quality of morbid action even in cases which appear in many respects alike, and are called by the same name, that you will be quite prepared for the remarks that all cases of rheumatic delirium which you may meet with will not be similar to the one we have just reviewed. In my work on "Functional Nervous Disorders," at pp. 164—166, you will find two cases related, in one of which large doses of antimony and in the other opium proved successful, while, as I have stated in the present instance, Dr. Todd's method of free stimulation would probably have been most serviceable. The impression which I would have the history to leave on your minds is, that you have witnessed a case of active, violent, rheumatic delirium, quite independent of alcoholic influence, which though occurring in a robust-looking male, who was not depressed by any long existing cause of debility, was from the first of highly asthenic quality, induced great wasting of the encephalon, and flaccidity (loss of contractile energy) of the heart, and terminated fatally by exhaustion in about fifty-eight hours after the delirium supervened. As corollaries to the case, I will add (*a*) the evident relation existing between neuralgia and delirium, the latter differing from the former only in its *locale* and in the greater intensity of the disorder; and (*b*) that it is generally better in doubtful cases to err on the side of too much than too little stimulus.

**Glasgow Royal Infirmary.**—At their meeting on the 7th inst., the directors of the Glasgow Royal Infirmary appointed Dr. Eben. Watson Surgeon to that Institution, in room of Dr. Lyon, who has resigned.

**The Law on Capital Punishment.**—Lord St. Leonards has proposed an amendment to the Government measure, which is, to omit part four of the Bill, in reference to executions within prisons. The provision as to murder of the first and second degree has already been expunged.

**The Disused Burying Grounds of the Holborn District.**—In the last Report of Dr. Gibbon, the Medical Officer of Health for this district, he calls attention to the useless and neglected condition of these grounds, and to the benefit that would accrue to the population were they converted into gardens for recreation. The disused burying grounds in this district are three in number, and their extent is about six acres.

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Medical Times and Gazette.

SATURDAY, JUNE 16.

## CHOLERA AND DIARRHŒA—NATURE AND ART IN THE TREATMENT OF POISONING.

It may be of use before we go further just to examine the prevalent notions of the "efforts of Nature," and of the necessity of "elimination" which form part at least of the basis of theories which demand a purgative treatment for diarrhœa and cholera.

As for "Nature," she is a mere sham. Civilised man repudiates the blind following of Nature. The instincts of Nature prompt to a thousand acts which are to be yielded to only if sanctioned by conscience. Nature prompts to deeds of lust, revenge, and theft, and we dare not, in the domain of morality, sanction any natural cravings whatever, unless reason, conscience, law, and public morality concur.

So as regards physical changes in living beings, what we call "Nature" signifies really things as they are—uninterfered with and let take their own course. And just as we check Nature by conscience in things moral, so we check her by reason and experience in things physical or Medical. If our experience shows us that any given sort of illness does well without medicine, or that any given spontaneous process leads to recovery, we let well alone, and call this leaving the case to "Nature." On the contrary, if our experience shows that the "efforts of Nature," or, in plain words, existing symptoms or actions, may be increased to the patient's benefit, we take measures accordingly, and call it "seconding the efforts of Nature." Or if general experience shows any given set of symptoms to be mischievous, we do not hesitate to suppress them; and if we are of imaginative minds we call this "restraining" or "checking the excessive efforts of Nature."

Anyhow, the word "Nature" is a mere cloak, a cobweb, a phantom. If it suits us, we respect her efforts; if not, we set her at nought; but, in either case, it is not "Nature," but our own reason and experience (if we have any) that we follow.

So much for Nature. But, inasmuch as a respect is professed for her "efforts," and it may be supposed that we are doing the correct thing in following her suggestions, let us see how "Nature" best deals with poison, and how experience teaches us to treat cases in which the "efforts of Nature" may be either inadequate or excessive.

Let us take the case first of a mineral or vegetable poison, say calomel, or arsenic, or elaterium. Either of these substances in certain quantity sets up vomiting and purging, by which, after a time, "Nature eliminates the poison," and the patient recovers. But let us suppose the dose very large, so that it gets, as we may believe, into the blood, that the vomiting and purging are intense and exhausting, does the Physician aim at elimination pure and simple? Not a bit of it. He seeks to put the patient into a state that shall render him less sensitive to the effects of the poison. He diminishes and controls the efforts of Nature, so that a large dose of poison may act like a small one, and a weak system like a strong one. The stronger the system the less violently does Nature react against the poison, and that which will make a weak system act like a strong one is *opium*. Give repeated doses of calomel till they purge, producing perhaps intense tenesmus and bloody stools, and what is the treatment? Opium. Under the influence of this, the poison is no more heard of; pain and discharge cease; and we may suppose that the poison eliminates itself quietly, without damaging the alimentary canal.

Let us next take the case of poisons of a zymotic order — typhoid or cholera. If a moderate dose be administered to a patient in first-rate health and spirits, how does "Nature" act? Why, she may not condescend to notice it. It is on patients exhausted, ill-fed, or already prone to illness, that the poison acts as a specific poison. To produce its full effects, it must provoke certain reactions in the system of the recipient; it must feed on the patient and multiply itself; and it is the weak, ill-fed, nervous, irritable, and exhausted who fall into those reactions and permit that multiplication most readily. Suppose, then, such a population, breathing air, drinking water, swallowing dust, eating food with unwashed hands, all impregnated with cholera poison, and suffering from incipient bowel disorder; what is the indication? Is it to eliminate? Certainly not; but to recruit the forces, and to resist the action of the poison in the alimentary canal, and for fulfilling these indications the experience of half the world points to opium. Dr. MacCormac, writing in a late number of the *Medical Press and Circular*, relates the circumstances of a house-to-house visitation in an Irish town. "Do you purge?" was the question asked; and if the answer were "yes," an opium pill was put into the respondent's throat without ceremony. The result was successful. The system at large, and the alimentary canal in particular, were soothed, comforted, and rested; the poison was "locked up," but could do no harm—the patient was protected. And this, concurrently with the experience of hundreds of Practitioners in the last three cholera epidemics, shows that a soothing, astringent, and non-eliminative treatment of diarrhœa is a pretty good safeguard against the fully-developed phenomena of cholera.

We do not assert that opium is the only or always the best remedy for diarrhœa; on the contrary, we last week reckoned up half-a-dozen remedies or methods of treatment, each available in its proper case. But our present purpose is to show that they who follow "Nature" cannot object to a remedy which produces a state of things such as "Nature" presents when at her best.

We shall continue our remarks from week to week, in the hope that this and kindred questions may be well debated, fallacies cleared up, and something like truth arrived at in the end.

## "LOCAL MUSEUM NOTES."(a)

If rapid and easy locomotion, with moderate freightage, had conferred on the homeward-bound traveller no other boon than depreciating the value of things brought from abroad called curiosities, he would still be deeply in its debt, to an extent, indeed, which the wayfarer now-a-days can hardly realise. Private collections of pickle bottles full of rum and lizards, monsters of the deep vaguely labelled Sea Devils, carved calabashes, and bags filled with crabs'-eye seeds are not now expected of him; whereas a few years ago the man required some courage, or a well-established reputation for filial piety, who could face his relations without being prepared, after the first transports of welcome, to produce a scorpion, a parrot in a big tin cage, a tattooed Sandwich Islander's head, or some other "dinna forget" element, which gives to the most humdrum travels a savour of romance.

Nothing could be less satisfactory, next to the materials of which they were composed, than the fate of such private collections. As they owed their interest entirely, or nearly so, to that taken in the donor, they were liable to be superseded on every fresh arrival. The history of a specimen was one of unrequited self-sacrifice from the moment when it was first induced to enter the pickle bottle, until, all its spirit flown, the cook turned it out on a dust-heap, and substituted onions.

Such souvenirs are seldom tendered now, and those who live at home at ease have ceased to expect them. Travellers send their spoil to depôts where they may be safe and within reach of the inquiring mind.

There is a great deal of the jackdaw in man—a vestige left of his mental condition when still a noble savage, a gorilla, or what you will. There is no difficulty in getting him to collect—indeed, it is hard to restrain him, he is always collecting, but in an imbecile, meaningless way. See him pluck a rose; watch him; he will put it in his mouth presently, and champ the petals, spitting them out in a little time, and wondering how came they there. Leave him by a recently-sifted dust-heap, and he will be soon poking it with his stick as earnestly as if it were the last cradleful out of Ballarat. Go into his lodgings at the sea-side and wonder—it is all you can—at how or why he has carried home the stones and water-worn oyster-shells on the mantelpiece, and which he will leave there on his departure. Depend upon it, he who went from Dan to Beersheba was collecting the whole way, but having no definite object, he found that all was barren, and reported accordingly.

Now, what Mr. Toynbee, the editor of "Museum Notes," proposes (and surely if a man ever had a claim on the public ear he has), is to guide this propensity for collecting, and turn it to good account. His scheme, which, if fully carried out, will be virtually a self-paid natural history survey of Great Britain, is "that the inhabitants of a parish, who feel disposed to form a local museum," should appoint a committee and a superintendent, that any one may become a collector, and for purposes of classification and identification be provided by the committee with museum papers and labels, and a map of the country for five miles round the parish church.

To these collectors any parishioners may send specimens; the collections may be begun at home, and if worth it, the expense of preparing objects will be defrayed. When they think it desirable the committee may provide cases made upon some definite plan, so that whenever a fitting room is provided for the museum these cases may form a regular continuous series.

The editor hopes that this plan will not only diffuse a liking for natural history, but brotherly love, and that men of all classes may be brought together in the great freemasonry of science.

The "Notes" (No. 1) contain a classified list, which gives us a general idea of what specimens may be preserved for consideration of the committee. They embrace natural history in almost its widest sense, beginning with the mineral kingdom, then the vegetable; and we are told that a collection should be made of the leaves of all species of plants in the district, in one sense no light undertaking, for

> "Various the trees and passing foliage here.
> Wild pear, and oak, and dusky juniper
> With briony between in trails of white—
> And ivy, and the suckle's streaky light
> And moss warm gleaming"—

all so easy to carry, too, except the names in one's head. In case 4 are to be kept all kinds of fruits; diseased specimens may also be preserved, and it is not unlikely that, as we see in daily life, the diseased specimens will outlive the healthy ones. The animal kingdom will include all, from Infusoria upwards:

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(a) No. 1, Hardwicke, London. P. 16. Edited by the Treasurer of the Wimbledon Local Museum, to whom communications may be addressed, Beech Holme, Wimbledon-common.

insects and the softer orthoptera may have chloroform, but beetles must take the fatal plunge into boiling water. Of birds, the feathers, eggs, nests, bones, heads, and feet, are to be collected. Of the mammalia, which the editor rudely renders beasts, the smallest contributions will be received. Some good hints on this section are given, and ants recommended as bone-cleaners; we would here mention those victims of popular prejudice, the black beetles. A band box, with holes in the top, is not only a model prison for them, but a self-supporting institution. We once shut up many dozen beetles with a carious bone, and blush to add forgot all about them for several weeks; at the end of that time the bone was beautifully clean; there was a heap of wings and legs, and two gaunt survivors were walking solemnly round and round watching each other with conscious, hungry eyes.

Collectors need not confine themselves to actual specimens; observations on the weather, etc. will be received by the Committee, and accurate observations of every living thing may be recorded. Of

> "The ring-dove that repeats his pensive plea,
> Or startled gull, up screaming from the sea,
> Or a few cattle looking up askant,
> With sleepy eyes and meek mouths ruminant."

If not already suggested, we would venture to propose that photographs of the forefathers of the hamlet, or typical specimens of the inhabitants should be collected, also words and proverbs of the locality, and receipts for the quaint messes our forefathers swallowed, which puzzle the readers of old books, because no one records them.

> "O! che crudeltà! che non compose
> Un' operetta sopra la cucina
> Tra l'infinite sue miraculose."

We wish this scheme the success everywhere which it has already met with at Wimbledon. It will tend to open rustic eyes and hearts, there will be no talk of shutting up heaths and commons where gentle and simple wander over them with a common object; it will divert men's thoughts from impurities, and sanctify lovers' lanes; perchance, too, some village Owen may be saved by it for the service of Nature, and many others won to muse with love on her mysterious ways, while the shelves of local museums will, even of humble names, still keep the memory green.

## THE PUBLIC SERVICES.

In a recent number of this journal we called the attention of the Profession to the very unsatisfactory nature of the reply vouchsafed by the Marquis of Hartington to Colonel North. We then expressed an opinion that things were looking very badly for the Army and Naval Medical officers. It now seems that our fears are to be realised. The late Commission at the Admiralty, and the publication of its Report, have had the desired effect. Candidates are forthcoming for the Army, and H.R.H. the Duke of Cambridge is said to have used the influence of his position against the adoption of that Report. He is said to have counselled delay. Another year over, a supply of Medical candidates just equal to the wants of the service, and we shall hear no more of concessions. The publication of the recommendations of the Committee will have effected the object the authorities had in view. A question may be asked perhaps of the Secretary for War, in the next Parliament, by some Member who is heartily sick of the matter. The reply will be—the Medical men are forthcoming! The well-meant endeavours of the late Committee will have been diverted from the good they intended into a source of positive injury.

In the *Army and Navy Gazette* we noticed a very commendable proposal from a Naval officer. Not only does he urge the employment of homœopathic practitioners, but he would go a step further, and have the authorities return to the days of Smollett, when the Medicine-man was a Surgeon's mate, with Professional knowledge equal to the application of a blister, or the administration of a clyster. If the combatant ranks of the Navy be such asses as seriously to advocate a measure like this, we would suggest that they recruited their Medical service from the members of the Veterinary College at once. They would be the most appropriate Surgeons for such patients, and would not lack the diploma which is such a stumbling-block in the way of the naval authorities.

It is very unfortunate, as it happened, that some of the English Medical Colleges have been so premature as to congratulate the Government on the satisfactory nature of the recommendations of the late Committee. Never were recommendations founded upon more economical and fair principles towards the Government, and we do most earnestly hope that the evils which any delay in giving them effect must surely produce may come home to Horse Guards and Admiralty alike. There are no Medical recruits for the Navy, and there was a time, not long distant, when Acting Assistant-Surgeons—of whose Professional and social qualifications we need say nothing—represented the young Medical element of the Army. The ball was at the foot of the Profession. A little longer starvation, and the just demands of that Profession would have been wrung from the authorities. Alas! 70 candidates appeared at Chelsea. A dissatisfied department found its rightful claims put off "to a more convenient season," while the Director-General and Horse Guards "went on their way rejoicing." Is it always to be so? Will the Profession never lay to heart the lesson which the Government has been reading it for the last four or five years.

## CONTAGIOUS DISEASES BILL.

The new Act "for the better prevention of contagious diseases at certain naval and military stations" is an important measure in more senses than one. It serves to indicate the extent to which our soldiers and sailors are affected by such diseases, while it shows that the pressure of the great pecuniary loss thereby entailed upon the nation has overcome the prejudice and repugnance which Englishmen naturally feel against making them the subject of legislative enactment.

The old Bill was introduced as a tentative measure probably. It was found to be ineffective in its working, and inadequate to accomplish the purposes for which it was designed. "*The Contagious Diseases Act*, 1866," has been framed with the view of meeting these difficulties. The places embraced by it comprise our various garrison seaports and camps, and the expenses attending its execution are to be defrayed by the Admiralty and War Department. Provision is made for the appointment of Visiting Surgeons and Assistants, in addition to an Inspector of Hospitals, and for the appointment of certified Hospitals for the treatment of infected women.

Upon information being laid before a magistrate that a woman is a common prostitute, he may order the issue of a summons requiring her periodical Medical examination. In the event of her being found to be affected with a contagious disease, she is to be conveyed to some certified Hospital, and there detained for the necessary treatment and cure. Refusal to be examined, etc., renders the person liable to imprisonment. A woman may, if she likes, voluntarily submit to these periodical examinations. Supposing that any woman discontinues her course of life, she has only to satisfy a magistrate on that head, and enter into a recognisance, with or without sureties, as to the Justice seems fit, for her good behavour for three months, to obtain relief from all such Medical examinations. The Act institutes certain penalties to be inflicted on the owners or occupiers of houses for harbouring women with contagious diseases.

Under the old Bill sufficient power was not given for detaining women in Hospital, nor for exercising a sufficient surveillance over them. There is not adequate Hospital accommodation in our garrison towns for the treatment of these cases at present. The Government, by the way, is never very just in its dealings with our Profession. The stipend allowed to the resident Medical Officers is absurdly low, we believe, and we confess we do not see that the authorities have any right to obtain the gratuitous services of the Hospital staff.

We need not enter into the religious aspect of the question. The Bill was most urgently required. The Government ought certainly to make provision for guarding public servants against the evils arising from a life of celibacy, enforced on them for the good of the nation. It appears to us that it will prove a very merciful measure for the women themselves. Not only will these unfortunate creatures obtain relief from physical suffering and want, but their stay in Hospital will make a break in their course of life, during which an opportunity for quitting it will arise, such as they probably would never have had otherwise.

## NITRO-GLYCERINE, *ALIAS* GLONOINE.

Our readers may probably be asked by their patients what is that *nitro-glycerine* which lately blew up a ship at Colon, and which seems likely to be such a dangerous article of merchandise? It is one of the *substitution bodies* found by peroxide of nitrogen, which are, perhaps, the most interesting products of modern chemistry.

Setting aside their peculiar scientific aspect, they already contribute so largely to the wants created by civilisation that their loss would be very materially felt could they no longer be brought into existence. Thus, there is gun-cotton, or *nitro-cellulose*, which offers such promise of taking the place of dirty, smoky gunpowder, and which, since the experiments in Austria, is largely occupying the attention of the chemist of our War Department on this account. How severely we should feel the loss of this substance to photography, which obtains from it its *collodion*, we need not say. Then there is *nitro-benzol*, to which substance is owing the commercially successful production of the brilliant and varied aniline and coal-tar dyes. Picric or trinitro-phenic acid is another nitro-substitution body which forms a valuable dyeing material. And now it seems likely that we are going to add to the uses of this class of substances that of *nitro-glycerine* for blasting purposes.

Nitro-substitution compounds possess some interest for members of our Profession. Gun-cotton, of course, is of interest as the basis of collodion, so useful for Surgical purposes. But they all are so, from their dangerous explosive properties, and from the very poisonous effects of some at least of them. Nitro-benzol, which, in addition to its extensive use in the manufacture of dye-stuffs, is largely used as a substitute for bitter-almond oil, under the name of *essence of mirbane*, as a flavouring material, is already familiar to the Profession as a poison. And if nitro-glycerine comes into use we shall then have to be prepared for deaths by this substance, which is no doubt an active poison. When a minute quantity of it is placed on the tongue, painful and persistent aching of the back of the head is produced, and sometimes vomiting.

Nitro-glycerine being probably a stranger to very many of our readers, they will perhaps be glad to learn a word or two about it. It is, then, an oily-looking, heavy liquid, insoluble in water, alcohol, and ether, and is said to have a sweetish, pungent, aromatic taste. It is formed, like other nitro-substitution products, by the action of strong nitric acid upon glycerine. Glycerine is dropped into a mixture of equal parts of strong nitric and sulphuric acids, kept cool. Nitro-glycerine collects at the bottom of the vessel, and when washed thoroughly with water is ready, and can be preserved for any time unchanged. Its chemical composition is described as being that of glycerine in which one-fourth of the hydrogen has been replaced by a chemically equivalent quantity of peroxide of nitrogen.

It explodes with great violence and suddenness on percussion or when heated to 356° Fah.; but, remarkably enough, it is unaffected when a lighted match is applied to it. It explodes under water as well as in the air. The force developed by its explosion is said to be *thirteen* times as great as that of its own bulk of gunpowder. The explosion gives rise to vapours very irritating to the air passages, probably from the formation of some acrolein and formic acid.

## THE WEEK.

### THE STRAND UNION.

The shocking state of things brought to light during the official inquiry into the state of the Strand Workhouse Infirmary has produced a general feeling of indignation, which is thoroughly well founded, and we hope will lead to a sweeping reform. Whilst we decline to speculate on the result of the colossal, and we fear Utopian scheme, for housing the sick poor proposed by the Association which is now endeavouring to ameliorate the condition of the inmates of the Metropolitan Workhouse Infirmaries, we fully accord to that Association the praise due to them for bringing such a state of things to light. It is right that Boards of Guardians who sanction and support such a system of neglect and cruelty should be held up to public reprobation. But we must not forget that it is quite possible to confound the innocent with the guilty, and that it would be in the highest degree unjust to attribute the faults of the Strand Board of Guardians to some other Boards, who we believe are doing all in their power to provide proper nursing and care for the sick of their charge. Mr. Rogers, the Medical officer of the Strand Union, has proved himself an excellent and benevolent Medical officer. We only wonder that he could continue to hold office so long under such masters.

### THE NEW VACCINATION BILL.

In another column will be found a letter from the dauntless and indefatigable champion of the Poor-law Medical officers, detailing the improved rates of remuneration to which Public Vaccinators will be entitled under the Amended Vaccination Bill, should that measure become law. Too much praise cannot be given to Mr. Griffin for the vigilance and exertions which have succeeded in obtaining these terms from the Select Committee engaged in amending the Bill. For every primary successful vaccination performed at an appointed station within one mile of the Public Vaccinator's residence, the old fee of one shilling and sixpence is retained; but if the distance be more than a mile and less than two miles, two shillings; and if it be more than two miles and less than three, three shillings will be allowed. In addition, there is to be an extra gratuity of one shilling per case paid by the Treasury as a reward for careful and successful vaccination. This extra fee, it seems, is to depend on the Report of the Inspectors and the recommendation of the Medical Officer of the Privy Council. The fee for re-vaccination is to be two-thirds of that payable for successful primary vaccination. It will be seen that these provisions, in the event of their becoming law, will substantially increase the stipends of many of our Profession, and will thereby add another to the heavy obligations which the Medical attendants of the poor owe to Mr. Griffin. The following are some of the other provisions of the Bill:—Guardians are to divide unions and parishes into vaccination districts, such division being subject to the approval of the Poor-law Board; the qualification of the Vaccinator is to be prescribed by the Privy Council; the Guardians are to enter into contract with the Vaccinator to carry out the provisions of the Act, but no contract is to be valid unless approved by the Poor-law Board; the Guardians are to provide stations for public vaccination, and no public Vaccinator is to be paid for vaccination out of his district. The remainder of the Bill chiefly relates to certificates and registration of vaccination.

The penalty imposed on parents neglecting to have a child vaccinated is not to exceed twenty shillings.

### THE ARMSTRONG FUND.

The Honorary Secretary of the Armstrong Fund, Mr. Hunt, has sent out a final circular stating that as sufficient money has been raised to meet Dr. Armstrong's legal expenses, no more subscriptions are required. This prompt method of meeting the expenses of prosecutions, such as the Messrs. Armstrong have been subjected to, is the most effective, not less than the most decisive, process for putting a stop altogether to trials of this vexatious and wicked character. The scoundrels who promote false actions for malapraxis are actuated by the belief that they shall either extort money without going to trial, or succeed by an accident of law if they push on to trial. In either case they feel they must win, while the Doctor must lose, certainly in pocket and probably in reputation. In many instances, we doubt not the opinion they form is the correct one; and it behoves us, therefore, the more carefully to let them see at every opportunity that the Profession has the heart, as it certainly has the means, to break their calculations, and to demonstrate the utter futility of their outrageous immorality. In a case like that of Dr. Armstrong, it is not the man we defend by these measures, it is the Profession; it is ourselves, as represented by him. We do more than defend, we *fore*-fend, as the old language, now well-nigh forgotten, wisely expresses. A member of our body, quite as guiltless as our friend Dr. Armstrong, might not have the means to meet a trial for malapraxis, and might sink before it, because he dare not make the venture to stand it out unless the Profession gave assurances, such as it now gives, that it will stand firmly and readily by to sustain every brother in a just cause. We have only to add that on Tuesday next the whole of the business for which the Armstrong Fund was formed will be completed, that the money so freely and quickly supplied will be paid over to Dr. Armstrong's legal advisers in full liquidation of their very moderate fees, and that afterwards the members and subscribers will give the Messrs. Armstrong a complimentary dinner, over which Dr. Richardson will preside, at the Rosherville Hotel, Gravesend.

### OVARIOTOMY IN NEW ZEALAND.

We have great pleasure in making known that ovariotomy has been performed for the first time in New Zealand, and that the operation has proved successful. It was performed, on the 12th of last March, by Dr. Mackinnon, an Army Surgeon on duty there with his regiment. The patient was an unmarried lady, only 19 years of age. We believe we may congratulate Dr. Mackinnon not only on being the first to perform ovariotomy in New Zealand, but on being as yet the only one of our Army Surgeons who has followed the example of their civilian brethren. We trust that many more of the Medical officers in our public services will, in their colonial and foreign service, carry far and wide the good deeds and the fame of British Surgery.

### FROM ABROAD.—SANITARY CONDITION OF THE FRENCH ARMY—THE PARIS INTERNATIONAL MEDICAL CONGRESS.

The Report on the sanitary condition of the French Army during 1864, which has just been issued, we have not yet had the opportunity of perusing; but we may present a few of the figures it contains, derived from an analysis made by M. Lefort. The first striking point about it, he observes, is the large number of men admitted into Hospital during the year. This amounted to 113,742 in an effective of 305,414 men—*i.e.*, 372 per 1000, which is a very large number when it is considered that it is composed of young and robust men, exempt from infirmities, the picked portion of the population, in fact. The proportion, as would naturally be anticipated, varied much according to locality. Thus for the soldiers in France it was 299 per 1000, in Algeria 620, and in Italy 477. The classification according to corps exhibits also great differences. Thus the special corps of Paris furnished 142 sick per 1000, the *Garde Impériale* 162, the engineers 240, the light infantry 249, the artillery 283, the infantry of the line 326, the cavalry 326, the *Ouvriers* 380, the *Train des Equipages* 400, the veterans 402, the corps in Italy 477, the *Infirmiers* 556, the *Corps d'Algérie* 592, the *Corps de France en Algérie* 651, the *Pénitenciers et Ateliers* 1090. Thus the infantry of the line sends double the number to Hospital as the guards, and while the high number of 556 attained by the *Infirmiers* is explained by the nature of their occupation, the enormous one of 1090 testifies to some important causes of insalubrity prevailing in the prisons and workshops of the Army. It seems that out of 711,116 patients who were admitted into the Hospitals and Infirmaries 37,752 were admitted for venereal affections—*i.e.*, 53 per 1000 patients, but as some of these may have been enumerated twice, it is preferable only to take into account those admitted into Hospital, and these amounted to 16,873, which in an effective of 305,414 gives 1 venereal patient in 18 soldiers for the year. In France the numbers were 1 in 29, in Algeria 1 in 14, and in Italy 1 in 22. As might be expected, the youngest soldiers are those most liable to sickness, and it was found that those of the first year contributed a proportion double that of the general mean. But in respect to the *mortality* during 1864 it was in France 2461 in a mean effective of 273,275 men, or 9·01 per 1000; in Algeria 1302 of 61,267 men, or 21·25 per 1000; and in Italy 127 deaths in 13,189 men, or 13·05 per 1000; total, 3935 deaths in an effective of 347,731 men—*i.e.*, 11·31 per 1000, or 1·31 more than in 1863. This increase has entirely arisen during the recent Algerian war, as the mortality in France itself decreased by 0·21, and in Italy by 4·87.

Steps are being taken in furtherance of the project of holding an International Medical Congress at Paris, in connexion with the Exhibition of 1867. A central Committee was formed last November, consisting of the following well-known gentlemen:—MM. Barthez, Béclard, Béhier, Bouchardat, Bouillaud, Broca, Dechambre, Denonvilliers, Follin, Gavarret, Gosselin, Jaccoud, Lasègue, Longet, Robin, Tardieu, Verneuil, Vidal, and Würtz. M. Bouillaud has been chosen President of the Committee, and the various Ministers having been applied to, have extended their warmest encouragement to the project. The Committee, in its address, expresses itself sanguine of success in this the first attempt to bring the members of the Profession of different countries together, "constituting not a mere meeting of Medical Practitioners, but an affirmation of the scientific movement of the epoch, and the first visible act of that intellectual alliance which unites the labourers of all countries." The plan of procedure will be hereafter announced, the Committee, in the meantime, calling for the support of the Medical press of all countries. Communications may be addressed to M. le docteur Jaccoud, Secretaire du Comité, 4, Rue Drouot.

### PARLIAMENTARY.—CAPITAL PUNISHMENT AMENDMENT BILL—NUISANCES REMOVAL BILL—SURGEONS FOR THE NAVY—CERTIFYING SURGEON AT BATLEY—THE CHOLERA CONFERENCE—LUNACY ACTS (SCOTLAND) AMENDMENT BILL—GAS WORKS IN THE NEIGHBOURHOOD OF VICTORIA PARK—COAL SUPPLY—PUBLIC HEALTH BILL.

In the House of Lords on Thursday, June 7, the Lord Chancellor moved that the Law of Capital Punishment Amendment Bill should pass *pro formâ* through Committee, in order that it might be reprinted in its amended form.

Lord Brougham was strongly impressed with the importance of this Bill. He hoped some steps would be taken, with regard to the plea of insanity in cases of murder, in order to permit a verdict of manslaughter to be returned in cases where such a plea was made out.

The Nuisances Removal Bill was read a second time.

On Friday the same Bill went through Committee.

In the House of Commons on Monday, June 10, Sir J. Hay asked the Secretary to the Admiralty whether there was still any difficulty in obtaining the services of good Medical Officers for Her Majesty's Navy; how many Assistant-Surgeons had entered the service since the 1st day of January; and what steps, if any, had been taken to carry out the recommendations of the Committee presided over by Admiral Sir A. Milne.

Mr. T. G. Baring said there was still very great difficulty in obtaining Assistant-Surgeons for the Navy, only three having entered the service since January 1 last. He hoped soon to be able to state the nature of the measures which would be taken, and which were based upon the recommendations of the Committee over which Sir Alexander Milne presided. The Admiralty were in communication with the Treasury upon the subject.

Mr. F. Beaumont asked the Secretary of State for the Home Department why the appointment of certifying Surgeon under the Factory Acts for the Batley district, vacant by death on April 16 last, was delayed by the inspector for a period of three weeks, and then filled by the nomination of a non-resident stranger, without the usual regard to the wishes of the millowners and manufacturers of the district, who supported the claims of resident candidates.

Sir G. Grey said the appointment of certifying Surgeon under the Factory Acts was placed by law in the hands of the Inspector, and not of the Secretary of State. Upon inquiry he had ascertained that the delay was occasioned by a doubt entertained in the first instance whether any fresh appointment was necessary, or whether there might not be a redistribution of offices. The gentleman selected from among nine or ten candidates had been a certified Surgeon in another district, and might therefore be considered experienced in the discharge of his duty. If any dissatisfaction were felt with his decisions, power existed to call in another opinion; but in no case had this been done.

Sir J. C. Jervoise asked the Under Secretary of State for Foreign Affairs what progress towards a settlement of the question had been made since the objection was taken by the English, Russian, Turkish, and Persian representatives at the Cholera Conference, Constantinople, to the proposal of the French representative for the stoppage of all sea communication between Arabia and Egypt, and for the presence of several vessels of war in the Red Sea in case of another epidemic.

Mr. Layard: The resolutions of the Cholera Conference, which have not yet been finally agreed to by the delegates, will probably be reduced to a convention, and when they are submitted in that form to Her Majesty's Government due consideration will be given to the measures proposed for adoption, as well as to the steps to be taken for enforcing them. Her Majesty's Government adhere to their opinion that great evils are likely to arise from the absolute prohibition of all departures by sea from Jeddah so long as cholera may be known to prevail among the pilgrims in Arabia. Her Majesty's Government have raised no objection to any measures of quarantine which the Turkish Government may consider it expedient to adopt, but they strongly deprecate the application to Indian pilgrims of measures of special and exceptional severity.

On Tuesday, June 10,

In the House of Lords, the Lunacy Acts (Scotland) Amendment Bill passed through Committee.

In the House of Commons, a long discussion took place on the Gaslight and Coke Company Bill, which, proposing to erect large gasworks in the neighbourhood of Victoria-park, was met with strong and deserved opposition. The Bill having passed through Committee, stood for "consideration of amendments," and ultimately it passed this stage by 169 to 138.

A long debate on the Coal Supply followed, during which Sir G. Grey, on the part of Government, intimated that an inquiry should be instituted by Royal Commission, on which it was hoped Sir R. Murchison would serve.

The Public Health Act was read a second time.

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We regret to announce the death of Miss Lucy Nevill, head nurse of the Lincoln County Hospital. Miss Nevill has fallen a victim to diphtheria at the early age of 27. She was the daughter of the Rev. C. Nevill, of Thorney, and descended from an old county family. She was trained as a nurse at King's College Hospital, and devoted her whole life to the work of tending the sick.

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# THE APPENDIX TO THE THIRD REPORT OF THE CATTLE PLAGUE COMMISSIONERS.

(*Concluded.*)

Last week we gave an outline of Dr. Lionel Beale's observations in reference to the pathology of Rinderpest. Dr. Beale believes that the poison is composed of certain organic living particles, which, given off from infected beasts, are carried about in the air and effect lodgment, especially upon the moist mucous surfaces of the body, where they rapidly multiply amongst the soft epithelial structures, until at length reaching the capillary vessels beneath, they enter through the walls of the latter to the blood current, and are then disseminated, rapidly multiplying, throughout the body, giving rise, in the first instance, to the various local congestions we have already noticed as the early lesions of Rinderpest.

The Reports of Dr. Angus Smith and Mr. Crookes follow next in order. The former relates to disinfection and disinfectants in general; the latter to the use of disinfectants in arresting the spread of Rinderpest. Mr. Crookes, in fact, has put to test the conclusions which have been arrived at by Dr. Smith after a very extended experimental examination of the whole subject of disinfection.

Both Dr. Smith and Mr. Crookes enter into a criticism of the different hypotheses that have been put forward in regard to the nature of zymotic poisons. Both gentlemen have given their adhesion to what may be termed the "organic theory" of infectious diseases, believing that the poisons of the latter consist of organised living germs, and they thus confirm the theory taken by Dr. Beale.

There are many observers who are inclined to believe that the poisons of septic diseases partake of the nature of gases and are produced from the decomposition of various organic substances. There are others again—but these are few—who view such poisons as belonging rather to the class alkaloids. Dr. Richardson, as our readers know, takes this view in reference to pyæmia.

With regard to gases, Dr. Smith remarks that "whilst the decomposition of organised beings after death produces gases and vapours that are opposed to health, these gases or vapours are incapable of originating, although they may be capable of feeding, some of those diseases, such as cholera and plague, which have been observed at all times to come from a warmer climate. There must, however, be some first origin of these diseases . . . it seems probable that it requires a warmer sun and a richer vegetation than is to be found in the North. This, however, is sufficiently made out, that when these diseases come among us they take root with most effect in those places where decomposing matter is found." Chemists, "when they have examined products of the latter action (putrefaction), have found sulphuretted hydrogen, carburetted hydrogen, hydrogen, carbonic acid, nitrogen, ammonia, acetic, lactic, and butyric acids, and numerous uncertain bodies having no activity, and utterly incapable of producing those prodigious results that are found when that force begins to work which produces plague, small-pox, or black death." Dr. Smith further points out that the kind of action produced by these agents is altogether different from infection. If the poison were a gas it would become diffused when once it reached the air, and be destroyed; so that we are driven to entertain the "organic theory," and to ask is the cause of infectious disease "an organic substance in the process of decomposition conveying that decomposition to another body, or is it an organised germ?" First of all, in regard to the former of these two explanations. A body in a state of change, we have been taught, may induce or set up a like change, if brought in contact with a second body. This we have been accustomed to call "catalysis." We know that some fermentative (or catalytic) changes are to be explained differently—upon Pasteur's theory, but it is not unlikely that little bodies or masses arise from putrid matter and float about in the air, ready to be deposited elsewhere; for, says Dr. Smith, "if we examine the action of sulphuric acid, water, and zinc, we find the particles of acid and water which are lifted into the air by the effervescence float about the apartment, and are carried to a considerable distance. They are globular bodies, visible to the naked eye, purely chemical, and not organised substances. Something of the kind may go on in putrifying organic matter and convey disease from part to part or place to place."

But the organic theory seems to be gaining favour day by day; and it is supposed that epidemic diseases are propagated by the diffusion and rapid multiplication of organic germs. "This view does, in fact, seem to explain many of the apparent vagaries, if we may so speak, of cholera and plague." "The germs of mischief may be conveyed as the wind or other agents may choose to move; and houses, where persons are in all respects cleanly in their habits, may be occasionally subjects of their attacks. But this does not contradict the great rule which seems everywhere observed, that they settle down in places where is found such natural food as animal, and especially decomposing animal and vegetable matter, and close dwellings always provide, unless when the germs grow better in living animals."

Now, disinfection in its widest sense is the destruction of all disagreeable gases and odours, as well as the arrest of the decomposition of bodies which give rise thereto, including therefore the term deodorisation; but the term antiseptic is applied to those bodies which prevent putrefaction, and disinfectant to those which remove the putrefactive state when once it is set a-going. The observations of Dr. Angus Smith apply chiefly "to organic bodies and the substances which they use for their multiplication, or the retention of their activity."

In reference to the present practice of disinfection, we are told justly enough that "as the matter stands we have a large collection of facts, very many proposals, and a very irregular practice."

In speaking of the general action of disinfectants, in reference to animal matter in a state of decomposition, Dr. Smith remarks that there is really a very "surprising variety in the modes of action." Some—*i.e.*, the metallic salts and mineral acids—combine with the elements of flesh, and the result is a compound which resists the action of the air; some, *ex.* charcoal, condense oxygen, and assist the destruction of the animal matter; some, *ex.* permanganate of potash, give out oxygen, and thus help the formation of carbonic acid; some, *ex.* sulphurous acid, absorb oxygen from the substance to be disinfected. There are, however, two classes—one containing substances that act upon the air and are volatile, and the other those that act upon solids and liquids. Dr. Smith recommends McDougall's powder (mixed carbonates and sulphites), amongst the former class.

We are only able to skim over the very elaborate series of experiments recorded. Some were undertaken to determine the influence of certain substances on the putrefaction of organic bodies, and it would appear that fusel oil, methylated spirits, carbolic and phenylic alcohol, cresylic alcohol, oil of mustard, and oil of bitter almonds, with pyroligneous acid, preserve the meat in a good smelling, fresh condition, whilst animals are able "to live in an atmosphere so filled with these vapours that meat will not decompose." The strong acids are most perfect preventives of putrefaction, but destroy the healthy look of the flesh, the least objectionable being sulphurous acid. A third set of experiments was devoted to disinfection in water, and in this case, arsenious acid, corrosive sublimate, sulphate of copper, and chloride of zinc are the most active agents. The removal of smell is best effected by McDougall's powder, it is affirmed. The influence of air, of water, of ozone, are severally discussed in detail in the Report. Dr. Smith holds that "all disinfectants, like medicines, are poisonous in great quantities. It is believed that there is an amount which will destroy the germs of disease, and not destroy life. If the life is very weak it may yield before the disease. If the disease has made great advances it will require more to destroy it than even a strong life can bear;" and in the matter of practical application it appears that "the abundant use of tar acids is successful as a preventive, and it is likely that with healthy beasts chlorine and two or three more of the powerful gases might act as a cure when used as fumigators only—that being the readiest way."

Dr. Smith has detected in the air of "infected" regions certain small "round bodies, presenting no structure, or at least only feeble traces of it, and perhaps to be called cells," and he observes that "the air of cowhouses and stables is to be recognised as containing more particles than the air of other places."

Mr. Crookes' Report is mainly devoted, as we have said, to the application of disinfectants in arresting the spread of the cattle plague, and enters fully into the organic theory. Mr. Crookes adduces many arguments in support of the latter, which we cannot here notice. The chief place is given to the value of antiseptics (sulphurous and tar acids) as against oxidising disinfectants—chlorine and ozone. "I started with a strong bias in favour of chlorine and ozone, but the irresistible force of the arguments derived from my experiments has caused me to alter my opinion." The effects of the two classes of agents are then detailed and illustrated by the narration of many experiments; after which follows an account of "Disinfecting experiments made on the farm," containing abundant testimony apparently to the success (as perfect prophylactics) of the antiseptics named.

Mr. Crookes generalises in conclusion thus,—"In dealing with the cattle plague it is possible to try testing experiments of a nature wholly inadmissible where human beings are concerned, and thus it is feasible to suppose that from the lessons derived from this pestilence we might obtain insight into meant of preventing or even curing zymotic diseases. Thus the theoretical views, the experiments, and results recorded in the preceding pages possess an interest beyond the immediate sphere of cattle plague. They point forcibly to the possible prevention and cure of all zymotic diseases which attack the human race, and thus possess a wider and more momentous significance than if they related only to cattle. Every argument brought forward, every experiment detailed, and every result obtained in the course of this investigation apply with overwhelming force to such visitations as typhus and typhoid fever, small-pox, diphtheria, and to that terrible scourge which has for some time past been threatening our shores.

"The free use of the disinfecting agents here pointed out might not only save the country from the ravages of this pestilence, but it would ameliorate the condition of the people. Although foul sewage and putrefying animal matter are probably insufficient to generate the first septic germ of zymotic disease, there can be no question that when such diseases do attack a population they spread with the greatest virulence wherever such putrescent materials abound. Highly important results might be expected to follow the general use of antiseptics, whether applied to farm buildings where large quantities of manure are produced or sewage, whatever its destination. . . . In tracts of land to which sewage, disinfected with carbolic acid, has been applied, the sheep are free from foot-rot, the potatoes from disease, obnoxious insects, such as turnip fly, gnats, and dung flies are absent, and grubs, larvæ, and the lower forms of animal life and infusoria disappear; whilst vegetation becomes remarkably healthy and luxuriant. It is highly probable that those imperceptible but injurious emanations from the soil known as malaria, would be destroyed; for Dr. Angus Smith has conclusively proved that the putrefactive decomposition in soils which produce malaria does not take place in presence of very minute quantities of carbolic acid." Mr. Crookes concludes:—"It may, therefore, be expected that by extending the sphere of operation of these preventive appliances we may not only diminish the loss of much valuable property and much sustenance of the people, but even diminish the risk and extend the term of the natural life of man."

The Report concludes with the investigations of Professors Varnall and Pritchard on treatment, an account of the labours of the Edinburgh Commission, and various miscellaneous papers and maps.

## REVIEWS.

*A System of Medicine.* Edited by J. Russell Reynolds, M.D., F.R.C.P. Lond., etc. Vol. I. General Diseases. London: Macmillan and Co. 1866. Pp. 952.

"The object proposed to himself by the Editor of this 'System of Medicine' is to present within as small a compass as is consistent with its practical utility, such an account of all that constitutes both the natural history of disease and the science of pathology as shall be of service in either preventing the occurrence or detecting the presence and guiding the treatment of special forms of illness." This further explanation is needed, because if any one thinks that he will find in this work a digest of all that is known and all that has been written, or even of all the most important contributions which the labours of the last quarter of a century only have made to our acquaintance with morbid states of the human body, he will be greatly disappointed. In saying this, we are not disparaging in any way either the scheme of Dr. Reynolds or the execution of the volume before us. A "System of Medicine," except in the limited sense defined by the editor, this work is not: it is not intended so to be. But it is clear on looking through the articles that considerable latitude has been allowed to the various contributors in this respect. It has been left to each apparently to settle for himself what in his special subject is of practical utility and what is not. We do not see exactly how it could have been otherwise arranged. Dr. Reynolds must have had a very difficult task, on the one hand to avoid the undue extension of his project, and on the other its being dwarfed within too restricted a compass. We can thoroughly appreciate, and we would make every allowance for this difficulty—we think our readers and the Profession at large will do the same; but the result is that the articles are unequal in value, because unequal in comprehensiveness. Still, there are articles in this volume (and we may say with truth that the majority are of this character) that leave nothing to be desired in this respect. Having made these preliminary general observations, we proceed to point out how the present volume is made up.

The volume opens with an "Introduction" by the Editor, and this is followed by a series of articles or essays upon the several diseases entering into Dr. Reynolds' first great group of diseases—viz., "Those in which the whole organism appears primarily and prominently deranged." His second great group—"Those in which special organs or system of organs are in like manner affected," will be discussed hereafter.

We must of course pay our first compliment to the Editor, and we do so by making a pretty long extract from his introductory essay, and transcribing almost in full his philosophical defence of the term "functional diseases." He tells us very truly that it has of late years been much the fashion to object to any such phrase, but, on the other hand, the following three classes of facts have to be remembered :—

1st. That there are some structural alterations—such, for example, as atheroma in the vessels, which may, if an individual has been killed by an accident, be found extensively distributed throughout the body—the existence of which had neither been known nor suspected by the presentation of any functional change or symptom during life. On the other hand, a man may have suffered for many years from discomfort or marked derangement of the functions of the brain, heart, or lungs; and yet the most practical anatomist, with all means and appliances to help him, may fail to discover, post-mortem, any organic change which is sufficient to have accounted for them. 2nd. Another class of facts, constantly lost sight of by those who deny the existence of functional disease, is to be found in the relations between structure and function in health. At the end of a day's work, and after a night's repose, we might find the two extreme conditions of the organism as regards function. For twelve hours, every muscle, nerve, and organ has been doing its utmost, and, as we know, has been wearing out; during the hours of sleep, many organs have been doing little, and some nothing; whereas others have, as it seems, to work on without repose; but in all repair has been going on. By an examination of the body killed suddenly at the end of one or the other of these periods, it might be possible to infer which had been the condition immediately preceding death. But this inference would be based upon the relation exhibited between the *products* of functional activity, such as the nature, quantity, and quality of the secretions in their several receptacles, and the *raw materials* upon which the organs have to work, such as the nature, quantity, and quality of the chyle, lymph, and blood. It would not be formed upon regard directed only to the condition of organs which had been either in activity or repose. . . 3rd. A third class of facts to be remembered is, that in many diseases the only symptoms to be recognised are changes in the degree of activity with which certain organs perform their functions. No new element is introduced by some diseases into the category of vital actions; such affections as chorea, hysteria, epilepsy, might be shown to consist of mere modifications in the degree, time of occurrence, and combinations of functions, each of which taken *per se* is consistent with health. The sudden loss of consciousness in epilepsy, for example, is not more mysterious than is the sudden but every-day-recurring passage from wakefulness to sleep; the arrested respiration is similar in kind to that seen when the chest is fixed in the performance of any great muscular exertion involving the upper limbs; and still more similar to that which can scarcely be called morbid, the prolonged apnœa of a screaming child, whether the scream be the expression of terror, temper, or pain; the convulsive movements are neither more nor less than nerve and muscular functions, any of which might separately, and many of which might in combination be the expression of healthy vital activity. From these three classes of facts, therefore, we are compelled to admit that in the present state of science, the *onus probandi* lies with those who assert the constant presence of structural in association with functional changes; and we affirm that those who make the assertion have never proved their point. . . We do not believe that there is any altered function without a correlated change in the nutrition of the organ; but what we assert is that such change, as a matter of fact, is of such kind as to be undiscoverable by our senses, and as a matter of inference, from what we know of the relation between nutrition and function, is of such a nature that it may always be beyond the reach of observation."—P. 4.

We congratulate Dr. Reynolds on the selection of his coadjutors. Dr. Parkes writes the article upon Influenza, Dr. W. C. Maclean those on Malarial Fevers and Dysentery, Dr. Goodeve those on Diarrhœa and Epidemic Cholera, Dr. Bristowe, that upon Pyæmia, Dr. Sidney Ringer contributes the articles upon Parotitis, Measles, Sudamina, and Miliaria, Mr. William Squire the articles upon Croup and upon Diphtheria, Dr. Edward Smith that upon Hooping Cough, Mr. Jonathan Hutchinson the article upon Constitutional Syphilis, Dr. Gavin Milroy that upon Plague, Dr. Gee the articles upon Scarlet Fever and Chicken-pox, Dr. Aitken those upon Dengue and Rickets, Dr. Hermann Beigel the article upon Roseola, Mr. Marson that upon Small-pox, Dr. Seaton the essay upon Vaccination, Dr. Geo. Buchanan writes upon Typhus, and Dr. Harley upon Enteric Fever. The article Relapsing Fever is written by Dr. Begbie, that on Yellow Fever by Mr. J. D. Macdonald; Dr. Reynolds himself takes the article upon Erysipelas, while those upon Glanders and Hydrophobia are contributed by Mr. John Gamgee and Dr. Arthur Gamgee. The article on Scurvy is from the pen of Dr. Buzzard, that on Purpura is written by Dr. Hillier; those on Gout, Rheumatic Arthritis, and Rheumatism by Dr. Garrod, and that upon Gonorrhœal Rheumatism by Mr. Brodhurst.

Such a selection as the above relieves a reviewer of a great load of responsibility, at the same time that it very considerably lighten his task. Many of the names in the list are familiar to us all in connexion with the several subjects assigned to them in this volume. Several of them have appeared already before the Professional public in the same association. We take credit to ourselves that no reader of the *Medical Times and Gazette* can be at a loss to divine what Mr. Hutchinson, for example, is likely to have to say about constitutional syphilis, what Mr. Marson is likely to have to say about small-pox, Dr. Seaton about Vaccination, Dr. Milroy about Plague, Dr. Buchanan about Fever, or Dr. Garrod about Gout and Rheumatism; nor yet as to the mode in which these gentlemen are likely to have performed their several parts. We could readily tell which are the most meagre articles, but these are so few, and are so overpowered by what is full and complete that we must leave the discovery to others. It would be invidious to name the best where all are good. Some of the contributors are known as careful and thoughtful writers, and we can say of these that in their several articles they fully maintain the character they had to preserve.

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*On the Safe Abolition of Pain in Labour and Surgical Operations by Anæsthesia with Mixed Vapours.* By Robert Ellis, M.D., Surgeon-Accoucheur to the Chelsea, Brompton, and Belgrave Dispensary, etc. London; R. Hardwicke, 192, Piccadilly, W. Pp. 80.

The author truly observes that "the history of anæsthetics has unhappily a gloomy shadow to contrast with its long array of blessing and relief. That shadow is the occurrence of a sudden and unforeseen death to some of those who have applied to the discovery for immunity from a temporary pain." It is against the more common sources of danger that Dr. Ellis has tried to guard in his modification of the ordinary mode of anæsthetising—which, by the way, is founded on a suggestion of Dr. Harley's. The vapour of alcohol is mixed with that of chloroform, and thus the depression from pure chloroform is counteracted. There are four chapters in the little work. The first treats of defects in the existing anæsthetic process, the second is on the vaporisation of anæsthetic fluids, the third on the physiological influence of anæsthetics, and the fourth on the fluids and apparatus employed for the mixed vapours. The instrument invented and used by Dr. Ellis is commendable, if only in that it does not present a formidable appearance, and by a simple contrivance the relative proportions of the different vapours can be regulated to a nicety. Hence the process recommended in detail in the book would appear really to be "easy, agreeable, and safe." We verily believe that many Practitioners object to the use of chloroform on account of possible danger, and not, as would seem to imply, a belief in its unsuitableness. To all who are thus deterred, and to the Dental Profession especially, the plan proposed by Dr. Ellis will be doubly acceptable; and we have much pleasure in recommending it strongly to the notice of all Professional men. The book is well written, well illustrated, and well printed, and we only hope will be carefully read by all Practitioners.

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*A History of a Successful Case of Amputation at the Hip-Joint.* By J. Sampson Gamgee, Surgeon to the Queen's Hospital, Birmingham. With four Photographs by Sarony and Pierre-Petit. London: Churchill and Sons. 1865.

We owe the author of this monograph an apology for not having noticed it before. We can assure him that the delay has not been owing to any want of appreciation on our part of the value and beauty of the costly volume before us. The case which it records was of sufficient interest, and its favourable termination sufficiently remarkable as a triumph of operative Surgery, to call for especial notice, even if it had been presented to us in the form of the shabbiest of pamphlets. But the accomplished Surgeon who has the merit of having brought the case to a successful issue has given its record to the world in a garb fully worthy of it. Paper, printing, binding, and illustrations are all of the most elaborate kind. The extreme beauty of the photographs places the book high amongst collections of the art, and confers on it a value quite independent of its Professional interest. The case was one of ossifying enchondroma of the thigh; the limb measured forty-eight inches in circumference, and was of ninety-nine pounds weight, or considerably more than half the entire weight of the patient, who some time before the operation only weighed 161 pounds. The operation was performed with the aid of Professor Lister's aortic tourniquet, and the same instrument was used to arrest a formidable arterial hæmorrhage which came on on the fourth day. The various steps and details of the operation, the account of the after treatment, and a valuable and suggestive chapter on Surgical dietetics, in which the liberal treatment of this patient in food and stimulants is contrasted with that pursued twenty years ago, when Mr. Sands Cox performed the same operation with success on a patient for whom "Little or no meat, wine, or beer was allowed," will be perused and studied with the greatest zest by practical Surgeons. The enormous mass removed by Mr. Gamgee is now deposited in the Musée Dupuytren, in Paris, and however we may regret that the valuable preparation should be lost to our collections, we cannot but feel pride that the Surgeons of France should have always before them so striking a testimony of the boldness, skill, and success of British art.

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*A Manual of Medical Jurisprudence.* By Alfred Swaine Taylor, M.D., F.R.S. Eighth edition. London: Churchill and Sons. 1866.

Taylor's "Medical Jurisprudence" is undoubtedly, taking it as a whole, the most useful book on Forensic Medicine in the English language. This will be allowed even by those who have had occasion to differ from the author, and who would dissent on scientific grounds from certain opinions which Professor Taylor has in his practice and writings defended. The large amount of Medical facts which it contains, the clear scientific directions which it gives, and the knowledge which it displays of the working of law courts and the general machinery of legal inquiry, constitute it first amongst Medico-legal text-books, and readily account for the authority which it justly carries both with lawyers and Medical men. The present edition of the Manual differs in several respects from its predecessors. One great improvement in it is that it is more portable. Bulk has been lost certainly by the omission of the details of cases, but the facts—the salient points—are retained, and if fuller information on an individual case be required, it will be found in the larger work of the author on "The Principles and Practice of Medical Jurisprudence." Two new chapters on evidence and the duties and responsibilities of Medical witnesses are placed at the commencement of the volume. In the second the question whether a Medical man is bound to attend and give evidence when subpœnaed against his will is discussed, and Dr. Taylor acknowledges the value of the legal opinion which we obtained for our readers in reference to the case of Rich *v.* Pierpoint by quoting it as authoritative. The usefulness of the present edition is enhanced by forty-five well executed woodcuts of the miscroscopical appearances of poisons, and of chemical apparatus. We cordially recommend this edition of a standard work to students of both Professions.

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*Report by Dr. Buchanan on an Outbreak of Yellow Fever at Swansea.*

*Handbook for Yellow Fever, describing its Pathology and Treatment, as Observed in Unintermitted Practice during Half-a-century.* To which is adjoined a Brief History of Pestilential Cholera and a Method of Cure, as Detailed in a Series of Official Reports Made during the Prevalence of the Epidemic in the Island of Trinidad in 1854. By Thomas Anderson, M.D., etc. London: Churchill. 1866. Pp. 80.

No two productions could possibly be more dissimilar than the above, and we most sincerely apologise to Dr. Buchanan for placing his admirable and exhaustive report in juxtaposition with Dr. Anderson's volume. But we have an excellent excuse. It would be false heraldry to place a metal upon a metal, so here we follow, we believe, strict rule by placing *or* upon *vert*. Contrast is everything in that ancient science—so, at least, we are told. That we have selected the proper colour for Dr. Anderson may be shown from the following extract:—"Sleeping among bags of onions, I have had occasion to observe, from the ammoniacal exhalations evolved is also a preventive [of cholera]. No people are before the Chinese in instinctive intelligence."—P. 75. Well, Dr. Anderson is an old man, and a moderate amount of twaddle is excusable, so we will be content to let him down easily. Still the above hint may just now be profitable to rural boards of guardians. Cultivate the alliceæ sedulously, they will come in usefully for the paupers' broth in the winter, and save no end of money in house drainage and cleansing operations. Does not Dr. Anderson say so?—a man of half-a-century's experience.

The yellow fever was brought into Swansea by the *Hecla*, which arrived at Swansea on September 9 last year, and Dr. Buchanan traces the subsequent outbreak case by case to communication with the ship. There is appended a meteorological table for the months of July, August, September, and October, in the years 1863 to 1865. "During the period of the outbreak an almost tropical heat prevailed at Swansea, and no rain fell. Probably the climatic conditions that foster yellow fever in the West Indies have never been better imitated in Great Britain.

The locality, too, where the cases occurred, a low-lying alluvial island at the mouth of a river, is such as is peculiarly favourable to the disease in its native latitudes." The following is Dr. Buchanan's final conclusion upon the question of contagion: "The conclusion, then, appears indisputable that if the fever was communicable at all by personal contagion, it was so only in an extremely feeble degree. If it had behaved like any of the more contagious fevers, such as small-pox, measles, typhus, or relapsing fever, it is quite certain that no such account as this could be given. The contrary belief that infection was received by each person severally direct from the *Hecla* is further rendered very strong by the fact that after the removal of the *Hecla* (and allowing for the incubation period in persons already infected), no fresh attack whatever occurred on the island or elsewhere, although the same climatic conditions persisted for some time after," p. 10.

We must also extract the following note *re* the working of the Common Lodging-house Act at Swansea, "The sanitary inspector finds difficulty in getting a conviction from the magistrates for taking lodgers into an unregistered house, inasmuch as the magistrates require evidence that the lodgers are different people, from one night to the other, before they consent to regard the house as a common lodging-house, and this evidence they insist on, even though it is admitted that members of several families occupy a single room." We are not aware that this difficulty has occurred in London, but it is well that health officers should be aware that it may arise in a defended case, and thus be prepared against such an objection to the summons.

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*The Physiology of Man; Designed to Represent the Existing State of Physiological Science, as applied to the Functions of the Human Body.* By AUSTIN FLINT, jun., M.D., Professor of Physiology and Microscopy in the Belle Vue Hospital Medical College. Introduction; the Blood; Circulation; Respiration. With Index. P. 502. New York: Appleton and Co. 1866.

THIS work is to be issued in separate parts, each, however, forming a distinct treatise devoted to natural subdivisions of of the subject. The remaining volumes, three in number, will be issued yearly until the work is finished, and will likewise be severally complete in themselves. The introduction contains considerations of physiology generally, the vital properties of organised structures, proximate inorganic and organic non-nitrogenised and organic nitrogenised principles. Chapter 1 contains a full description of the blood, its composition, coagulation, and circulation; there is an exhaustive chapter with illustrations on the frequency and arrest of the heart's action, the movement of the blood in arteries, capillaries, and veins, and its peculiarities in different parts of the system, as within the skull and in erectile tissues. Respiration is also treated fully; with the movements of expiration, the changes respired air undergoes, the changes of blood in respiration, and the relations of the latter to nutrition. If published separately in flexible enduring wrappers and *interleaved*, Dr. Flint's word would be of great value to the student, as it is clearly written by a good practical physiologist. The bibliography of his subject might be easily added, with the opinions of any lecturer whom the student attends, upon the blank leaves we suggest to the binder of this excellent text-book.

# PROVINCIAL CORRESPONDENCE.

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## SCOTLAND.

EDINBURGH, May 25.

ONE of the most successful *conversaziones*, for which we are indebted to our Royal College of Surgeons, was given at the end of last month, when Professor Struthers, of Aberdeen, delivered an interesting and able lecture on the Edinburgh Anatomical School. The lecture appeared to have been fully appreciated by a large audience, and we are glad to learn that it will shortly be published. Dr. Struthers described the foundation and development of the Anatomical School—a history which in reality includes the origin of Medical teaching in Edinburgh—and gave extremely valuable biographical sketches of the well-known anatomical teachers who have been so illustriously connected with it. The period embraced in the lecture extended from 1505, a century before Harvey's great discovery, to about the year 1846. The interest of Dr. Struthers' lecture will be at once understood and its value appreciated when it is remembered that during this period the Anatomical chairs were held by men of such reputation as the three Munros, John and Charles Bell, Barclay, Fife, and Knox. We would gladly welcome a further contribution on this subject, carried down to the present day, and, apart from talent and taste in historical research, of which this lecture contains so distinct proof, there can be few men whose associations and enthusiastic devotion to anatomical science would better fit them for the task than the Professor of Anatomy at Aberdeen. There can be little doubt that Medical literature is sadly in want of historical research, and, probably, there is no department of history in which the student would find so unexhausted a field, waiting a systematic and, without fail, a rich and productive harvest.

A few days ago, an important paper was read by Dr. Spence, before the Medico-Chirurgical Society, on the Mode of Action of Strychnia. Therapeutical Physiology is a subject which, in this country, receives so little attention that we gladly hail any original investigation which may be safely advanced as a creditable research by a British observer. The most important part of the paper consisted in an endeavour to prove by experiment that the reflex and motor functions of the spinal cord reside in distinctly different cells. The method followed in experimenting was to excise the heart of a frog so as to arrest the circulation, and then to cut through the cranium, in order to expose a section of the posterior part of the brain. Extract of nux vomica was then applied to the nerve substance, and allowed to soak down the cerebro-spinal axis. This caused spasm of the muscles from above downwards and an apparently excessive excitability of the integument, which also arose from above downwards. Dr. Spence supposes that he has detected a peculiar difference between the appearance and disappearance of the surface excitability and the muscular spasm. Shortly after the commencement of the experiment, when the whole animal was affected with spasm of the muscles, the over-excitability of the surface was limited to the upper part of the body, so that, at this stage, an irritation applied to the lower limbs caused only ordinary movements, but the slightest irritation of the throat or upper limbs produced general spasm. At the last stage of the experiment the upper part of the body had lost the excitability of its surface, but still its muscles were subject to spasms. No movement whatever could be excited by pinching the upper extremities, although the slightest touch applied to the posterior extremities produced spasm of all the limbs, anterior as well as posterior. From such facts Dr. Spence arrives at the conclusion that there is a distinct class of cells in the cord destitute of motor power, but possessing the property, on the one hand, of receiving impressions from the surface, and, on the other, of exciting the motor cells to action; and to this class of cells Dr. Spence refers the action of strychnia. Reference was then made to the manner in which strychnia affects these nerve cells, Dr. Harley's views on the mal-nutrition of the spinal cord being attacked. That the phenomena are not caused by a reception of non-oxygenated blood, Dr. Spence believes he has proved by an experiment in which a frog was kept in an atmosphere of pure oxygen for four hours, a poisonous dose of strychnia administered, and the animal returned to the oxygen atmosphere, and, still, unmodified symptoms of strychnia poisoning were developed. Allusion was then made to the resemblance which exists between strychnia poisoning and tetanus. From the fact that spasm occurs in the former independently of the blood and from other considerations, Dr. Spence thinks that in tetanus the nerve cells are primarily affected, the exudation observed by Lockhart Clarke being one of the products of the morbid action. The claims of woorari and nicotine as antidotes to strychnia were discussed, and it was stated by Dr. Spence that great error exists on this point, and has been caused by a misconception as to the quantity of strychnia required to produce death in cold-blooded animals. A frog received $\frac{1}{25}$th of a grain of acetate of strychnia, and recovered without the administration of any antidote. Dr. Spence concluded his paper by very interesting observations on the therapeutical applications of strychnia. These conclusions were the results of very ingenious and numerous experiments. The investigation is one for which the Medical Faculty of the University presented a gold medal to the author on his gradation.

His Royal Highness Prince Alfred received the degree of LL.D. from the University on Saturday, May 9. The Senatus took advantage of the presence of his Highness in Edinburgh, for the purpose of opening the Museum of Science and Art in this city, to confer the degree; and as a former student of the University, the honour was an extremely appropriate one. The degree was conferred in the upper Library-hall by the Vice-Chancellor, Sir David Brewster, in the presence of the University officials, a large body of graduates, members of council and students, and a considerable number of the fair and curious public. From the University the Prince proceeded to the Museum by means of the covered connecting bridge, and here the usual formalities were gone through in the presence of a brilliant assemblage, numbering upwards of three thousand. The foundation-stone of this Museum, it will be remembered, was laid by the late Prince Consort, and was one of the last public actions of his very useful life. With this Museum is now incorporated the Natural History collection, which formerly occupied so large a portion of the University buildings. Although even now an extremely large and beautiful building, it is rather less than half finished, and will certainly be the largest, and probably the most splendid, public building in Scotland when completed according to the original design.

## GENERAL CORRESPONDENCE.

## WHERE ARE THE SHAM MEDICAL EXAMINATIONS CONDUCTED?

[To the Editor of the Medical Times and Gazette.]

SIR,—In one of the spirited speeches of Sir Dominic Corrigan (more power to him!) at the Medical Council Board he read a memorandum as to the mode in which an examination was conducted at one of the Medical Boards as follows:—

"Examination at —— on Friday, November 3, 1865, commencing at eleven o'clock and lasting half an hour; conducted entirely orally by the secretary in the presence of the president, no other person being present."

"The candidate," Sir Dominic remarked, "came back (to Ireland?) with the good news, and the next (a natural) result was that a batch of eleven candidates flew away from Ireland to get their diplomas on the same easy terms."

Now the name of the Board is to remain a mystery until the next meeting of the Council; but cannot we solve the question diagnostically by the method of exclusion? 1. We can exclude Ireland. The lucky drone "came back with the good news," and there was at once a flight of Paddies from Ireland. 2. Did they settle down at any of the Universities of Great Britain? Clearly not; for none have a president and secretary who act as examiners, and in none will one examination do. There are consequently the British Colleges left; but (3.) There is no public announcement that at the close of the last year eleven Irish passed the College of Physicians in London, and as to the Hall and College, the secretaries are not examiners; whereas, on November 5 one examining secretary was the sole performer. Consequently (4thly) we come to Scotland, and here we find we approach a solution. The Irish are strong on the pass-lists of the Colleges in Edinburgh and the Faculty of Physicians in Glasgow; the secretaries are most accomplished examiners, and the candidates give one a notion, although they do not affirm as much, that they are smartly handled. But then in a fog a donkey looks like a lion. Now which of these three sisters is it? A reference to the records under date November 5 might solve the interesting problem. Would the visitors of examinations kindly gratify the public curiosity?

AN ADMIRER OF SIR (NOT ST.) DOMINIC.

KING'S COLLEGE STUDENTS' DINNER AND TESTIMONIAL TO SIR WM. FERGUSSON.—We understand that the annual dinner of old King's College students will be held on Thursday, June 21, at St. James's Hall, Piccadilly, and that the meeting will be greatly enhanced in interest by the presentation of a handsome service of plate to Sir William Fergusson, Bart., as a testimonial of the respect of his pupils and colleagues. Old King's men desirous of attending should write to Mr. Francis Mason, 10, Conduit-street, Hanover-square, before the 19th, as no tickets will be issued after that day.

THE annual banquet of Licentiates in Dentistry of the Royal College of Surgeons of England was celebrated on Tuesday, June 5, at the Albion Tavern, Aldersgate-street, E.C., F. C. Skey, Esq., in the chair.

## REPORTS OF SOCIETIES.

## ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MAY 8, 1866.

DR. ALDERSON, F.R.S., President.

A PAPER by Mr. JOSEPH TOYNBEE was read on "Pathological and Surgical Observations on the Diseases of the Ear" (eighth series).

### ON DISCONNEXION OF THE INCUS AND STAPES: ITS EFFECT UPON THE FUNCTION OF HEARING, AND ITS TREATMENT.

The author begins by some observations on the anatomy and physiology of the chain of bones. He gives an account of the tensor tympani ligament, whereby the membrana tympani and the chain of bones are kept in a naturally resilient state. And he then shows that the function of the chain of bones is twofold: (1) to transmit sonorous vibrations from the drum to the expansions of the auditory nerve; (2) to act as the analogue of the iris in the eye by adapting the labyrinth for the reception of sonorous vibrations having varying degrees of intensity. In proof of the first-named function, the experiments of MM. Sissajous and Dessains are cited, by which faint undulating lines were produced by a slender style attached to the base of the stapes during the vibration of the drum by sonorous undulations. In proof of the second function of the drum, the fact was cited that during the act of listening the stapedius muscle relaxes the membrana tympani and the membrane of the fenestra rotunda; on the contrary, when a loud sound is expected, the tensor tympani muscle draws tense the membrana tympani and the membrane of the fenestra rotunda. The pathological conditions alluded to in the paper are: (1) simple disconnexion of the incus and stapes; (2) disconnexion of the incus and stapes, the long process of the incus being absent. 1. The author shows that simple disconnexion of the stapes and incus, if attended with no other lesion, is not productive of any appreciable deafness, inasmuch as the tensor tympani ligament is able to keep the two bones in contact, and the action of the tympanic muscle is not interfered with. But if the membrana tympani or its ligaments is relaxed, in addition to the disconnexion of the stapes and incus, then the function of hearing is interfered with, and often only to this extent, that the patient can hear only when the voluntary act of listening is performed—that is to say, when by voluntary muscular effort the incus is held in contact with the stapes. In this class of cases, gentle pressure on the outer surface of the drum by any resilient body restores the natural power of hearing, and the distress produced by the necessity of constant listening is quite overcome. 2. But if the membrana tympani or its ligament is much relaxed, then no voluntary effort can bring the stapes and incus into contact, and great deafness is the result. This deafness is also remedied by the application of an artificial membrana tympani, which, gently pressing upon the outer part of the chain of bones, keeps the incus and stapes in contact. 3. This disconnexion of the incus and stapes also occurs in conjunction with partial or complete loss of the long process of the incus, the membrana tympani being entire. The treatment in this class of cases consists in pressing inwards the membrana tympani so as to place its inner surface in contact with the head of the stapes, and to retain the two structures in contact. The lesions above referred to also take place when the membrana tympani is perforate. When there is disconnexion of the incus and stapes, together with a thickening of the mucous membrane or the ligaments of the articulation, the treatment consists in keeping up gentle pressure upon the outer surface of the long process of the incus; when the long process of the incus is absent, the pressure must be upon the head of the stapes. In order to exercise gentle pressure upon the ossicles and still to allow the muscles to move the ossicles, the author has recently suggested a new kind of artificial drum, in the shape of a small globe, of india-rubber containing air.

Mr. HARVEY said he considered the paper of much importance and interest, inasmuch as it would show the aural Surgeon the means of preventing much of the mischief this part of the organ was subjected to after long-continued and neglected catarrhal disease. He (Mr. Harvey) had paid some attention to the subject before the Society, and from the experience thus derived he was not surprised to find the incus so often the seat of mischief and so often displaced, owing to the anatomical connection of this bone with the mastoid cells. His own examinations had been more especially directed to the ossicles and their capsular attachments, when attacked by rheumatism, gout, and certain forms of syphilis affecting the auditory functions as a consequence, which they often seriously imperil, and it not unfrequently happens that anchylosis supervenes. These lesions cannot be very accurately diagnosed at all times during life; yet he thought a sufficiently correct opinion might on many cases be made, from which a rational mode of treatment could be derived, and which would be a source of gratification to the Surgeon, and enable him to give much relief, and in some cases make a complete cure of the deafness. As regards the treatment of the cases brought forward by the author of the paper, where the incus was supposed to have been displaced, or, as suggested, dislocated from its attachments, he should like to be informed whether pressure alone had been adopted, or whether it had been combined with constitutional treatment. He thought two of the cases cited by the author pointed to such an amount of debility or relaxation of the structures as would have yielded to constitutional treatment—namely, that of giving an increased vitality to the system by tonics. The duration of time required for the cure was also a point of importance. There was another point of very grave consideration, and on which he would like to be more informed, whether the author had ever known epilepsy to have been brought into action by long-continued pressure on the ossicula; if so, he thought it would be preferable to pause rather than adopt such expedients as the author had suggested. He regretted that no history had been given of the preparations on the table by which more practical instruction would have been gained. Some useful suggestions thrown out and many difficulties inherent in the subject-matter might also have been cleared up.

Mr. Brooke said there was some advantage in the membrana tympani which had not been alluded to. Supposing the power of hearing to be feeble, it was possible, the membrana tympani being entire, to make the external auditory canal a reciprocating cavity by closing the external meatus. If the meatus be closed, and a tuning-fork be then applied to the head near the unclosed ear, it will be best heard by the closed one. Hence the importance of its collecting and comminuting vibrations, independently of the pressure it exerts on the tympanum.

Mr. Hinton said that some cases which had come under his observation tended to support what might appear to be the weakest part of Mr. Toynbee's paper—viz., the evidence of relaxation or disconnexion of the assicula when the membrana tympani was not perforated. In the cases referred to, of which he had seen several, the membrane was thin and relaxed, either all together or in its posterior portion, and consequently had fallen inwards to such a degree that the head of the stapes projected beneath it. In some of these cases he had found that a stream of air passed into the tympanum, filling the cavity and raising up the membrane, considerably increased the hearing power, but in others the opposite effect was produced; inflation of the tympanum diminished the hearing, which was restored either by sudden strong inspiration through the nose, or by pressing in a peculiar manner upon the meatus, both of which actions had the effect of placing the membrane visibly in contact with the stapes. In some instances in which an apparently similar collapse of the membrane existed on each side, the opposite effects were produced by inflation, showing that the condition of the parts contained without the tympanic cavity was different. When drawing or forcing the membrane inwards, in the mode above described, improved the hearing, the use of the artificial membrane had frequently been beneficial.

Mr. Savory said the author had brought forward so much in his paper that it seemed almost ungracious to ask for more. He (Mr. Savory), however, failed to find a cause for the conditions the author described. It had occurred to him that some of the cases might have had a traumatic origin, and he asked Mr. Toynbee if this view might not throw some light on the particular way in which the disconnexion was brought about.

Mr. Toynbee, in reply, said that it was quite possible for the incus to be separated from the stapes as the result of a blow—indeed, one of the specimens indicated such a cause of dislocation; but, as a rule, the incus and stapes were disconnected by one of the three following causes — (1) relaxation of the tensor tympani ligament or of the membrana tympani itself; (2) thickening of the tympanic mucous membrane with catarrh; (3) a loss of substance of the long process of the incus. Desirous of not encumbering the paper with pathological researches, he had deferred entering upon a consideration of the mode in which the pathological changes were effected, leaving the subject for a future paper. In reference to the difficulty of ascertaining the fact of the disconnection of the incus and stapes when the membrana tympani is entire, Mr. Toynbee said that the affirmative could only be decided when the history, appearances, and symptoms concurred to favour the conclusion. In no case had any brain symptoms been produced by the use of the artificial membrana tympani; indeed, it was highly improbable that the presence of the drum would produce such a result, as undue pressure on the chain of ossicles, and thence upon the vestibule, produces immediate increase of deafness. In many cases the artificial drum is dispensed with after a short time, as the chain of bones by its use appears to regain its normal resiliency; in other cases the artificial drum requires to be used at intervals. Considerable experience during many years has shown that the use of the artificial drum is attended with permanent advantage.

In reply to Mr. Brooke, Mr. Toynbee said that in the early study of the subject, he had reason to believe that the artificial drum acted beneficially by constituting the tympanum a closed cavity, and he was strengthened in this opinion by the beneficial effect following the use of a bubble of mucilage for the purpose of closing the aperture; recent researches in pathology, and in operative practice, had, however, induced him to adopt the conclusions cited in the paper, and he was disposed to believe that even the beneficial effect of the mucilage was due to the gentle pressure it exerted upon the chain of bones, thus conducing to render it continuous and resilient.

The President thought that much more would be gained by a close study of physiology as introductory to pathological investigation. He said that whilst we were fully acquainted with the mode in which light was impressed upon the retina, and so communicated to the brain, notwithstanding that doubt still existed as to the true theory of the nature of light. Yet, on the other hand, whilst the vibrations of the air were fully understood, very little that is positive has been ascertained as to the mode in which those vibrations are communicated to the brain.

Mr. Toynbee asked permission to say a few words in reply to the remarks of the President. In the first place, it was a mistake to suppose that all the ossicles could be lost without the production of deafness—the presence of the stapes was absolutely requisite to hearing. In the second place, it was only recently that the true action of the stapedius muscle upon the stapes was made out, and the analogy of the base of the stapes to a piston and the inner surface of the fenestra ovalis to a cylinder clearly shown; and thirdly, experiments and dissections had clearly demonstrated that the action of the tensor tympani muscle was to render tense the membrane of the fenestra rotunda by exercising traction on this muscle when the scala vestibuli of the cochlea was exposed, when the fluid in the scala was seen to move outwards; on the contrary, when the tendon of the stapedius muscle was pressed upon, the fluid was seen to recede again.

A paper, by Mr. Arthur E. Durham, was read, on

## A CASE IN WHICH A NEW OPERATION FOR THE RADICAL CURE OF HERNIA WAS SUCCESSFULLY PERFORMED.

Stephen H., a sailor, 26 years of age, sought admission to Guy's Hospital for the purpose of being radically cured of an easily-reducible but very troublesome inguino-scrotal hernia on the right side. The hernia had been first noticed six years previously. It had gradually increased in size, and extended into the scrotum. Latterly it had given rise to such constant inconvenience and so much occasional pain that the patient had been quite unable to follow his occupation. He could not wear a truss, although he had repeatedly attempted to do so. At the period of admission to the Hospital the scrotal portion of the hernia was about as large as a hen's egg, or rather larger. The bowel, of which it was evident the hernia mainly consisted, was easily returned into the abdomen, but a slight fulness of the inguinal canal persistently remained. On January 19, chloroform having been fully administered, and the hernia reduced as completely as possible, Mr. Durham proceeded to operate in the following manner:—An incision about two inches and a half in length was made through the skin and superficial fascia, in a direction at right angles to Poupart's ligament, and just over the inner border of the internal or deep abdominal ring. The tendon of the external abdominal oblique muscle was next divided in a similar direction, but to a somewhat less extent, and in a situation slightly further from the median line of the body. The lower fibres of the internal abdominal oblique or cremaster were then separated longitudinally, and the internal spermatic fascia or fascia propria of the hernia was exposed. A slight incision having been made in the lower and deeper part of this fascia, an aneurism needle was carefully insinuated through the areolar tissue, and by its means a ligature was placed between the sac of the hernia and the important structures of the spermatic cord, and carried through the upper and deeper part of the fascia. The fascia and sac were then drawn gently downwards and towards the median line of the body, and the ligature was tied tightly as high up and as far outwards as possible; in fact, as nearly as could be judged, exactly at the internal or deep ring. The ligature thus included the greater part of the circumference of the fascia propria or internal spermatic fascia just where it becomes continuous with the fascia transversalis, the whole circumference of the sac just at its junction with the general peritoneal lining of the abdominal parietes, and within the sac a small plug-like portion of omentum. In passing the aneurism needle, a slight puncture was unintentionally made into the sac. This puncture, however, when subsequently dilated, afforded the opportunity of ascertaining that the sac did not communicate with the tunica vaginalis testis, but that it contained a small piece of irreducible omentum; this was drawn out and cut off below the ligature. Finally the wound was closed above and below by sutures, which were passed through the sac. The ends of the ligature were left coming out through the middle of the wound. The after progress of the case was most satisfactory. The patient was kept absolutely in the recumbent position for more than six weeks. From first to last he never had a single bad symptom worth mentioning. There was never any abdominal tenderness, constitutional disturbance, or other indication of general peritonitis, nor was there ever much pain about the site of the operation. The upper and lower parts of the wound healed by first intention. The ligature came away on the eighteenth day, and complete closure of the wound speedily followed. On March 29 the patient, having to a certain extent recovered his strength, went into the country. Before leaving the Hospital he was examined by all the members of the Surgical staff as well as by many visitors. There could not be discovered the slightest hernial protrusion nor any abnormal impulse on coughing. The inguinal canal from the internal ring seemed perfectly blocked up by the obliterated sac and new material. This case, although a solitary one, may be considered to prove—first, that the method of operation described is practicable; and secondly, that it is not necessarily attended by danger. The author would add that he believes it to be more scientific in principle than any other method yet adopted, and he hopes, therefore, it may prove more successful in practice.

Mr. Spencer Wells said that the proceeding described to the Society as *new* reminded him very strongly of operations performed centuries ago for the radical cure of reducible hernia. But, as the object of the older operators was to apply a ligature around the neck of the sac, or to obliterate it by scarification or by the introduction of foreign bodies within it, or to destroy it by caustics or the actual cautery, their proceedings proved to be so extremely dangerous, and so often unsuccessful, that when he (Mr. Wells) brought Wutzer's method before the Society in 1854 all operations for the radical cure of hernia were very generally condemned by the Profession. Since 1854, Wutzer's operation had been very frequently practised here, and had often proved unsuccessful. But this was because it had been performed in cases for which it was unsuitable. Where the rings have not been much widened and the canal not much shortened it is a very successful operation, and it is almost free from danger. Unfortunately, it is only applicable to a very small proportion of cases. Mr. Wood's operation is of much wider application, but it is unquestionably a more serious, not to say dangerous, proceeding. The operation performed by Mr. Durham appeared to be even more hazardous. Free division of skin, fascia, and muscle, and the application of a ligature, even if the sac were not accidentally opened, though not in this case followed by any bad symptom, might certainly be expected to lead to danger in a certain proportion of cases. And it became a grave question whether any very serious operation could be justifiable in cases of reducible hernia. If the hernia could be well supported by a truss, no operation attended with danger to life could be sanctioned. When a truss could not be borne, then Wutzer's operation in cases to which it was adapted, or Wood's operation when the rings were wide and canal short, seemed to offer at least an equal prospect of success, and to be much less hazardous, than the operation performed by Mr. Durham.

Mr. Holthouse wished to know the particular reasons for performing this operation for the radical cure of hernia, and what were its advantages over other operations having a similar object. He thought Mr. Wells was in error in believing that it was the same operation which had been done some centuries ago. In the cases to which Mr. Wells referred the sac had been tied at the external ring, and thus a pouch was left open above the ligature, into which a hernia could descend. In Mr. Durham's operation the sac was tied at the internal ring. Mr. Holthouse thought the new operation was inferior to Mr. Wood's, partly because it was less safe, and partly because it dealt only with the hernial sac, and made no provision for drawing together the sides of the canal. Mr. Wood's operation, he added, blends the sac with the walls of the canal, which thus offer a firm resistance against future protrusion.

Mr. Christopher Heath, without wishing to detract from the credit of a successful case, could not but regard the good result in Mr. Durham's operation as in great measure due to the accidental presence of a piece of omentum within the sac, and which, therefore, served to plug the canal. This occurrence could not be looked for in every case, and even if the sac were opened, as was unintentionally done by the operator in his case, it would be scarcely possible to draw omentum down with safety. Mr. Heath thought three months too short a time to show the ultimate success of the operation, and was not surprised to hear that after the inflammation excited and the formation of an abscess there was reported to be considerable thickening of the parts. He knew from his own experience and that of others in Wood's operation that very considerable induration disappeared after a time, and he feared that then the peritoneum would again become stretched and the hernia be reproduced. Another point worthy of consideration, he thought, was the advisability of dividing the muscles to the extent recommended by the author, and feared that it would lead to permanent weakening of the abdominal parietes, as was seen after the operation for ligature of the iliac arteries.

Mr. Hulke asked if ~~the omentum was~~ included intentionally?

Mr. Kingdon said that it was not the fatality of former operations which had led to their disuetude, as Mr. Wells had just remarked, but their inefficacy. The former, as well as the present, operations were based upon a false assumption, —viz., that there was power in the adhesions thereby instituted permanently to prevent a recurrence of hernia. There was not the slightest evidence in favour of such an assumption, but the recorded evidence of Dupuytren and Scarpa was against it. Sooner or later, as Mr. Heath had stated, the adhesions were sure to yield.

Mr. Durham, in reply, said that although he had searched diligently he had failed to find on record the details of any such operation as was described in his paper just read. He therefore ventured to consider his method a new one. With regard to the ancient operations referred to by Mr. Spencer Wells, the descriptions given were for the most part so vague and indefinite as to afford no exact information as to the precise particulars of the methods adopted. In those instances in which the descriptions were more exact, the operations were manifestly coarse and clumsy, and necessarily involved the very sources of danger (such as sloughing of the hernial sac, wasting of the testicle, etc., etc.) which he (Mr. Durham) had been most careful to avoid. The operations most similar to his own were those of Langenbeck and Schmucker. Those Surgeons, however, applied their ligature at the external, not at the internal ring. The most that could have been accomplished by such a proceeding, even if successful so far, must have been the conversion of a scrotal hernia into a bubonocele. No very great gain this. Mr. Durham had tried a new method in this case simply because it did not appear to him worth while to try either of the methods at the present time or recently in vogue—viz., Wutzer's and Wood's. Wutzer's operation had been amply proved by experience to be unsuccessful—nay, worse than unsuccessful. And, indeed, it was so unscientific in principle that the wonder was it should ever have been adopted to any extent. Mr. Wood's method was certainly very ingenious, but his own account of the results of his numerous operations did not seem to him (Mr. Durham) very encouraging. Of the sixty patients whose cases are detailed in Mr. Wood's book, between forty and fifty (a very large majority) were discharged wearing trusses, and in only six or seven of the fully-recorded cases did it appear to have been considered right to dispense with such mechanical supports. Could a hernia be said to be radically cured in the full and proper sense of the words if the patient were still obliged to wear a truss? Further, in less skilful hands than his own Mr. Wood's method had been shown to be by no means free from danger. With regard to the possible and probable risks of his method, Mr. Durham believed that the danger of meddling with the peritoneum, particularly with such portion as forms the hernial sac, had been very greatly exaggerated. He certainly should hardly have expected Mr. Spencer Wells, of all men, to have been so very fastidious and fearful about touching a little extension from that general abdominal lining which he (Mr. Spencer Wells) was in the habit of cutting into and mopping out so freely, fearlessly, and with so much impunity. The argument derived from the statistics of operations for strangulated hermia was very bad. That a large proportion of cases in which the sac was opened proved fatal was indisputably true; but the explanation was obvious. Those cases in which it was necessary to open the sac were the most dangerous, for they were those in which the strangulation was most severe or had continued longest, and, therefore, those most likely to prove fatal. There was no evidence to show that the mere opening of the sac increased the danger of the operation; indeed, in a great many cases of recovery if the sac had not been opened the hermia could not have been returned, and the patients must have died. In the present case there never was the slightest indication of any dangerous symptom whatever. There was none of the "severe inflammation" and nothing of the "extensive abscess" which Mr. Heath had suggested. In conclusion, it appeared to Mr. Durham that he had done intentionally what Mr. Wood only did accidentally—viz., close the hernial sac at the internal ring. On the other hand, Mr. Wood attempted to accomplish intentionally what he (Mr. Durham) allowed in this case to become accomplished as it might—viz., constriction of the inguinal canal and external abdominal ring. In certain cases the association of the two methods would probably be much more successful than either by itself, and such association he should without hesitation adopt.

## THE PATHOLOGICAL SOCIETY.

TUESDAY, APRIL 3.

DR. PEACOCK, President.

### CASTRATION.

Dr. **DUKA**, of the Bengal Army, exhibited a specimen not strictly pathological, but of considerable interest, relating to a state of off-hand Asiatic Surgery as it exists even in our days in Bengal and probably other parts of our Indian Empire. The specimen in question was the pubic region of an old eunuch, Edoo by name, aged nearly 60 years, who, as the chief of a gang of eunuchs in the districts of Patna and Monghyr, had the duty of enrolling fresh hands into his confraternity by "doing as he was done by," namely, emasculating such young boys of 6 to 8 years of age as he could obtain possession of, and for so doing he was brought to trial in 1860, and sentenced to a long term of imprisonment, during which time he died in the Monghyr gaol, in 1863, whilst Dr. Duka was in Medical charge of it. We were hitherto under the impression that all eunuchs, as in Turkey and Abyssinia, were deprived merely of their testes; this specimen, however, would show that in India a clean sweep is made of the whole scrotum, testes and the penis as well, leaving a longitudinal cicatrix, closely adhering to the bone, with the urethral orifice at the upper end of it. It is very rare indeed that Europeans in the East ever have the opportunity of seeing these "neuter" individuals of our race, except as attendants at Mahomedan courts; still rarer can our brethren in India obtain a chance of making a preparation like this, which it is presumed is unique of its kind. The specimen is now the property of the Museum of St. George's Hospital.

Dr. **CHOLMELEY** exhibited

### A MASS OF ENLARGED AND DEGENERATED MESENTERIC GLANDS FROM A MAN AGED 54.

The patient had been first seen by Dr. Cholmeley, in conjunction with Mr. E. C. Hulme, under whose care he had been on account of a large double inguinal hernia, in October last. He was suffering from cough, dyspnœa, and emaciation, and was supposed to be consumptive. On the left side percussion was clear, and the respiratory murmur puerile, but somewhat harsh immediately under the clavicle. The right side was absolutely dull and silent as high as the third rib in front, and the spine of the scapula behind; the signs pointed to compression of the lung by an upwardly enlarged liver, rather than to consolidation or to collection of fluid in the pleural cavity. Nutrition and assimilation were much disordered; the abdomen full and tender on manipulation; the bowels relaxed; the stools "offensive and light-coloured." The patient improved in health and strength for some weeks, but then fell back and died exhausted at the end of February. The right lung had expanded considerably, so that fair respiratory murmur could be heard as low as the fifth rib; there were never any physical signs of serious disease of the lung itself. Small scattered tubercles were found in the apices of both lungs, and a few vomicæ of the size of half a pea, and there was an old cicatrix in the left apex. The intestines were matted together, the great omentum rolled up into a thick cordon with the transverse colon; the peritoneum greatly thickened and specked with black pigment; the liver greatly enlarged, in an advanced degree of fatty degeneration, universally adherent to the diaphragm, and prevented from descending below the ribs; the mesenteric glands formed a mass the size of a large cocoanut; some of them were as large as a Bergamot orange, and they were in various stages of tubercular degeneration. There was no tubercle elsewhere. The man had died from tubercular disease, but not from the tubercular disease in the lungs.

Dr. **CHOLMELEY** next exhibited a specimen of

### WARTY GROWTHS IN THE LARYNX, CAUSING DEATH BY ASPHYXIA.

The specimen was taken from a boy, two years of age, who was admitted into the Great Northern Hospital under Dr. Webb, with an history of an ordinary attack of croup. He was much relieved by emetics, but daily had severe attacks of dyspnœa, and never quite lost the hoarse stridulous croupy breathing. Dr. Webb proposed tracheotomy on the second day, but the proposal was negatived in consultation. On the fifth day it was learned that the child had been quite unable to speak or cry, and had had occasional severe attacks of dyspnœa for nine months; and the mother was observed to be very unhealthy-looking, and to have a suspicious-looking scar on the forehead, and marks of extensive ulceration in the fauces. The child had then become very weak and exhausted, and another attack of dyspnœa coming on, tracheotomy was resorted to by one of the Surgeons, but profuse bleeding occurred from a large vein which crossed the front of the trachea, and the child died on the operating table. No inflammatory exudation of any kind was found in the larynx, trachea, or bronchi, but the rima glottidis was choked up by a mass of warty vegetations growing from the true vocal cords and the adjacent mucous membrane; the growths consisted of paramount epithelium.

### LARVAL TAPEWORMS IN VEAL AND MUTTON.

Dr. **COBBOLD** exhibited a small section of the heart and numerous portions of the triceps adductor femoris muscle of a calf in which he had successfully reared the cysticerci or larvæ of the tænia mediocanellata. He stated that these larvæ were quite distinct from those usually found in swine, and that they were even more abundant. The examples of this cysticercus bovis taken from the heart were not so perfectly developed as those in the ordinary muscles of the body, which was owing to the density of the muscular bundles. His experiment was the only one hitherto performed in this country, but he hoped shortly to lay before the Society the results of a second "feeding" in an adult animal of the same species. The cysticerci obtained from mutton (sent to his table) had undergone calcareous degeneration rendering it impossible to determine to what tapeworm species they might be referable. Probably they were distinct, and represented a third species of tænia derived from meat. (Since the meeting Dr. Cobbold has received from Mr. Heisch a specimen of "measle" taken from the interior of a mutton chop. It is armed with a crown of hooks, and is apparently quite distinct from the pork "measle.")

Dr. **DICKINSON** exhibited a specimen of

### RUPTURE OF THE AORTA.

A man, aged 59 years of age, apparently well, was working on a low scaffolding; he made a sign of distress and extended his hand, fell off the scaffolding, and was picked up dead. He had apparently died from the fall. There was a rent in the early part of the arch of the aorta, and the pericardial sac was full of blood. On the back of the aorta for two inches the two inner coats were absent, and in one part blood had escaped.

The **President** inquired whether Dr. Dickinson had been able to obtain any history of a syncopic attack prior to that of which the patient died, for looking at the specimen he inferred that such an attack must have occurred at the time of the tear of the internal coats some time previous to death. The specimen bore a close resemblance to some figured by Rokitansky in his work on diseases of the arteries, as cases of cured rupture of the aortic coats.

Dr. **Dickinson** showed a specimen of

### MALFORMATION OF THE HEART.

The heart was taken from a child who had been the subject of cyanosis. There was one large left ventricle, and with this the two auricles were connected. One right ventricle was quite rudimentary and opened into the left. It was connected with a pervious pulmonary artery.

The **President** said that from the casual examination which he had made of the case of malformation of the heart exhibited by Dr. Dickinson, it appeared to be an instance of the condition which he had described as "a supernumerary septum in the right ventricle." It would be observed that in the cavity which was laid open, and which was obviously the right ventricle, there was a very decided constriction a short distance below the pulmonic valves, thus separating the large sinus from the small cavity, which is the analogue of the infundibular portion of the ventricle, and presenting an analogy to the form of the heart in the Chelonian reptiles. The aorta and pulmonary artery also both arose from the right ventricle, and the left ventricle communicated with the right. The position of the several cavities was also transferred.

## MEDICAL NEWS.

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**Royal College of Surgeons of England.**—The following Members of the College, having undergone the necessary Examinations for the Fellowship on the 29th and 31st ult., were reported to have acquitted themselves to the satisfaction of the Court of Examiners, and at a meeting of the Council on the 14th inst. were enrolled Fellows of the College, viz.:—

Messrs. Edmund Archer, Cape of Good Hope, diploma of membership dated December 29, 1846. Theodore Duka, Her Majesty's Indian Army, October 7, 1853. Thomas Furneaux Jordan, Birmingham, May 2, 1854. William Darling, New York, November 21, 1856. Francis Falwasser, Army, March 26, 1858. Frederick Howard Marsh, St. Bartholomew's Hospital, June 3, 1861. Louis Stromeyer Little, Brook-street, Grosvenor-square, April 22, 1862. Alexander Bruce, Albert-terrace, April 26, 1864, and William George Vawdrey Lush, Wilton, near Salisbury, April 27, 1864.

Only one candidate failed to acquit himself to the satisfaction of the Court. At the same meeting of the Council, the following member having been *elected* a Fellow at a previous meeting of the Council, was admitted, viz.:—

John Morrill, Newhaven, June 12, 1840.

**Apothecaries' Hall.**—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, June 7, 1866:—

Narcis Richard Haswell, Helton, Cornwall; Henry John Branson, Scarborough; Dixon Brombridge, Snaith, Yorkshire: John Rees James, Llanelly, Carmarthenshire; Frederic Stewart Colquhoun, Tiverton, Devon; Edward James Leverton, Truro, Cornwall.

The following gentlemen also on the same day passed their First Examination:—

John Giles, St. Bartholomew's Hospital; George Moore, General Hospital, Birmingham; Charles Nutt, Guy's Hospital; William Bevan Lewis, Guy's Hospital; George Stokell, Guy's Hospital.

**Pharmaceutical Society of Great Britain.**—Names of Candidates who passed the Examination as Pharmaceutical Chemists, June 13:—

Parson Custance Baker, Holt; John Day, Retford; John Hugh Davies, Newcastle-on-Tyne: John Goucher, Wellington, Salop; Thomy Pasmin, Mauritius; Thomas Barker Horner, Woolwich; John James Thorn, Crediton; Henry Allcock Averill, Stafford; George Baxter, Chester; John Temlett Long, Bristol; Richard Pheysey, Waterloo.

### APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

**Constable, John H. C.**, L.K.Q.C.P. Ire., &c., has been elected District Medical Officer to visit out-patients to the Royal South London Dispensary.

**Kealy, J. R.**, M.D., has been appointed Surgeon to the Portmouth Hospital.

**Platt, W. H.**, L.R.C.P. Edin., has been appointed House Surgeon to the Scarborough Dispensary.

**White, J. R.**, has been appointed House-Surgeon to the Kent County Ophthalmic Hospital, Maidstone.

**Young, Edward Parker**, M.R.C.S., L.S.A., and L.M., has been appointed Surgeon to the Westbourne Dispensary and Maternity.

### BIRTHS.

**Debenham.**—On June 7, at Heath House, Stepney, the wife of R. Debenham, M.R.C.S., of a son.

**Divers.**—On June 6, the wife of E. Divers, M.D., (of Queen's College, Birmingham), of a son.

**Norton.**—On June 6, at 112, Westbourne-grove, the wife of A. C. Norton, M.D., of a daughter.

**Rudall.**—On April 26, at Melbourne, Australia, the wife of J. T. Rudall, F.R.C.S.E., of a son.

**Smith.**—On June 2, at Burbage, Wilts, the wife of C. Swaby Smith, M.R.C.S., of a daughter.

### MARRIAGES.

**Bury—White.**—On May 30, at the parish church, Spalding, W. H. Bury, M.D., to Harriet White.

**Eastcott—Roberts.**—On June 2, at St. Stephen's, Westbourne-park, J. C. Eastcott, Surgeon R.N., to Emile Catharine, only surviving daughter of W. Roberts, Esq.

**King—Smith.**—On April 21, at St. George's Church, Prince of Wales Island, J. B. King, M.D., Assistant-Surgeon H.M. Indian Army, to Joanna, second daughter of the late H. W. Smith, Esq., of Island Hall.

**Kitching—Atkinson.**—On May 8, at Picaltsdorf, Cape Colony, T. Kitchin, M.R.C.S., to Lydia Jane, youngest daughter of the Rev. J. Atkinson, Picaltsdorf.

**Knott—Milward.**—On June 7, at the parish church, Bidford, M. O'Malley Knott, M.D., to Sophia, eldest daughter of J. Milward, of Tower-hill, Bidford.

### DEATHS.

**Austin, M. F.**, M.R.C.S. Eng., at 15, Red Lion-street, Clerkenwell, on May 25, aged 79.

**Thompson, T. D.**, L.S.A., on June 8, aged 55.

**Tunaley, C.**, M.D., at 1, Millbrook-place, Harrington-square, on June 5, aged 58.

**Ure, Alexander**, F.R.C.S., at 18, Upper Seymour-street, Portman-square, on June 13.

## POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

### RESIGNATIONS.

*Altrincham Union.*—Mr. Earle has resigned the Workhouse; salary £50 per annum.

*Aylesbury Union.*—Mr. Brown has resigned the Waddesdon District; area 16,829; population 2978; salary £85 per annum.

*Bury Union.*—The Heap District is vacant; area 8996; population 22,537 salary £60 per annum. Mr. Sellers has resigned the First Pilkington District; area 2468; population 4304; salary £20 per annum. Also the Second Pilkington District, area 3000: population 8000; salary £30 per annum.

### APPOINTMENTS.

*Easingwold Union.*—John C. Robinson, M.R.C.S.E., L.R.C.P Edin., of the Coxwold District.

*Keighley Union.*—Percy Milligan, M.R.C.S.E., L.S.A., to the South Keighley District and the Workhouse.

*Knaresborough Union.*—Thomas Trowsdale, M.R.C.S.E., L.R.C.P. Edin., to the Harrogate District.

*Lincoln Union.*—George W. Glasier, M.R.C.S.E., L.S.A., L.M., to the Eleventh District.

*Presteigne Union.*—Tom Oliver Hunt, M.R.C.S.E., to the Union.

*Ticehurst Union.*—William M. Harmer, M.R.C.P. Edin., L.F.P. and S. Glasg., L.S.A., to the Salehurst and Etchingham District.

**Royal College of Physicians.**—The President and Fellows of the College have issued cards of invitation to a *conversazione* at the College on Wednesday evening, June 27. The Harveian Oration is to be delivered in English by Dr. Paget on Tuesday, June 26, at 4 o'clock.

**Oxford Honours to Medical Men.**—On Wednesday, June 13, the Honorary Degree of D.C.L. was conferred by the University on Sir J. G. Simpson, M.D., of Edinburgh, and on Dr. J. D. Hooker, of Kew Gardens.

**Mr. William McGill** has bequeathed to the Royal Infirmary, Edinburgh, a property of the value of £10,000, the rents to be applied to the purposes of the charity.

ACCIDENT TO A SURGEON.—The Mayor of Chard (Mr. Spicer, a Surgeon) was thrown from his gig in that town on Sunday week, and was so terribly cut about the head that a neighbour, not recognising him, ran to his house for Medical aid. Mr. Spicer is, however, recovering.

PHARMACEUTICAL EXHIBITION.—An exhibition of objects relating to pharmacy is to be held at Nottingham during the meeting of the British Pharmaceutical Conference. The meeting of the Conference will commence on Tuesday, August 21, being the time of the meeting of the British Association for the Advancement of Science. Professor Bentley will preside.

THE Odontological Society held its monthly meeting at its rooms, Soho-square, on the 4th inst. Dr. Richardson gave further explanations of his plan for producing local anæsthesia, and also described his new styptic, which could be applied by the spray apparatus. Mr. Balkwill read a paper on arranging artificial teeth for the purpose of mastication.

A CASE of death from cholera having been alleged to have taken place on board the Peninsular and Oriental Steam Company's ship *Poonah*, which arrived at Southampton on June 10, a full inquiry was instituted by Dr. Wiblin. It was proved that the case was one of English cholera, and that the crew and passengers were in good health.

CHOLERA AT DJEDDAH.—A telegram dated Alexandria, June 9, states that "Between the 26th and 27th ult. more than 100 deaths from cholera occurred at Djeddah."

THE CHOLERA AT NEW YORK.—The following telegram dated New York, May 30, appeared in the *Times* of Saturday, June 6:—"The steamer *Union*, from Liverpool, arrived yesterday at the New York quarantine. Thirty deaths from cholera had occurred on board during her passage." Another telegram dated June 2 states that "On that day twenty-six new cases occurred in New York quarantine."

THE Nuisances Removal Act, No. 1, 1866, entitled a Bill to amend the Nuisances Removal and Diseases Prevention Act, 1860, brought in by Mr. Knatchbull-Hugessen and Sir George Grey, and ordered, by the House of Commons, to be printed, May 17, 1866, has only three clauses, as follows:—"1. The sixteenth section of the Act of the twenty-third and twenty-fourth Victoria, chapter seventy-seven, shall be and is hereby repealed. 2. No Justice of the Peace shall be deemed incapable of acting in cases under the Nuisances Removal Act, or the Act of the twenty-third and twenty-fourth Victoria, chapter seventy-seven, by reason of his being a member of any body thereby declared to be the authority to execute the said Act, or by reason of his being a contributor or liable to contribute to any rate or fund out of which it is thereby provided that all charges and expenses incurred in executing the said Act, and not recovered as therein provided, shall be defrayed. 3. This Act may be cited as "The Nuisances Removal Act, 5 (No. 1), 1866."

AT the present moment, when the condition of the metropolitan Workhouses is arresting so much public attention, we extract with pleasure the following report from the *Cork Constitution* of June 8.—

"FERMOY UNION, Wednesday, Richard Carroll, Esq., J.P., Chairman of the Board, presided.

"THE WORKHOUSE SCHOOLS AND CHILDREN.—The Clerk read the report of the Head Inspector of National Schools, as follows:—

"'I am of opinion that the state of this school is very satisfactory, and reflects great credit not only upon the teacher, but on the Board of Guardians, who evidently *take a pride in having the children well cared for*. The latter are remarkably clean in person, and tidily and comfortably dressed, and unquestionably are the *most cheerful and the healthiest looking children* I have *ever seen in any workhouse*.'"

PROPOSED MEDICAL CLUB—(From a Correspondent).—It is proposed to establish in London a new club, to be called the "Sydenham," for the convenience of members of the Medical Profesion, securing, at a minimum cost, all the advantages of a modern club. The want of such an institution has long been felt, especially by provincial Practitioners, and those of their brethren in the various public services and the mercantile marine—the want of a house that they can make their temporary home, and where they may at the same time enjoy the advantage of London Professional society. It is anticipated that an entrance fee of five guineas, with an annual subscription of three guineas, for members residing within the metropolitan postal district; and an entrance of three guineas, with a subscription of one guinea, for those beyond, will be found sufficient; it being expressly understood that these rates will be available only on the part of those joining the club at its commencement. Though the terms of donation and subscription will be thus comparatively so much lower than those of other clubs, it may be expected that, in respect of comfort and convenience, the Sydenham will not be inferior to any in London. It is further worthy of note that at Calcutta, Madras, and Bombay "general clubs," on the principle here announced, have been in eminently successful operation for many years. Sleeping accommodation will be provided for extra-metropolitan members, and for limited periods only.

ELECTIONS AT THE COLLEGE OF SURGEONS. — The retiring members of the Council, Messrs. Hilton and Luke, will not be allowed to resume their seats at the Council table without some opposition, as on Monday last, when the time expired for sending in applications, the names of the following candidates had been received, the names appearing in seniority of Fellowship, viz.:—Mr. William James Erasmus Wilson, F.R.S., of Henrietta-street, Cavendish-square, Consulting Surgeon to St. Pancras Infirmary, etc.; nominated by Sir J. R. Martin, and Messrs. J. E. Erichsen, H. Thompson, G. Critchett, W. Adams, and T. W. Nunn. Mr. Charles Hawkins, of Savile-row, the Metropolitan Inspector of Anatomy, and Consulting Surgeon to Queen Charlotte's Hospital, etc.; nominated by Messrs. T. Tatum, P. G. Hewett, G. Pollock, H. Lee, T. Holmes, and B. E. Brodhurst; and Mr. Henry Spencer Smith, of Queen Annestreet, Cavendish-square, Surgeon to, and Lecturer on Surgery in, St. Mary's Hospital; nominated by Messrs. J. Birkett, H. Coote, H. Thompson, G. Pollock, C. H. Moore, and J. R. Lane. The senior candidate, Mr. James Luke, appears, from the Calendar of the College, to have been elected on the Council so long ago as 1846, has twice filled the President's chair, and occupied a seat in the Court of Examiners since 1851. The case is different with regard to Mr. John Hilton, F.R.S., the other retiring candidate, who is in the active practice of his Profession, teaches in one of our largest metropolitan schools, and who has only just been elected an examiner; he, moreover, deservedly fills the Vice-President's chair, and may fairly aspire to the highest office; it would be manifestly unjust to displace this gentleman, and it will be gratifying to Mr. Hilton's friends to know that his return may be considered secure. This feeling, however, should not induce the Fellows to relax in their efforts to place him at the head of the poll. The election is fixed for Thursday, July 5th, at 2 o'clock. The Fellows' festival will take place the same evening at the Albion Tavern; Mr. Wormald, President of the College, has been requested to occupy the chair.

SERIOUS CHARGES AGAINST A MEDICAL ASSISTANT.—At the Farnham Police Court on Tuesday last, Lake Young, *alias* William Augustus Young, was brought up on remand, before F. R. Thresher, Esq., and Major Spring, charged with embezzlement, felony, and obtaining goods under false pretences. It appeared from the evidence of Dr. W. Davies, of York Town, Frimley, with whom the prisoner had recntly been engaged, that in the month of April last the prisoner obtained his situation as assistant upon what afterwards proved to be false representations and a false certificate. A month's probation was mutually agreed upon, and it was the duty of the prisoner to attend patients and dispense medicine. At the expiration of the month, however, the prisoner was discharged, but for what cause it did not appear. Shortly after his leaving the situation it was discovered that an entry had been made in the day-book of Medicine supplied to a tradesman near Sandhurst, which it afterwards transpired had been paid for, and not accounted for by the prisoner, by whom the entry was made. Suspicion resulted from this omission which led to further inquiry, and it was then ascertained that several things belonging to the Surgery were missing, including a caustic pencil case and several Medical works. It was also found that the prisoner had obtained wearing apparel and other goods to a considerable amount from the tradespeople by means of false pretences—one of which was that he was engaged permanently as a Medical Practitioner, and was desirous of opening accounts. The police were communicated with, and it was found that he had succeeded in obtaining a fresh situation, under an assumed name, as Assistant Surgeon to Dr. T. L. Hales Smith, of Fetter-lane, Fleet-street, London, where he was apprehended by Sergeant Hyde, of the Surrey constabulary. Search was made in the prisoner's rooms, and several pawnbrokers' duplicates were found. The officer produced a list of the articles missing from Dr. Davies' Surgery, and on allusion being made to the caustic pencil case, Dr. Smith at once stated that it was presented to him by the prisoner shortly after his engagement. The prisoner cross-examined the several witnesses with all the ingenuity and skill of a barrister, but did not succeed in shaking their testimony. The prisoner in defence admitted having given the caustic pencil-case to Dr. Smith, but emphatically denied taking it from Dr. Davies' Surgery with any felonious intent. He also stated that it belonged to the old stock of the Orphanage Asylum at Frimley, of which establishment Dr. Davies was Medical officer; that he had used it in the Profession generally, but did not attach any particular value to it. The prisoner was formally remanded for the completion of depositions.

PUBLIC HEALTH.—The Government Bill upon this subject now before the House of Commons contains some clauses that should be generally known. Among nuisances to be abated by the authorities empowered to execute the Nuisances Removal Acts these are to be included:—A house or room so overcrowded as to be dangerous or prejudicial to health; a factory or work-place not already under the operation of the Factories or Bakehouses Acts not kept in a cleanly state, or not ventilated in such a manner as to render harmless as far as practicable any gases, dust, or other impurities generated in the course of the work that are injurious or dangerous to health; a fireplace or furnace for working engines by steam, or in any mill, factory, etc., which does not so far as is practicable consume its own smoke. But this last part of the clause is not to come into operation for a year in places where at present there is no law for compelling such consumption of smoke. A penalty not exceeding £5 is imposed for exposure in any public place or public conveyance of any person suffering from a dangerous infectious disorder without proper precaution against spreading it; and there is a like penalty on the owner or driver of a public conveyance who does not immediately provide for its disinfection after it has with his knowledge conveyed any such sufferer. Carriages for the conveyance of such persons may be provided by the local authorities. The sewer authorities may compel the owner of any house in their district which is without effectual drainage to remedy that defect. Various other powers are given by the Bill to the sanitary authorities for the sake of the public health.

THE following are the last week's Cattle Plague Returns.

| Census Divisions. | 1. Attacked. | | | Back cases reported in the week ending June 2, 1866. | 2. Result of reported Cases from the Commencement of the disease. | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Week ending May 19. | Week ending May 26. | Week ending June 2. | | Attacked. | Killed. | Died. | Recovered. | Unaccounted for. |
| Metropolitan Dist. | 5 | 4 | 8 | .. | 7883 | 3402 | 3712 | 318 | 451 |
| South Eastern Co. . | .. | 2 | 2 | .. | 4858 | 1685 | 2538 | 465 | 170 |
| South Midland Co. | 209 | 140 | 133 | 3 | 20382 | 8391 | 10066 | 1538 | 387 |
| Eastern Counties . | 73 | 49 | 37 | .. | 11365 | 5348 | 4832 | 788 | 397 |
| South Western Co. | 1 | 3 | 6 | .. | 1756 | 656 | 822 | 207 | 71 |
| West Midland Co. . | 216 | 193 | 135 | 14 | 14400 | 5897 | 6085 | 1508 | 910 |
| North Midland Co. | 378 | 246 | 170 | 28 | 18594 | 10584 | 6251 | 1218 | 541 |
| North Western Co. | 761 | 342 | 311 | 1138 | 69355 | 22992 | 34973 | 7668 | 3722 |
| Yorkshire . . | 144 | 93 | 76 | 14 | 34429 | 7784 | 18347 | 5933 | 2365 |
| Northern Counties. | 42 | 58 | 33 | .. | 8600 | 4895 | 2613 | 974 | 118 |
| Monmouthshire & Wales . . . | 48 | 42 | 25 | .. | 8212 | 1070 | 5791 | 1054 | 297 |
| Scotland . . | 55 | 32 | 24 | 30 | 46808 | 6214 | 28034 | 10702 | 1808 |
| Totals . | 1932 | 1207 | 960 | 1227 | 246642 | 78918 | 124114 | 32373 | 11237 |

This Return shows that 960 attacks were reported to have occurred during the week ended June 2, being a decrease of 247 on the previous week.

A considerable, but varying, number of "back cases" are reported every week. These cases, however, do not necessarily relate to the previous week only; they generally comprehend arrears of from six to eight weeks, and, in some instances, a longer period.

*Note.*—6 Inspectors who reported cases last week have not reported in time for this return—viz., for the county of Bucks, 1; Cumberland, 1; Lincoln, 1; Stafford, 1; for the Metropolis, 1; and for Scotland, 1. These inspectors returned 81 cases last week.

AMONG minor reforms, let us decapitate, if we can, all our Assistant-Physicians and Assistant-Surgeons, at home and abroad; and, rejecting the misleading frontispiece "assistant," leave them what they are, Physicians and Surgeons. Let us unite for adequate remuneration for labour. No false sentiment about the nobility of doing for nothing work which it is hoped will prove indirectly the source of fees, and which it is inwardly felt ought to be directly paid. "The labourer is worthy of his hire"—"A fair day's wage for a fair day's work," may not be very poetical, but they have the genuine smack of an honest British instinct.—*Address at the London Hospital Medical College, by Walter Rivington, M.S.*

# NOTES, QUERIES, AND REPLIES.

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He that questioneth much shall learn much.—*Bacon.*

The articles on Cholera Literature will be resumed in our next number, including notices of Dr. Macpherson's valuable work on "Cholera in its Home," Mr. Baker's edition of Dr. Southwood Smith, and Dr. Anstie's Notes on Epidemics.

*A Rural M.R.C.S.*—Get *Ollendorf's* French System. Any bookseller can supply it.

*A Medical Student.*—1. Yes; so the present Regulations say.—2. Odling and Williamson.—3. Cyanide of potassium.

*Mr. Thompson.*—Mr. Hancock's lectures were brought to a close on Friday.

*Small Pox Hospital.*—Inoculation was first tried on criminals in 1727.

"*Dr. Macaulay.*"—A portrait of Banister may be seen in the collection gathered at the South Kensington Museum, to which it has been lent, with others, by the College of Surgeons.

*University of New York.*—The Council of this Institution have just unanimously elected Dr. William Darling, F.R.C.S. Eng., to the Professorship of General and Descriptive Anatomy in the University.

*A Naval Surgeon.*—It was stated a few nights ago in the House of Commons that only three individuals had entered the Naval Medical Service since January last.

*J. H. and a Metropolitan Fellow.*—You are not the only correspondents complaining of the dinner to the Fellows taking place in London in July, when there are such favoured places as Greenwich and Richmond where it might be eaten in coolness and comfort.

*A Provincial Fellow.*—We are informed that the usual circulars have been sent to all the Fellows in the United Kingdom whose addresses are known at the College. In your own case it appears that last year the circular was returned through the "Dead Letter Office" endorsed "Gone away—left no address." Your name only, without address, appears in the College list; you should, therefore, at once write to Mr. Trimmer, the Secretary, who will rectify the mistake.

*Erratum.*—P. 609, second column, line 56, for "Syme," read "Lister of Glasgow."

### GRIFFIN TESTIMONIAL.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In consequence of the paucity of answers in favour thereof, the Committee of the above fund have given up the idea of a banquet to Mr. Griffin. As doubtless the College election will bring some Medical men to London, it is intended to make the presentation of the testimonial on July 5th proximo, unless the Poor Law Board should fix some other day to receive Mr. Griffin's deputation. In this latter case the testimonial will be given him immediately after the interview with the President. The time and place will be duly notified by printed circular. The testimonial is now on view at the manufacturers', Messrs. Mappin and Webb, 71 and 72, Cornhill. Intending subscribers, who have not forwarded me either their subscriptions or their *cartes de visite*, will obligingly do so without delay.

I am, &c.,
ROBERT FOWLER, M.D., Treasurer and Hon. Sec.
145, Bishopsgate-street Without, June 13, 1866.

### DR. MACLOUGHLIN ON "SYPHILIS"?

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—The Medical Committee, appointed on my suggestion by the Admiralty and by the War Office, "to study and to report if there is a syphilitic virus, and if so, what are its pathognomic symptoms on the genitals and on any other part of the body, and what is its rational plan of Medical treatment—have published the evidence of the Medical witnesses which they have examined, and they have also published the conclusions to which they have arrived. But they have not published the treatment which they recommend for this so-called syphilitic disease. Therefore, in the interest of the public and in the interest of Medical science, permit me, through the *Medical Times and Gazette*, to request the Medical Profession will be pleased to suspend their judgment on the above Report until the Committee have published the plan of Medical treatment they have decided to recommend, and until an answer is published to the above Report.

I am, &c.,
DAVID MACLOUGHLIN, M.D.,
Member of the Legion of Honour.
36, Bruton-street, Berkeley-square, W., June 9.

### ON THE TREATMENT OF WHOOPING-COUGH BY THE TOPICAL APPLICATION OF NITRATE OF SILVER.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—It is not my intention to enter into the pathology of whooping cough, but merely to point out how this troublesome affection may speedily be relieved by simple means. From the uncertain success attending the use of the various remedies, I was induced to try the topical application of a solution of nitrate of silver, ℈j., ℈ij., ad. ℥i., to the larynx, (which I believe was first recommended by Dr. E. Watson, of Glasgow), together with the administration of a mixture of chloric ether and morphia in doses proportionate to the age of the patient. The relief obtained from this mode of treatment after the failure of other means has induced me to continue its use, and from the experience of upwards of fifty cases during the last five years, I have every reason to be satisfied with it. The plan I adopt is that recommended by Dr. Horace Green, of New York, in follicular disease of the pharyngo-laryngeal membrane, and described by Dr. J. H. Bennett ("Principles and Practice of Medicine," second edition, page 591). The effect is, in the majority of cases, most marked; the peculiar spasmodic cough is changed in a few days, and frequently in the course of a week the patient is well.

I am, &c., **Fred. H. Morris, M.D.**

Cheltenham, June 5th, 1866.

### A Whalley to the Rescue.

Ho! Whalley and Newdegate rise and give aid,
And your efforts in Parliament throw into shade,
To the Medical Council be up and away,
For it's fast coming under Dominican sway!

### A Lay of the First Examination.

*Scene: Edinburgh. Time: the present.*

With Ellis and Quain I've dissected,
  And worked at my Holden at night,
Until, like a vessel injected,
  My brain with my learning is tight.
And what with extensor and flexor,
  Nerves, arteries, muscles, and veins,
The subject's the greatest perplexer
  To all but the mightiest brains.

The muscles attempting to state, I
  Just mix them all up in my mind,
I make the levator palati
  Arise from the coccyx behind;
And then, as a crowning disaster,
  When asked by a tutor last week,
I said that of course the cremaster
  Contracted the lips and the cheek.

The nerves are, excuse me, infernal;
  The brachial plexus I trace,
And cut the cutaneous external,
  Dissecting at too great a pace—
And on through the body, each plexus
  Gets harder and harder to me,
Oh, why were they classed so to vex us
  Poor fellows who seek an M.D?

I'm yearning for chemical knowledge,
  For oxides, and nitrates, and all;
They don't want such stuff for the College,
  And little will do for the Hall.
Work o'er, as a gentle corrective,
  At Rutherford's(a) classes I show
Affinity truly elective
  For whisky mixed well with HO.

I'm sure I've made due preparation
  In physiological lore,
I've read up the nerves of sensation
  Till Bennett can teach me no more.
While still in my dreams I am hearing
  My lectures again and again,
And Bennett at Virchow is sneering
  With Leucocythæmic disdain.

When strolling with some pretty cousin,
  Whose eyes are as bright as each flower,
And gathering plants by the dozen,
  Botanical knowledge is power.
And yet, to be faithful recorder,
  At eight in the morning I find
The name of each natural order
  A very unnatural "grind."

When calmly enjoying the oyster,
  Fresh come from its Newhaven home,
And making each morsel the moister
  With "half-and-half," headed with foam,
To think it's called "gasteropodic,"
  The bivalve I lately enjoyed,
Will make a sensation spasmodic
  Arise in the crico-thyroid.

And oh, were my troubles but over,
  And oh, was I once an M.D.,
I'd feel myself fairly "in clover,"
  And rush to the far-foaming sea.
And ah, how Belinda would meet me,
  With smiles far too witching to last,
And how my old comrades would greet me,
  Were passing a thing of the past.

**Civis Academiæ Edinburgensis.**

### Poor-law Medical Reform.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I shall feel obliged by your allowing me, through the medium of your journal, to inform the Poor-law Medical officers, and I may say the Profession generally, for it concerns all, that the Vaccination Bill has passed through the Select Committee, and is again before the House of Commons.

In my communications to the Select Committee I suggested alterations in the title and preamble, and in nineteen clauses, or proposed to substitute nine new clauses. On examining the Bill, I find the title and preamble still stand without Wales being mentioned, but twenty three clauses have been altered, verbally and otherwise, and one clause (5) added; the four forms in the schedule have also verbal alterations. Allow me here to state that all my suggestions have not been adopted. With due appreciation of the value of the efforts made by the meeting held at the Freemasons' Tavern on April 10, and by private individuals, still it appears to me that the efforts made by the Poor-law Medical Reform Association have had considerable influence—First, in actually stopping the Bill, when about to go into Committee of the House of Commons, by means of a pamphlet forwarded to each member and by private communications, and secondly, by suggestions made to the Select Committee itself; but that influence could never have been brought to bear had not money been subscribed to pay the expenses of printing, etc. I have no hesitation in saying that the amendments now proposed in the Vaccination Bill in a pecuniary point of view will amply repay the members of the Poor-law Medical Reform Association for all the money they have subscribed during the last ten years, and I hope will stimulate the entire body of Poor-law Medical officers to subscribe to the funds of the Association, in order to enable it to prosecute with vigour the changes sought in the genera administration of the Medical relief of the poor. The seed has been sown, the eyes of the public have been opened, a large body of the House of Commons now listen to us, and the time cannot be far distant when very considerable changes must be made in the Medical relief of the poor. Clauses 5 and 6 in the amended Vaccination Bill (quoted below) will show the pecuniary changes proposed on and after January 1, 1867.

The public vaccinators are to receive not less than 1s. 6d. for each successful primary vaccination performed in a workhouse; this is a gain, as at present no fee is legally payable. The 1s. 6d. fee now paid for vaccinations performed at a station within one mile of the residence of the Medical officer is not increased, but 6d. is added to each fee for all vaccinations performed at a station over one mile and under two miles distant, thus making the fee 2s. Beyond two miles the fee which is now 2s. 6d. is to be not less than 3s. In addition to these payments, it is proposed by Clause 5 to pay 1s. extra for each child whom the vaccinator has successfully vaccinated; but that will depend on the "number and quality" of the vaccinations, on the "reports" made to the Lords of H.M. Council, and the time to which the "award" relates. This clause is ambiguous, but on inquiry I find this payment is intended to depend upon the manner in which the vaccination is carried out—that is, if done in accordance with the approval of the Inspectors. My correspondent says, "If you glance at any of the Inspectors' reports you will see on what system they go in judging the vaccination of a place, and by their Reports the Medical Officer of the Privy Council would be guided to recommend the payments in question. They would be additional payments, made on the principle of payment for results. I hope it will be of general benefit to the public vaccinator, whose interests will be identical with those of the public." The revaccination of those previously successfully vaccinated will be under special arrangements, and only paid for at two-thirds of the fee of successful primary vaccination. I regret we have not obtained more, but if we do our duty well, and Clause 5 be fairly carried out, the Bill will be a gain to us of some thousands per annum, and I feel sure place the public vaccination of this country on a more satisfactory footing. That the Bill might have been more efficiently amended cannot admit of a doubt, but official influence was too strong for us; and a satirical private print, forwarded to me by a member of the Select Committee (printed by Standidge and Co.—worth looking at) representing Poor-law vaccinators receiving £200,000 a year, the Registrars £20,000 a year, Simon, Bruce, and Co. £10,000 a year, etc. etc., had its weight in preventing our receiving that redress which we desired. I have again addressed the Poor-law Board, asking that a deputation of Poor-law Medical officers may be permitted to wait upon them on July 5th, which I trust may be granted.

I am, &c. **Richard Griffin.**

12, Royal-terrace, Weymouth, June 9, 1866.

"*Clause* 5.—On reports made to the Lords of her Majesty's Council with regard to the number and quality of the vaccinations performed in the several vaccination districts of England, or any of them, the said Lords may from time to time, out of monies provided by Parliament, and under regulations to be approved by the Lords Commissioners of her Majesty's Treasury, authorise to be paid to any public vaccinators in addition to the payments received by them from guardians or overseers, gratuities, not exceeding in any case the rate of 1s. for each child whom the vaccinator has successfully vaccinated during the time to which the award of the said Lords of the Council relates."

"*Clause* 6.—Every such contract for vaccination shall provide for payment in respect only of the successful vaccination of persons, and so that the rate of payment for primary vaccination shall be not less than the following—that is to say, for every such vaccination done at an appointed station situated at or within one mile from the residence of the vaccinator or in the workhouse of the union or parish, not less than one shilling and sixpence, and for every such vaccination done at any station over one mile and under two miles distant from his residence, not less than two shillings, and for every such vaccination done at any station over two miles distant from his residence, not less than three shillings: such distance being measured according to the nearest public carriage road."

### The United English and Scottish Life Assurance Company and their Mode of Appointing Medical Referees.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I enclose the following for your inspection, and, if of sufficient importance, for insertion in your journal. Having had during the last few years similar applications from insurance offices, I think it is quite time to call attention to such a system of appointing referees. I wish to refer particularly to the following:—viz., "Referee to insure in the office for not less than £600!" thus taking "greater interest in its welfare!" and the offer to have "your name as the local referee in all the advertisements and circulars of the company!!"

I am, &c., **Fred. W. P. Jago.**

3, St. Andrew's-terrace, Plymouth.

(Copy.)

"5, Union-terrace, Plymouth, June 6, 1866.

"Sir,—I have been requested by the directors of the United English and Scottish Life Assurance Company to ask you if you would feel inclined to act as their Medical referee for these towns and their neighbourhood, with a remuneration fee of one guinea for each examination. The directors have laid it down as a rule that the Medical gentlemen of the Company insure their own lives or the life of some one of their family with the same, for at least £400, so as to make them constituents of the Company, and therefore taking greater interest in its welfare. Should you entertain this proposal, please let me have your decision at your earliest convenience, when I will, if favourable, at once report to the directors, and insert your name as the local referee in all the advertisements and circulars of the Company. Hoping to hear soon from you, I have the honour to be, Sir, your obedient servant,

"**Frederick Schade.**

"To F. W. Jago, Esq., Surgeon, 2, Frankfort-street, Plymouth."

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(a) *Taverna Edinburgensis.*

"No. 3, St. Andrew's-terrace, Plymouth, June 7, 1866.

"Sir,—I have to acknowledge the receipt of your letter of yesterday, asking me to become the Medical referee for the United English and Scottish Life Assurance Company, on condition that I first insure in the office for £600. It makes a very material difference to any one accepting your offer whether your proposal has been made to him only as a *bonâ-fide* referee, or whether a similar note has been sent to other Medical men in Plymouth. Before replying to you I shall feel obliged by an explanation.—I am, Sir, yours obediently, "Fred. W. P. Jago.

"Mr. F. Schade, 5, Union-terrace, Plymouth."

The following is the reply, headed conf. (confidential):—

"Sir,—In acknowledging receipt of your letter of the 7th instant, I beg to state that I have sent a letter similar to the one addressed to you to some other Medical gentlemen in Plymouth, as the Company requires *two* referees. Should you object to this, I am sorry, on the Company's account, that it will lose your valuable assistance in promoting its success.

"Awaiting your final decision, I am, Sir, your obedient servant,

"Frederick Schade.

"To Mr. Fred. W. P. Jago, Surgeon, 3, St. Andrew's-terrace, Plymouth."

"3, St. Andrew's-terrace, Plymouth, June 7, 1866.

"Sir,—Having had applications from others on previous occasions to be appointed referee, *provided I insured my own life*, was the reason of my inquiry as to the real nature of your letter to me.

"As was suspected, the chief aim seems to be to obtain *insurances*, and not so much the Medical referees, by sending *circulars* to various Medical men in this town. I cannot consider your letter as 'confidential,' being convinced that such applications from insurance offices should be freely and openly discussed and exposed.

"The method adopted is an ingenious one for extending business, and I am happy to find that that of the United English and Scottish Life Assurance Company requires two Medical referees for Plymouth. I must remind you that your first letter speaks only of one, as it says that if I will insure my life you will 'at once' report to the directors, and insert my name as *the* local referee 'in all the advertisements and circulars of the Company!' How tempting! This brilliant prospect is best seen at a distance, and I beg therefore to decline insuring my life for the sake of a few fees. I am, Sir, yours truly,

"Mr. F. Schade. Fred. W. P. Jago."

"5, Union-terrace, Plymouth, June 7.

"Sir,—In reply to your note of to-day, I beg to express my astonishment at the way you want to turn matters, and to make it appear now as if I only had written to you for the sake of the assurance, and not to secure you as a Medical referee to the Company.

"The condition I mentioned to you is fixed by the Directors, and therefore I have only to act accordingly, but you are certainly very wrong in your ideas on this subject—I must repudiate them altogether; at any rate, you have no occasion to express yourself in such offending language, because you have nothing to complain of. If you have no intention to insure your life, leave it alone, but don't offend the agent of the Company, who is not responsible for the instructions received from the Directors.

"You say my first letter only speaks of one referee, but this is not the fact. In addressing you as a single person, I must speak in the singular and not in the plural; insert your name as the local referee, and if you like, I can show you the letters received from the managing director of the Company. Expressing my regret at your misrepresenting my intention in this way, I am, Sir, your obedient servant,

"Mr. F. W. P. Jago, "Frederick Schade.

"3, St. Andrew's-terrace, Plymouth."

Here the correspondence ends, and I leave it to your readers to judge in a matter of some importance to Medical men. The agent has applied to himself what only concerns him as an agent, and I don't think I have misrepresented or misunderstood anything. Nor should the office ask any one to be *the* Medical referee on condition that he insure for not less than £600, when it turns out that others here (as confessed by the agent and from my own inquiries) have had similar letters sent to them at the same time. Who would be *the* Medical referee if *all* accepted the offer (as they might) on the Company's terms?

Being interested in the office because insured therein, is a plausible, but bad argument, and degrading as used towards the Profession. I am simple enough to think that a disinterested Medical referee is likely to be more impartial.

That about publishing the name of the referee reminds one of the rattle in the tail of the rattlesnake—at all events, it is what "any (Medical) follow *can* understand." I am, &c.,

Fred. W. P. Jago, M.B. Lond.

### ERECT VISION FROM INVERTED IMAGE ON THE RETINA.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Before we offer our explanation on this much-disputed subject, we shall speak generally of the structure of the retina. This consists principally of two distinct portions: first, the expansion of the optic nerve in front; and second, a peculiar apparatus behind, consisting of what are generally called the "cones and rods" and the "granules and vesicles," the latter bodies being in front of the former. The relative position of the nerve expansion and the hind apparatus of the retina has long been misunderstood; but lately it has been finally decided as above mentioned.

It has also been made known to physiologists that the two portions of the retina are as distinct in function as in structure. The anterior portion: the expansion of the optic nerve is not at all concerned in receiving premarily the stimulus of light. This is evident from the fact that the optic disc, the point of entrance of the optic nerve, where there is none of that hind apparatus above described, is most deficient in the power of receiving visual impression, while the "yellow spot," where no other structure is present except the "cones," is the most sensible portion of the entire retina. From the above, it follows unequivocally that the stimulus of light cannot act primarily on the optic nerve expansion, but only on the apparatus behind it; and, therefore, the image of the object that is seen is not formed upon it, but upon that apparatus; consequently the inverted images of objects are behind the expansion of the optic nerve, and not upon it, nor in front of it. Now, it can be easily understood that the hind apparatus upon which the inverted images are depicted may so act upon the expansion of the optic nerve as to produce impression of erect images upon it, which is then communicated to the percipient principle by the nerve in that condition.

The explanation of this phenomenon which has been given by Drs. Muller and Volkman is inconsistent with that pervading character of all Nature's plans of work, which is absolute truthfulness and simplicity, while that of Dr. Carpenter is, for other reasons, alike unnatural. But we shall examine these explanations minutely.

*On the Explanations of Erect Vision from Inverted Image on the Retina.*—It is hardly possible, neither necessary, to go over all of the multitudinous explanations which have ever been proposed of this singular phenomenon. I shall, therefore, select only three which have been recently put forth, and are more or less accepted by the public, and shall consider them *seriatim*.

One of these, held by Sir D. Brewster and enunciated by him as follows:—"The lines of visible direction necessarily cross each other at the centre of visible direction, so that those from the lower part of the image go to the upper part of the object, and those from the upper part of the image to the lower part of the objects, . . . so that any inverted image necessarily produces an erect object.—"*Optics," by Sir D. Brewster: Cause of Erect Vision from an Inverted Image.*

Everybody will see this explanation distinctly means that the percipient principle arrives at the knowledge of the figures of an object, directly from the object itself, and is unaffected by its image on "the recipient portion"(a) of the retina, whatever its condition may be, inverted or erect; and the explanation will hold good if such were the case; but who will say that such is the fact? On the other hand, none would deny that all the knowledge which the percipient principle derives of an object from vision merely, is obtained only from its image on the retinal recipient portion, quite unaffected by the object itself. But this explanation implies much more than this; for what is meant by the "lines of visible direction?" They are certainly not the same as the rays of light thrown by an object upon the retina, for the passage of the latter is described as quite contrary to that of the former; but we are told that these so-called "lines of visible direction" proceed from the part of the "recipient apparatus" affected by the rays of light in their track and crossing each other as they do. Now, we may ask what are these lines of visible direction? As far as we are aware, they are nothing visible or tangible, and, in fact, do not belong to any portion of the material apparatus of vision. They may belong to the part which the percipient principle takes in the act of vision. At least, this view of them has been taken by Dr. Carpenter, in his Physiology, par. 610. He says, "We immediately refer the cause of the excitation of any spot of the retina by a luminous impression to an objective source in the 'line of direction,' which passes from that spot through the centre of direction." This hypothesis is virtually the same as the "mental projection" of Professor Muller, only expressed in a complicated manner by adding the phrase "line of direction." It means nothing more or less than that the mind, instead of deriving the knowledge of an object from its image on the recipient apparatus, which is inverted, knows directly the object itself, as it is external to ourselves. Every one will see that, however positively the upholders of the explanation under consideration may deny this bare nature of their hypothesis, yet this is really what they mean. Obviously preposterous as this hypothesis is, it is yet held by some; I shall, therefore, mention the objections which are opposed to it.

First. We are conscious of having no such "lines of visible direction" or "projection."

Second. It places vision external to the mind at the external object, for it must be beyond the point where the so-called "lines of visible direction" cross each other in order to be erect.

Third. In case of this hypothesis being true, the mind will have the knowledge of distance of objects, which is the same as the length of the lines of visible direction from mere vision, but we know we have it not.

I may, therefore, draw the conclusion that no such thing as "lines of visible direction" exist, and that erect vision from inverted image on the recipient apparatus is no effort of the mind.

The second explanation is held by Dr. Carpenter, and expressed by him as follows:—"The visual perception is obviously not a mere transfer of the sensorial impression, but is a mental state excited by it, and, therefore, related to it as an effect to its cause; and we know no reason why it should be less natural for the retinal picture to suggest to the mind the notion of erect position than for it to have the contrary effect."—*Dr. Carpenter's Physiology, par.* 610.

Before we examine this hypothesis more minutely, we shall make a remark which is obvious from a mere superficial reading of the above statement—namely, that even as explained and demanded by the author, the chance of erect or inverted vision from the inverted picture in the eyes is evenly divided on either side; that is, there is as much probability at best for the hypothesis of erect as of inverted vision. But every one who has an adequate sense of the precision and determination of purpose with which Nature works, will see that she will hardly leave such a serious point at issue to be decided by chance; but this is merely to rouse suspicion, and lead us to inquire more diligently into the real state of things in this explanation.

It is expressly told by the author, a few lines preceding the quotation, that in vision "our consciousness is not impressed with the discordant image on the retina." In fact, he says that the retinal picture has nothing more to do in the act of vision than to excite a mental state. But every one is aware of the miserable position of this theory: for although it enables the author to explain away the difficulty of reconciling the discrepancy in position between the retinal and visual picture, it creates another difficulty, which is infinitely more grave than the one it obviates; for, it leaves to account for the fact, why do we perceive some definite, and fixed, and invariable image or figure at all in vision, since the retinal image does only but excite a (any) mental state? Then again, on pricking the optic nerve with a pin we excite a mental state, but we do not see a definite figure, but only an indefinite mass of light. Can there be a more clear demonstration of the fact that the retinal picture is essential to the vision of objects?

No doubt Dr. Carpenter has been misled by the experiments of Dr. Serre. His experiments certainly prove that when pressure is made by the point of the finger, or by any other circular surface, upon a part of the globe, over the interior of which the retina is continuous, the spectrum or phosphene (as it is termed by Dr. Serre) is also circular, and the compressing body, on the other hand, be square at its extremity, the "phosphene" is also square; and if it be triangular, the phosphene is triangular too. This only proves that the recipient apparatus is susceptible of being impressed with images of objects, by other physical stimulus besides light, as pressure, when made over it. But it by no means proves that the retinal picture is not the cause of the visual image. Dr. Carpenter is no doubt aware of these imperfections in his hypothesis, and therefore he has supplemented it with the preceding explanation of Sir D. Brewster.

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(a) In order to avoid confusion, the hind apparatus of the retina, on which images of objects are formed, is called the "recipient portion" of the retina.

*Third Explanation*, held by Drs. Müller and Volkmann. I mention it only to say that it requires no long serious attempt at refutation, it being opposed to the very first principles which are the basis of all our knowledge. It has long been abandoned, after it had served its purpose in the absence of a better one.

Before we leave this subject, we shall explain the cause of our "sense of direction" in vision. We have proved before that there is no such thing as "lines of visible direction." Notwithstanding, we can easily explain the cause of "sense of direction" without them. The "cones and rods" which we have shown are the apparatus for the primary reception of light, are arranged with a certain degree of obliquity, so as to be inclined to a point in the retina. This point is the "centre of visual direction." This phrase is, of course, here used in a sense quite different from that in which it is used by the upholders of the theory of "lines of visible direction." We use it to mean the point in the retina towards which the "cones and rods" are inclined, and which may be its centre or a little to one or the other side of it. The rays of light thrown by an object upon the recipient apparatus, the "cones and rods," make varying angles with this centre of visual direction; and these angles are the only index to the direction of external objects.

For the benefit of readers, we shall add the following summary of the whole discussion:—

1. The retina consists of two distinct structures, quite different in function from each other: the one anterior, consisting of the expansion of the optic nerve, and the other posterior, consisting of what are called "cones and rods" and "granules and vesicles."

2. The posterior portion only is susceptible of being acted upon by physical stimuli, which produce images of objects upon it, but in an inverted position.

3. The anterior portion, the expansion of the optic nerve, is susceptible of being acted upon only by the posterior apparatus, which is capable of inducing that condition in it which produces vision.

4. All our knowledge of the external objects which we derive from mere vision, is obtained from their images on the recipient apparatus of the retina, and therefore such images are essential to vision.

5. The change of position of visual image from inverted to erect is effected by the action of the recipient apparatus upon the expansion of the optic nerve.

6. Visual direction does not depend upon the so-called "lines of visual direction," which have no existence in nature, but upon the angles which rays of light make with the centre of visual direction, which we have explained, is either the central point of the recipient apparatus, or any other point in it, to which the "rods and cones" are inclined.

7. It is a fact in metaphysics that from mere sight we can have no knowledge of distance; and second, that so entirely is our knowledge of external objects from mere vision dependent upon their retinal images, that we could not know from mere vision whether the objects we perceive in vision existed external to ourselves or not; that is, we could have no idea of the external world from mere vision.

MATI LAL MITRA.

4, Cumin-place, Grange, Edinburgh, March 28.

**COMMUNICATIONS** have been received from—

THE ROYAL COLLEGE OF PHYSICIANS; DR. PAVY; MR. J. A. VINEN; APOTHECARIES' HALL; DR. J. G. FLEMING; MR. R. GRIFFIN; A. BOGGS, Esq.; LORY MARSH, Esq.; J. BAXTER LANGLEY, Esq.; DR. LEARED; J. G. FRENCH, Esq.; MEDICAL STUDENT; D. MACLOUGHLIN, M.D.; F. W. P. JAGO, Esq.; A RURAL M.R.C.S.; M. D. OWEN, Esq.; F. C. SKEY, Esq.; DR. GEORGE JOHNSON; DR. B. W. RICHARDSON; DR. BALLARD; DR. HUGHLINGS JACKSON; DR. LIONEL BEALE; MR. J. CHATTO; DR. TILBURY FOX.

**BOOKS RECEIVED—**

The Dental Journal (May)—Barker's Right Food for Children—Jones, Defects of Sight and Hearing (2nd edition)—Smith's Thermometric Observations on the Fevers of Children—The St. Louis Medical Reporter (May)—Barclay, On Gout and Rheumatism—Ernest Graham—The True and the False Sciences—Pearse's Notes on Health—Lee's Baths of France.

**NEWSPAPERS RECEIVED—**

The Jamaica Guardian—The Glasgow Herald—The Sunday Gazette—The Co-Operator.

# VITAL STATISTICS OF LONDON.

*Week ending Saturday, June 9, 1866.*

## BIRTHS.

Births of Boys, 1006; Girls, 953; Total, 1959.
Average of 10 corresponding weeks, 1856-65, 1770·1.

## DEATHS.

| | Males. | Females. | Total. |
|---|---|---|---|
| eaths during the week .. .. .. | 676 | 707 | 1383 |
| verage of the ten years 1856-65 .. .. | 560·8 | 527·2 | 1087·5 |
| verage corrected to increased population.. | .. | .. | 1196 |
| eaths of people above 90 .. .. .. | .. | .. | .. |

## DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

| | Population, 1861. | Small pox. | Measles. | Scarlatina. | Diphtheria. | Whooping-cough. | Typhus. | Diarrhœa. |
|---|---|---|---|---|---|---|---|---|
| est .. | 463,388 | 2 | 12 | 5 | 1 | 9 | 6 | 7 |
| orth .. | 618,210 | 12 | 9 | 9 | 1 | 14 | 16 | 6 |
| entral .. | 378,058 | 2 | 6 | 5 | 1 | 7 | 10 | 1 |
| ast .. | 571,158 | 10 | 24 | 16 | 1 | 14 | 6 | 5 |
| outh .. | 773,175 | 8 | 20 | 8 | 1 | 31 | 15 | 3 |
| otal .. | 2,803,989 | 34 | 71 | 43 | 5 | 75 | 53 | 22 |

## METEOROLOGY.

*From Observations at the Greenwich Observatory.*

| | |
|---|---|
| Mean height of barometer .. .. .. .. .. .. | 29·878 in. |
| Mean temperature .. .. .. .. .. .. .. | 61·0 |
| Highest point of thermometer .. .. .. .. .. | 84 7 |
| Lowest point of thermometer .. .. .. .. .. | 50·7 |
| Mean dew-point temperature .. .. .. .. .. | 54·1 |
| General direction of wind .. .. .. .. .. .. | S.W. |
| Whole amount of rain in the week .. .. .. .. | 1·48 |

## BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, June 9, 1866, in the following large Towns:—

| Boroughs, etc. | Estimated Population in middle of the Year 1866. | Persons to an Acre. (1866.) | Births Registered during the week ending June 9. | Deaths. Corrected Average Weekly Number.* | Deaths. Registered during the week ending June 9. | Temperature of Air (Fahr.) Highest during the Week. | Temperature of Air (Fahr.) Lowest during the Week. | Temperature of Air (Fahr.) Weekly Mean of the Mean Daily Values. | Rain Fall. In Inches. | Rain Fall. In Tons per Acre. |
|---|---|---|---|---|---|---|---|---|---|---|
| London (Metropolis) | 3067536 | 39·3 | 1959 | 1400 | 1383 | 84·7 | 50·7 | 61·0 | 1·48 | 149 |
| Bristol (City) . . | 163680 | 34·9 | 119 | 73 | ‡68 | 78·4 | 50·4 | 60·3 | 0·64 | 65 |
| Birmingham (Boro') | 335798 | 42·9 | 207 | 163 | 137 | 73·6 | 48·3 | 59·6 | 0·46 | 46 |
| Liverpool (Borough) | 484337 | 94·8 | 327 | 281 | 358 | 71·0 | 54·1 | 61·8 | 0·64 | 65 |
| Manchester (City) . | 358855 | 80·0 | 239 | 203 | ‡183 | 75·0 | 49·0 | 60·6 | 0·64 | 65 |
| Salford (Borough) . | 112904 | 21·8 | 102 | 57 | 64 | 71·8 | 50·4 | 58·7 | 0·66 | 67 |
| Sheffield (Borough) . | 218257 | 9·6 | 168 | 115 | 118 | 72·3 | 48·5 | 57·5 | 0·40 | 40 |
| Leeds (Borough) . | 228187 | 10·6 | 196 | 116 | 149 | 77·3 | 44·5 | 59·1 | 0·32 | 32 |
| Hull (Borough) . | 105233 | 29·5 | 64 | 49 | 38 | .. | .. | .. | .. | .. |
| Nwcastl-on-Tyne, do. | 122277 | 22·9 | 95 | 65 | 68 | 68·0 | 45·0 | 56·1 | 0·22 | 22 |
| Edinburgh (City) . | 175128 | 39·6 | 124 | 84 | 93 | 69·7 | 47·0 | 54·5 | 0·40 | 40 |
| Glasgow (City). . | 432265 | 85·4 | 347 | 252 | 281 | 68·4 | 47·9 | 56·8 | 0·85 | 86 |
| Dublin (City and some suburbs) . | 318437 | 32·7 | 202 | †156 | 151 | 70·1 | 46·0 | 56·2 | 0·96 | 97 |
| Total of 13 large Towns . . . | 6122894 | 34·4 | 4149 | 3014 | 3314 | 84·7 | 44·5 | 58·5 | 0·64 | 65 |
| Vienna (City) . . | (1863)<br>560000 | .. | .. | .. | Week ending June 2.<br>.. | Week ending June 2<br>.. | .. | §<br>.. | .. | .. |

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·878 in. The atmospheric pressure declined to 29·66 in. on Sunday, and rose to 30·11 in. on Friday.

The general direction of the wind was S.W.

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* The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.

† Registration did not commence in Ireland till January 1, 1864; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in that city were the same as the averages of the rates in the other towns.

‡ The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

§ The mean temperature at Greenwich during the same week was 56·2°.

# APPOINTMENTS FOR THE WEEK.

### *June* 16. *Saturday* (*this day*).

*Operations* at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free Hospital, 1½ p.m.

### 18. *Monday.*

*Operations* at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.

### 19. *Tuesday.*

*Operations* at Guy's, 1 p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; St. Peter's Hospital for Stone, 3 p.m.

ANTHROPOLOGICAL SOCIETY OF LONDON, 8 p.m. Meeting.

### 20. *Wednesday.*

*Operations* at University College Hospital, 2 p.m.; St. Mary's, 1¼ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.

### 21. *Thursday.*

*Operations* at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.

### 22. *Friday.*

*Operations*, Westminster Ophthalmic, 1½ p.m.

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# ORIGINAL LECTURES.

## CLINICAL LECTURE ON A CASE OF LITHOTOMY.

By JOHN ADAMS, F.R.C.S., M.R.C.S.,
Surgeon to the London Hospital.

Gentlemen,—I take the opportunity to direct your attention to the case of a boy of about 9 years of age on whom I operated some ten days ago, and who is now able to pass his water *per urethram*, having progressed very satisfactorily from the time of the operation; and I call your attention to the case on account of its extreme simplicity, and because I think there is usually too much anxiety expressed in such cases. The operation of lithotomy is so enveloped in supposed difficulties, and is attended with so many imaginary risks, that by some it is altogether declined. I think this is quite wrong, and I am firmly impressed with the idea that if a few simple circumstances are attended to, no Surgeon with such a knowledge of anatomy as every Surgeon ought to possess need decline the operation on the score of its difficulties. Let us now consider the case before us. A little boy, aged 8 or 9, was brought to the Hospital about a fortnight ago, complaining of a frequent desire to make water, and micturition was always accompanied by great pain, which was more severe after the passing of the water. I suspected that there was a stone in the bladder, and I satisfied myself that he had no phymosis, which, you are aware, induces by reflex irritation most of the symptoms of stone. With the steel sound I felt the stone at once, and admitted him into the Hospital, directing that a few grains of carbonate of soda should be given him thrice daily, and that he should take some castor oil occasionally, and that he should be kept in bed. The soda has a soothing effect on the neck of the bladder, which is the most sensitive part of the viscus, and I think in this way it does good—indeed, so powerful is its influence in this respect that it often happens that all the symptoms of stone vanish under its use, and the patient is reluctant to allow any further interference in his case.

In this little boy some mitigation of his sufferings occurred; but, being certain that a stone was in the bladder, I cut him, and removed a stone about the size of a filbert, and composed of the lithate of ammonia.

You will probably have observed that no water was injected into the bladder, as I felt sure that some urine still remained, and I was not solicitous on that point, and that, when he was tied up (the necessity for which in children under chloroform is by no means apparent), I passed the staff, and, after a moderately-sized opening made deeply into the ischio-rectal space, the membraneous part of the urethra was opened, and the incision into the neck of the bladder was made with Blizard's knife carried along the groove of the staff. I followed the instrument with my left forefinger into the bladder, and felt the stone and removed it with the forceps. If I had had any doubt about the entry of my finger into the bladder, which may by possibility happen in the adult, where there is a deep perinæum, I should not have removed the staff, but I should have carried a blunt gorget along its groove as far as it would pass, and run the forceps along it until I had satisfied myself that I had felt the stone with the forceps. This is never requisite in a child, for, although the bladder is not so near the perinæum as a person ignorant of anatomy might suppose, the interior of the bladder can always be reached by the Surgeon's forefinger; at any rate, I advise you never to introduce your forceps until you are certain that you are in the bladder, for this is a fatal error, and, if persisted in, it will lead most assuredly to the destruction of your patient. It would be infinitely better to desist at once from the operation, however unpleasant this may be, than to be groping in the dark and trying to find the stone, which of course, under such circumstances, you cannot do.

In this little boy there was some bleeding, so I secured one artery with a ligature, and I passed a piece of lint deeply into the wound to be retained two hours only, which stopped all bleeding, and I sent him to bed. He has had no bad symptom. I cannot help thinking that patients are often damaged by too much solicitude; they are made to run the gauntlet of so much meddlesome interference that they very often don't get fair play. Thus a patient is sounded, and a stone is felt, and he is brought into the theatre for operation, when the Surgeon passes the sound and first feels the stone indistinctly, and then it eludes the sound altogether; then the unlucky patient is poked about first by one and then by others, still the stone is unperceived. Then the bladder is injected, and the sounding takes place again, and at last the patient is sent to bed, and he dies of peritonitis, or the bladder becomes so much inflamed that the Surgeon cannot cut him, and he sinks under his disease. Gentlemen, having felt the stone once distinctly, and once again, however indistinctly, just prior to the operation, don't ask all the bystanders to annoy your patient by turning the sound right and left, pushing it backwards and dragging it forwards, first with this sound and then with that, but act upon your own conviction, and proceed to cut, and you will not be disappointed. You see, therefore, that patients may die without the operation, and I remember Mr. Headington, formerly a Surgeon of this Hospital, used to relate the case of a child who died after rough sounding, and whose death was attributed to the inflammation of the bladder, in consequence of the stone having been broken up into many fragments, an explanation which it is difficult to reconcile with our present knowledge of the effects of stone-breaking in lithotrity, which is usually followed by a diminution of symptoms; but the child died unoperated on. All Surgeons of experience counsel a free external incision and a limited internal incision through the neck of the bladder, and the advice is sound and quite in accordance with experience. The opening into this boy's bladder was only sufficient to allow the forefinger to pass, but the stone was small, about the size of a filbert, and was readily extracted. In the summer I cut a man in whom the stone weighed seven ounces, and in this case the opening into the bladder was no larger than what I have stated, nevertheless the stone was extracted with comparative facility, and the patient recovered, the external opening being of very large size. In such cases the neck of the bladder and prostate are most probably lacerated, although they both yield considerably. From my own experience, I am sure this is a very important point, and I am certain that death is often the result of a neglect of it. I remember to have lost two patients from inattention to this, and they have made a forcible impression on my mind. I do not boast of any extraordinary experience or success, but most of the cases I have operated on have been children, and these generally do well if the operation is performed without violence; but in the one instance alluded to I thought I could extract the stone with my finger, and foolishly enlarged the opening I had made into the bladder by cutting; the consequence was this—the opening into the bladder never healed, and the child died after a lingering illness, worn out by abscesses between the rectum and bladder, which I could not cure, although I freely laid them open.

The other case was that of an adult, on whom I operated four years since, and removed without difficulty four calculi of moderate size; but the man was sent to me again, with symptoms of stone, two years afterwards, and I cut him again, expecting no difficulty in the case. I removed through a limited incision three moderate sized stones, but I found a very large one left behind, and, as I could not get this away easily, I most reluctantly enlarged the opening into the bladder and got the stone out. This man did well for some time, but he had abscesses about the bladder and rectum, and pelvic cellulitis and inflamed hips and buttocks; and, although he left the Hospital, and went to his native county, Norfolk, in a fair state of health, with the opening into his bladder nearly healed, he eventually sank, as I understand. I attribute this patient's death to bad cutting, and will never again enlarge the incision originally made into the neck of the bladder, however much I may be urged to do so. I am quite convinced that the safety of the patient much depends on the nature of your incision into the bladder, and that if you can't get a stone out where the incision is small, you can do no good by enlarging it by cutting it. The stone, if of large size, when drawn through the opening dilates it, and probably enlarges it by laceration, but this is better than cutting. The only exception that I can see to this rule is where the prostate is large and rigid, and where it would be impossible to enlarge the opening without cutting.

When I finished the operation I sent the patient to bed, but I did not tie the legs together; and why? Because I not only thought it unnecessary, but positively injurious. I remember well that formerly the legs of a patient after lithotomy were always tied closely together, and I have ever seen the buttocks strapped together with adhesive plaster. Mark well what may happen if this be done. When the Surgeon comes down four or five hours afterwards to see the patient he finds him in great distress, with a quick pulse, possibly vomiting, and complaining of unusual pain in the belly, he finds also that no urine has passed by the wound; he atributes this condition to the blocking up of the wound by coagula, and he therefore oils his forefinger, passes it through the wound into the bladder, breaks down the coagula and thus liberates the pent-up urine, the cause of all the mischief, and the patient is relieved at once. You may ask, what are the best instruments to use in lithotomy? and the answer is not easy because there are so many in use and there is such variety according to the ideas of different Surgeons, and what is safe in one man's hands may not be so in another's; although I am quite of opinion that if you know your anatomy, and have sufficient confidence in this knowledge, you may use what instrument you please. I have never used any other means of cutting than the lateral operation, in which the incision into the bladder has been made with Blizard's knife. This is a beak knife, and runs readily along the groove of the staff into the bladder. Some use the gorget, but this instrument is going out of fashion. Others use the rectangular staff of Buchanan; this, I confess, I do not like, but it appears very safe. Some use a straight staff and a single scalpel to make both the external incision and the lateral cut into the bladder; the only inconvenience which I see in these instruments is that the knife has more than once been made to transfix the posterior part of the bladder (a fatal error); and, lastly, you may employ the mesian incision, as you have often seen here. This last is a very neat and ready method of reaching the bladder, and in children it can be done with great safety. I do not follow it because it is not worth while to change a plan I have always pursued unless I find that success can be attained much more readily by any new method. But you, as young men and experienced anatomists, may select that plan which you think advisable, being assured that to cut well for stone is by no means so difficult as to perform many other operations which are usually regarded as of far less magnitude. Besides which you have the opportunity of testing at this and the other metropolitan Hospitals the success of every variety of operation for the removal of stone from the bladder.

## ORIGINAL COMMUNICATIONS.

OBSERVATIONS ON THE

# "GRANULAR MATTER" AND "COMPLEX ALBUMINOID MATTER"

REFERRED TO IN SECTION II. OF THE THIRD REPORT OF THE COMMISSION APPOINTED TO INQUIRE INTO THE ORIGIN AND NATURE, ETC., OF THE CATTLE PLAGUE.

By LIONEL S. BEALE, M.B., F.R.S.

> "And now I seem to hear Galen admonishing us, that we should agree about the things, and not dispute greatly about the words."

In this paper I shall venture to offer some observations upon part of Section 2 of the Commissioners' Report, in which the "nature of the disease" is considered.

It is not to have been expected that the scientific members of the Commission should have carefully read through every line of the lengthy reports they have received, or that they should have mastered every minute detail communicated to them; but, on the other hand, they must have acquainted themselves with the general tenor of the observations contained in the reports to which they have referred, and therefore any opinions, statements, or comments in their third report can hardly have been made lightly or without due deliberation.

After stating that portions of infected blood-textures and mucous discharges have been examined by me with the aid of the highest magnifying powers that exist, the Commissioners state what I have *not* found (a). "He has found no definitely *formed (!)* substance that can *certainly (!)* be said to be the cause of the cattle plague." He finds "no *new* appearance *decidedly (!)* characteristic of the disease."

And this, according to the Commissioners, is what I have found,—*granular matter!* "He finds a great increase of granular matter (b)." This really seems to be all that the Commissioners have been able to extract from my report, and they give due prominence to it. If not all, certainly that which, according to them, appeared most worthy of the attention of the public, and therefore I conclude, in their opinion, the most original and perhaps the most intelligible portion of my work. The next sentence in the paragraph, at the beginning of which I regret to say my name figures, is the following:—

"Possibly this *granular matter* may be the poison; possibly, again, *it* may exist in particles of definite form, and of a size still smaller than $\frac{1}{100000}$th of an inch, but which might be perceived if it were possible to construct instruments of still higher magnifying powers; more probably it is matter of a kind which *is and will always be undiscoverable by the microscope.*"

Here we have the following propositions:—First, that *this* granular matter (not defined by the Commissioners) *may be* the poison; secondly, that the poison *may* exist in particles of definite form smaller than the $\frac{1}{100000}$th of an inch, and that these particles *might be (!)* detected if it were *possible (!)* to construct microscopes of still higher magnifying powers than the $\frac{1}{50}$th; thirdly, that it is more probable that the poison is matter of a kind which *is* and will *always be (!) undiscoverable* by the microscope. The Commissioners ought surely to have stated to the public and to scientific men the circumstances which have led them to conclude that the matter in question will *always* be undiscoverable by magnifying powers which have not yet been constructed.

I think there is no doubt that any person of ordinary intelligence who read through the paragraph would draw the following inferences:—That Dr. Beale had examined blood textures, etc., with the highest magnifying powers made, and had found granular matter; but that although this granular matter might be the poison, it probably was not, and seeing that granular matter is very widely diffused, of very varied character, composition, and properties, entering into the composition of all kinds of dust, *débris*, and indefinite stuff, the general conclusion such a person would arrive at would not probably be very easily expressed, but might he not write it thus ·0.—?

The scientific members of this Commission have stated what in their opinion I have not found and what I have found in the course of the inquiry undertaken at their request. It is not for me to appeal against the extraordinary remarks they have considered it right to make. The value or worthlessness of this, as of every other scientific inquiry, will in time be determined by scientific men here and abroad.

Not content, however, with offering the very decided opinion that the poison will always be *undiscoverable* by the microscope, the failure of the instrument must be most decidedly expressed. The writer sternly remarks, in the commencement of another paragraph, "As the *microscope* fails us," but then, as if freed from painful restraint, adds exultingly—"we turn to *chemistry* to detect the substance!" The microscope has *failed* utterly, but chemistry, although perhaps a little behindhand, is advancing with rapid strides. The microscope will never detect the substance, but although chemistry has not as yet done so, no doubt she will by-and-by. "Chemistry" has not *hitherto* separated the poison;" "no chemical test *as yet* exists by which it can be recognised." Again, "Chemistry has *as yet* found in cattle plague *no complex albuminoid matter in a state of rapid chemical change capable of communicating its own action to the albumen of the serum of the blood and of the textures of cattle.*" Now, what can all this mean? Has any one who has studied this question, even cursorily, met with any facts to justify the opinion that there is the slightest probability that such poisons as those of cattle plague, or of typhus, scarlatina, small pox, etc., will ever be detected by chemical tests or separated by analysis? And yet if the expressions employed have any meaning at all, they surely point to the inference that chemistry will some day find in cattle plague a *complex albuminoid matter* in a state of rapid chemical change, capable of communicating its own action to the albumen of the serum of the blood; and not only so, but that it is in this purely chemical way, by this transference of rapid chemical change, that these poisons really do act upon the blood. It is most important that if any facts have been discovered in favour of this conclusion that they should be known, and the Commissioners ought certainly to have referred to the observations which have led them to use the expressions alluded to. I will ask pointedly if, in the course of this investigation, one single fact has been discovered which tends to render it probable that such poisons may be fairly regarded as complex albuminoid matters in a state of rapid chemical change and capable of communicating their own action to albumen and textures? I confess it will surprise me if in any one of the reports furnished to the Commissioners there is a trace of evidence or even an opinion expressed in favour of this old chemical doctrine of Liebig's, now almost entirely abandoned. In another place the Commissioners talk of "an *increased* zymotic action in the blood and in the textures." What, I would ask, is meant by zymotic action in the *textures?*

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(a) The italics in all the extracts are my own.

(b) At first I was inclined to think that the word "granular" was a mere misprint for "germinal," as each word contains the same number of letters, but the context renders this most improbable.

Such expressions ought not to be used carelessly and without consideration. If they astound some persons, they serve but to confuse and perplex simple-minded people who wish to learn, and are apt to excite ridicule and create prejudices against those who devote themselves to thorough scientific work. It is only fair that those who employ them should be pressed to define plainly what they mean. It would be too hard, perhaps, to inquire what textures of the body were the seat of zymotic action. Fancy zymosis of the fibrous, muscular, or nervous textures, or fermentation of the bones or brain; then as to the *increased* zymosis! But enough. It appears to me that the Commissioners have thus raised not only "*doubtful*" but very doubtful *points*, instead of marking out "briefly and plainly" the results of "observation and experiment."

# CASE OF QUOTIDIAN AGUE; PAROXYSMS ARRESTED BY A SINGLE FULL DOSE OF QUININE.

### WITH THERMOMETRIC OBSERVATIONS IN CO-RELATION WITH THE PULSE AND RESPIRATION.

By F. W. PAVY, M.D., F.R.S.,
Assistant-Physician and Lecturer on Physiology at Guy's Hospital.

THE *Medical Times and Gazette* has occupied a foremost position in England in advocating the employment of the thermometer as a means of affording information in disease. The following case forms an exemplification of the extent of variation of temperature that may be in the course of disease within a few hours produced, and of the precision with which thermal manifestations transpire. The case was reported and the observations carefully conducted, by my clinical clerk, Mr. Gill.

John C , aged 9, admitted April 28 into John Ward, under Dr. Pavy. Is a delicate, sallow-looking boy, belonging to the Shoreditch Union. Has been latterly at the schools at Brentwood, but two days ago was brought up to the Workhouse in Shoreditch, and on his father observing him to be ill, he was removed and brought for admission into Guy's Hospital.

At 6 p.m. on the day of admission his temperature was found to be 105·8°. Pulse and respiration rapid. Skin perspiring. Tongue clean in front, furred posteriorly. The chest sounds were normal. Urine, sp. gr. 1025; contained no albumen, but had deposited lithates. He had not much appetite, but a great craving for liquids. Bowels natural; spleen much enlarged. He was ordered for the present to take ℥j. of the saline mixture of the Guy's Pharmacopœia every six hours.

April 29.—11 a.m.: Temperature 98·4°, pulse 116, respiration 27. 6.30 p.m.: Temperature 105·4°, pulse 148, respiration 45. 8.15 p.m.: Temperature 101·8°, pulse 136, respiration 32.

30th.—11 a.m.: Temperature 98·6°, pulse 108, respiration 38. 6.45 p.m.: Temperature 104·4°, pulse 148, respiration 35. 9 p.m.: Temperature 101·4°, pulse 140, respiration 33.

May 1.—11 a.m.: Temperature 97·2°, pulse 106, respiration 28. 4 p.m.: Temperature 103·2°, pulse 145, respiration 31. Notwithstanding this elevation of temperature, the patient is shivering and complaining of feeling very cold. He is lying in bed, with his legs drawn up into a heap and his head under the bed clothes. Skin in a state of cutis anserina; great thirst, and distress of countenance. 5.15 p.m.: Temperature 104·1°, pulse 148, respiration 32; perspiring profusely; expression of distress has passed off. 7.35 p.m.: Temperature 101·8°, pulse 138, respiration 31; perspiration standing in drops on his face, and his shirt quite wet with it.

2nd.—10.30 a.m.: Temperature 98·4°, pulse 104, respiration 24. 1 30 p.m.: Temperature 99·5°, pulse 108, respiration 27. 3.20 p.m.: Temperature 105·4°, pulse 168, respiration 30; is beginning to shiver. 4.20 p.m.: Temperature 104·6°, pulse 148, respiration 28. 6 p.m.: Temperature 102·6°, pulse 142, respiration 34; sweating moderately.

3rd.—11 a.m.: Temperature 97·6°, pulse 104, respiration 26. 2 p.m.: Temperature 98·8°, pulse 120, respiration 34. 5 p.m.: Temperature 105·5°, pulse 168, respiration 34. 6.30 p.m.: Temperature 103·4°, pulse 140, respiration 35. 9 p.m.: Temperature 100°, pulse 116, respiration 30.

4th.—11.30 a.m.: Temperature 98·6°, pulse 108, respiration 27. 2.15 p.m.: Temperature 104°, pulse 148, respiration 40. 4.45 p.m.: Temperature 103·4, pulse 148, respiration 32. 8 p.m.: Temperature 100·2°, pulse 108, respiration 30.

5th.—10 a.m.: Temperature 97·4°, pulse 96, respiration 28. Up to this time the only medicine taken by the patient was the saline mixture prescribed on his admission. To-day, at 2 p.m., a pill, containing eight grains of quinine, was administered. 6 p.m.: Temperature 101·8°, pulse 146, respiration 30, feels pretty well. 8 p.m.: Temperature 100·1°, pulse 114, respiration 30. The day has passed through without any shivering fit.

6th.—10 a.m.: Temperature 98·2°, pulse 104, respiration 28. 8 p.m.: No further quinine was given, and the patient had no paroxysm to-day.

7th.—11 a.m.: Temperature 98·6°, pulse 96, respiration 26. 7 p.m.: Temperature 99·4°, pulse 100, respiration 28; no paroxysm.

8th.—No paroxysm; feels pretty well.

9th.—No paroxysm; temperature not reaching above 99°.

21st.—The patient has continued without any return of his ague, and without any medicine since the dose of quinine that was administered on the 5th. The spleen maintains its original size. The hypodermic employment of quinine was now ordered, a grain and a-half to be injected every day.

27th.—The injection has been repeated every day, but the spleen, the outline of which had been mapped out with ink, presents no perceptible diminution in size. To discontinue the injection, and to take three grains of quinine in solution three times a day.

June 2.—Spleen much smaller.

5th.—Spleen scarcely larger than its natural size. The boy appears well, and is quite free from any sign of ague.

35, Grosvenor-street, Grosvenor-square.

# NOTES ON THE PHYSIOLOGY AND PATHOLOGY OF LANGUAGE.

## REMARKS ON THOSE CASES OF DISEASE OF THE NERVOUS SYSTEM, IN WHICH DEFECT OF EXPRESSION IS THE MOST STRIKING SYMPTOM.

By J. HUGHLINGS JACKSON, M.D.,
Assistant-Physician to the London Hospital and to the Hospital for Epilepsy and Paralysis.

THERE are two modes of expression, one emotional and the other intellectual. By one we show what we feel and by the other we tell what we think. We may show that we are surprised, angry, grieved, or astonished by the former, but by the latter we give to another by signs (generally words) a notion of our thoughts on things. Now, in some cases of disease of the hemisphere (always, in my experience, near to and involving the left corpus striatum), intellectual expression is wanting, and emotional expression is well preserved. But we may make the statement broader still, at least in some cases. In some cases of defect of speech the patient seems to have lost much of his power to do anything he is told to do, even with those muscles that are not paralysed. Thus a patient will be unable to put out his tongue when we ask him, although he will use it well in semi-involuntary actions, *e.g.*, eating and swallowing. He will not make the particular grimace he is told to do, even when we make one for him to imitate. There is power in his muscles and in the centres for the co-ordination of muscular groups, but he—the whole man, or the "will"—cannot set them a-going. Such a patient may do a thing well at one time and not at another. In a few cases the patients do not do things so simple as moving the hand (*i.e.*, the non-paralysed hand) when they are told. This sort of difficulty generally, however, clears up long before power to talk returns. There is in health a great difference in the power individuals have to do things they are told to do—*e.g.*, to draw in their breath.

I wish here to urge on students who are studying cases in which defects of expression are the most striking symptoms, to work at them from healthy language and through slight defects down to total inability to express anything in any way. Again, we must think of them as defects of mind, as well as of that part or phase of mind which enables us to think aloud in words. And we must never forget that in disease of the hemisphere we may have now and then, besides mental symptoms, amaurosis, epileptiform seizures, bilious vomiting, retracted belly, congestion of the lungs, constipation, and irregular pulse; for the brain is not only the "organ of mind," but it is the nervous system of the nervous system. It need scarcely be said that words, especially such as "mind," sensory, motor, &c., fetter our thoughts as well as define them.

Although the difference in the execution of voluntary and involuntary movements is very striking in some cases of loss of speech, the degree of loss of power to utter words must not be taken as a certain index of this difference. The difference probably depends on the difference in quantity of brain damaged near to (as well as in the exact relation of the part damaged to) the highest part of the motor tract, the point of emission of the orders of the "will" to muscles and to centres for muscular groups. Any one who has tried to use the ophthalmoscope, in many cases where speech is lost or defective, will find how great the difference is in different cases. Thus one of my patients in the London Hospital had power only to say "yes" and "no," and yet the examination of his eyes was an easy matter. He has since rapidly recovered, and soon regained power to make signs for what he wanted. He had lost power to execute, not all movements, but those movements which are most artificial. Dogberry believed that reading and writing (and doubtless talking, although he did not say so) came by nature, but I suppose everybody else believes they are acquired by education. This patient cannot write, but he can copy correctly from a book with his left hand.

A few months ago a patient came under my care who could only say "pooh! pooh!" and an examination of his eyes was almost impracticable. He made efforts, but he never did what I told him, whether it was to look in a particular way or to keep his eyes still. Instead of opening them, he opened his mouth, or screwed up his face, or shut his eye, and could not be got to look in any particular direction, although he seemed on the alert to act, and was all the time doing something with his muscles. In this case I have little doubt that more of the brain was affected, and more of the corpus striatum than in the other patient. This patient is almost as bad now as he was six months ago, and still never does anything I ask him to do.

In a third patient who (and who, by the way, is hemiplegic on the left side, and now has much recovered speech) was unable to talk, the ophthalmoscopical examination was at first almost impracticable. Now, it may be said that the patients do not know what we wish them to do. But the last-mentioned patient, when told to "look at my finger," seemed to know what was wanted, for when I was about to give up in despair, he took hold of my little finger, as I guessed, deprecatingly, and as much as to say he knew what was wanted, but could not do it. There can, however, be no certainty in this instance. It may be my fancy. But it will be observed that a speechless patient who cannot put out his tongue when told will sometimes actually put his fingers in his mouth as if to help to get it out; and yet not unfrequently when we are tired of urging him, he will lick his lips with it. Now, as a rule, the worst of these patients can generally smile, and all such involuntary processes go on well enough. I say generally, for a Physician who has seen many cases of defective speech will be obliged to use such words as "generally." I can call to mind but one speechless patient who did not become able to smile; but this patient (now under my care) never does anything but look about him, and eat and drink, and utter the word "yes" when anything is said to him. He will, however, cry "Oh!" and grin when his rigid (right) paralysed arm is extended. He takes his food when it is put near him; but when the nurse (at my request) "forgets" to give him his breakfast, he never makes any signs for it, although he follows her about with his eyes. He will, however, I have little doubt, begin to smile soon. He has only been ill a month.

These patients can do things which require scarcely any, if any, education to do, or for which, in other words, the centres exist ready to co-ordinate muscles. It would seem that the centres for the emotional and the semi-voluntary and involuntary actions are in the pons, medulla oblongata, and spinal cord; but where the power is that sets them a-going is not clear.

There are plenty of facts to show that in disease of the corpus striatum those muscles less under the control of the "will" escape, and that through this, the highest part of the motor tract, we are able to direct our *limbs*(a) voluntarily. The views of Mr. Dunn on the relation of defects of speech to disease of the corpus striatum are, I think, of great value in this connexion. Again, there is no more difficulty in supposing that there are convolutions near the corpus striatum for superintending those delicate movements of the hands which are under the immediate control of the mind, than that there is one, as Broca suggests, for movements of the tongue in purely mental operations. The phenomena of chorea, I believe, point to this conclusion.

I must here say that I believe less in some of the views propounded by Broca than I did, although I think the scientific world is under vast obligation to him for giving precision to an important inquiry. Yet I cannot but think that my disagreement with M. Broca, as well as many of the differences of opinion on this subject, are to a great extent due to different ways of putting the same thing. (See quotation from M. Broca's pamphlet.) Indeed, I think the evidence I have collected goes to confirm many of his statements as to facts, but I have for some time ceased to go with him in a few of his inferences. (See *Lancet*, November 26, 1864.) I think, then, that the so-called "faculty" of language has no existence, and that disease near the corpus striatum produces defect of expression (by words, writing, signs, etc.) to a great extent, because this is the way out from the hemisphere to organs which the will can set in motion. Hence, as I believe, disease of the convolutions near the corpus striatum is the cause of chorea, which, as regards the limbs, is not so much a disorder of mere motion as disorder of those movements which are voluntary and educated, or at least co-ordinated.

On the education of voluntary movements Bain has some most valuable remarks, and with reference to his views it is not unimportant to draw attention to the fact that chorea is a rare disease either before these movements have been learned or after they have been fully acquired. Unilateral epilepsy seems to replace and sometimes, I think, to displace chorea, and both run into actual hemiplegia occasionally.

So much for the superficial distinctions as regards the nature of (and seat of the centres for) voluntary and involuntary motion, and now for the resemblances of the two.

It may seem to be a wilful contradiction, but we find that a patient *does* things involuntarily which he cannot do voluntarily. At all events, these so-called speechless patients give utterance not merely to words, but to words in a relation which gives them at least the appearance of language. I have elsewhere spoken of swearing and of other similar ejaculatory sentences. These seem to border on emotional actions, or, as I have already put it metaphorically, "oaths are phrases which emotion has filched from the intellect to express itself in a more definite way than it could do by mere loudness of tone or manner." We scarcely say anything when we swear, although we utter words in relation. The secret of the perfect utterance of these phrases which in "speechless" patients are obviously not voluntary, is that they are easily elaborated by long habit, and can thus be brought out by a slight stimulus. Such facts seem to me to be of great importance as illustrating Laycock's doctrine on the reflex function of the brain. Indeed, the study of swearing, in spite of the nastiness of this habit, is one of the very greatest interest and importance, in our attempts to trace the gradations of motion, thought, and language.

But I now wish to speak of utterances which are perhaps of the same category as the others, but which seem to be rather expressions of the whole mind, as thinking of particular things, and yet which, contradictory as it may seem, the mind cannot get out when it likes. It will be found that patients who usually cannot talk will sometimes utter a real sentence. Laycock ("Mind and Brain," vol. ii., p. 438) has some most important observations on this subject. He says (and this, I think, helps to show the continuity, with differentiation, of these utterances with emotional utterances like interjections), that "a person usually speechless, under violent emotions may speak. A similar thing is observed with regard to laughter. A person with local disease cannot laugh voluntarily, but he can involuntarily." We had at the Hospital for Epilepsy and Paralysis a patient who could not keep from laughing, even when asking for help in his distress.

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(a) I use the word "limb" here, not only in the usual sense, but in the sense of an appendage to a vertebra. I have elsewhere tried to show that the nervous system may be divided on a plan corresponding to the divisions of the skeleton on Owen's scheme. The "centres" for laughing, winking, &c. (being, as I imagine, homologous with those functionally less important which are situated in the cord), are for muscles, &c., connected or in relation with the segment, whilst the corpus striatum is the centre for the muscles of the appendages of the segments. I think, (since the views Dr. Broadbent has recently brought forward) that these centres are probably doubly connected with the brain, *i. e.*, each with each side of the brain. The circulatory system, however, does not appear to follow any such order of continuity of function. Its arrangement in the brain rather indicates the relation of parts in their nutrition, and probably in their development. I shall wait for a future opportunity of explaining what I mean by the word "centre."

The patient, who utters the sound "pooh, pooh!" never said a single word to any of the nurses or students of the Hospital for some months, yet his son assures me that his father once, by saying the word "master's," told him where his tools were, and that he once said, with difficulty of articulation, but with intelligibility, "How is Alice getting on?" Although I have always given place to such statements by patients' friends, I confess that I have more than once almost felt that I was giving place to error in recording in my notes statements made to me about the occasional utterances of patients who would never speak to me. I have recorded (See "Royal London Ophthalmic Hospital Reports," vol. iv., part 4) the case of a "speechless" patient who was said to have one day asked for chops, although I confess I did not then believe it. I do now. My past unbelief was brought to my mind forcibly the other day. A most intelligent student gave me the particulars of the case of a patient who died with disease of the left hemisphere. Soon afterwards I was talking to this gentleman of such utterance as I have mentioned. He remarked to me that this patient's wife had, with indignation at his (the student's) incredulity, affirmed that her husband, otherwise always speechless, said, "God bless you, my dear." Now, my friend was quite justified in being very incredulous, but I ventured to tell him that it was better to record such statements, although on the authority solely of the relater.

Dr. Martin, of St. Bartholomew's Hospital, has had the great kindness to allow me to mention a case of loss of speech which occurred in his practice. It is the more important, since Dr. Andrew tells me Dr. Martin clearly located the disease, and predicted its nature during the man's life. I have Dr. Martin's permission to make use of the case, but the following quotation from the notes I got from the patient's wife will serve my present purpose:—"She told me the following as the only words she had heard him say besides 'No,' since he lost his speech (March 8) to his death (May 15): 'Five nights, six nights, seven nights, and then five nights out of seven.'" These words she assured me he spoke very clearly indeed, and she fancied he wanted to tell her something, but what it was she could only guess.

In nearly all the cases recently observed of loss of speech with hemiplegia the paralysis has been on the right side of the body, indicating disease of the left side of the brain. To explain this, Dr. Moxon suggests that the left side of the brain only is educated, although there is "an organ of language" on each side. I believe this hypothesis is essentially a most important one, but I differ from it in one way, although, of course, I can be but speculating. I think both sides are probably educated, but that the left is the one that begins to act, and that those educated utterances, which are in a sense involuntary, have become so by habit—*i.e.*, frequent education, and may be the result of action of the right side only. How from the right side they are set a-going I do not know any more than I know how a person laughs, not only without effort, but even when he tries to keep quiet.

M. Baillarger has already, I find, considered this question in an admirable manner. He says—"L'analyse des phénomènes conduit à reconnaître, dans certain cas de ce genre, que l'incitation verbale involuntaire persiste, mais que l'incitation verbale voluntaire est abolic. Quant à la perversion de la faculté du langage charactérisée par la pronunciation de mots incohérents, la lésion consiste encore dans la substitution de la parole automatique à l'incitation verbale voluntaire." In the following sentence *apropos* of a particular case, he speaks more generally—"Il est bien évident quici l'incitation motrice voluntaire etail abolie et que l'incitation motrice spontanée persistait" M. Baillarger refers to cases recorded in Dr. Forbes Winslow's remarkable and valuable work "Obscure Diseases of the Brain."

M. Baillarger has also made some very important observations on incoherence in cases of loss of power to talk voluntarily. It has occurred to me to try to produce an artificial incoherence in "speechless" patients by partial chloroform narcosis. M. Baillarger quotes from Gratiolet a statement to the effect that the frontal convolutions on the left side are in advance of those on the right in their development. Hence, if this be so, the left side of the brain is sooner ready for learning. It is the elder brother.

At first glance there seems to be an utter difference betwixt a smile and such an ejaculation as an oath, and a greater still betwixt a smile and such a sentence as "How is Alice getting on?"(b) There may seem to be an equally great difference betwixt ataxy of articulation and uttering wrong names for things. I have already, in some remarks on a case of chorea, referred to this subject (*Medical Times and Gazette*, January 28, 1865). "It is in some classes of cases of disease of the nervous system hard to say where obviously motor symptoms end and where the purely mental ones begin. Thus there is (in cases of hemiplegia on the right side) every gradation betwixt, on the one hand, a total loss of power to express ideas, or a loss of knowledge of the relation of words to things, and on the other, apparently scarcely more than an ataxy of articulation. And sometimes in the same case we find that the patient makes mistakes in words, and also articulates badly." It is not difficult to show that ataxy of articulation and so-called loss of memory for words are really defects of the same kind, and that the loss of the sign the speechless patient had for a thing is the loss of power to reproduce in his organs (in health from his brain, through series of centres, to the end of his tongue), the *movements* he has learned for that sign, or, at least, the "motor impulse," and that damage near the corpus striatum affects language and thought, not because any so-called faculty resides there (or anywhere, except in the whole brain or whole body), but because more or less of parts which help in making symbols are broken up. The fact that people do not put their tongues in motion when they think may seem to be a great difficulty; but I hope to show that it is not so great a one as is imagined. This will be but a particular expansion of the views which Bain has long taught, and which, indeed, he has applied to speech. "When we recall," he says, "the impression of a word or a sentence, if we do not speak it out, we feel the twitter of the organs just about to come to that point. The articulatory parts—the larynx, the tongue, the lips—are all sensibly excited; a *suppressed articulation* is, in fact, the material of our recollection, the intellectual manifestation, the *idea* of speech." The italics are in the original.

M. Broca makes the following remarks, which amount, in principle, nearly to the same thing, in a pamphlet he was good enough to send me a year or two ago. (Extrait des *Bulletins de la Société Anatomique*, juillet, 1863.) "Pour expliquer comment un aphémique comprend de langage parlé, sans pouvoir cependant répéter les mots qu'il vient d'entendre, on pourrait dire qu'il a perdu, non la mémoire des mots, *mais la mémoire des moyens de coordination que l'on emploie pour articuler les mots*." The use of the word memory in the sense of its being a distinct faculty, is, I think, likely to lead to some confusion. Spencer says, ". . . such a succession of states [*motor impulses*, the results of conflicting impressions] constitutes *remembrance* of the various motor changes which thus become incipient—constitutes a *memory*." . . . "Thus then the nascent nervous excitements that arise during this conflict of tendencies, are really so many *ideas* of the motor changes which, if stronger, they would cause—a *recollection* of such changes; and thus memory necessarily comes into existence whenever automatic action is imperfect." According to this definition, memory is the obtruding of some of the motor impulses on the consciousness, but I suppose M. Broca means by memory of words the connexion the seats of motor impulses (co-ordinating centres, or whatever they may be called) for words have with that other part of the nervous system (whatever and wherever it may be) which sets them a-going.

Dr. Fournié has also written admirably on this subject, and indeed on the whole question of language. I follow him in principle, although I differ from him in some details, which, however, I daresay he may not think to be details. I must, however, leave this part of the subject for the present, and take it up from the point of the relation of sensation to motion, and of each of these to centres.

That the convolutions near the corpus striatum have to do with guiding muscles in articulation, there can, I think, be little doubt, and we may make the subject of study wider by inquiring (which I think we may do in the case of chorea) if they are not for *corresponding actions*—not mere movement—of the muscles of the limbs as well. That the corpus striatum is the centre chiefly for the limbs, as apart from the trunk, pathology, I think, leaves no doubt. In this connection it is important to mention that Laura Bridgman, when she dreamed, "talked" in finger language, and doubtless she thought by signs she made with her fingers (and their brain connexions). As we generally think in the movements of our articulatory organs, or in the motor impulses, to move them, so she "talked" and thought in the way she was taught.

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(b) I would here refer the reader to Mr. Herbert Spencer's "Principles of Psychology," and especially to the chapters "The Growth of Intelligence," "Reflex Action," "Instinct," and "Memory." The facts related in this paper seem to me to be in harmony with certain views Mr. Spencer has put forward in those chapters.

Dr. William Thomson, the present Archbishop of York, writes ("An Outline of the Necessary Laws of Thought"): "Those among the deaf and dumb who have been taught by the pains of an enlightened humanity to converse and to think must use, instead of the remembered words which we employ, the remembered images of hands in the various combinations of finger-speech [here the italics are mine] *as the symbols of their thoughts*. The deaf and blind, taught the names of objects from raised letters, must think, not by associations of sound, but by touch."

Of course, we do not either speak or think in words or signs only, but in words or signs referring to one another in a particular manner (see Waitz' "Anthropology"), any more than we move single muscles, but muscles co-ordinated to a particular end. Indeed, words in sentences lose their individual meaning—if single words can be strictly said to have any meaning—and the whole sentence becomes a unit, not a word-heap.

Dogberry thought such things as reading and writing come by nature, but we now believe that even the easy flow of talk of the most loquacious is essentially an entirely artificial process, and that even (granting there is truth in the pooh-pooh! and bow-wow theories) the origin of signs—*i.e.*, words—had little in it that was like anything instinctive. The Archbishop of York says, "In the fullest sense, language is a divine gift, but the power and not the results of its exercise, the germ and not the tree, was imparted." I am quite aware that written words and finger words are said to be signs of signs, but they belong to the same category as language does, in that writing is an artificial process, and distinct, at least in degree, from such actions as smiling, respiration, and gesticulations.

I think it will be found that the nearer the disease is to the corpus striatum the more likely is the defect of articulation to be the striking thing, and the further off, the more likely is it to be one of mistakes of words. This is not contradictory to what I have elsewhere said (*Lancet*, November 26, 1864) as to the degree of difficulty in expression depending on the *quantity* of brain damaged "about the highest part of the motor tract, the corpus striatum—the point of emission of the orders of the 'will' to the muscles." I think, too (although I have yet but little evidence on the point), that in cases of embolism of branches of the middle cerebral artery, we shall find the difficulty to be in "finding" the right word (*i. e.*, in making the right signs) rather than in the process of manufacturing the signs, and for this reason that convolutions at a distance are more likely to be damaged, and again, that the damage is wide-spread, and often slighter in degree. Finally, I think we have good grounds for investigating if the arterial supply is not so *developed* as to *re*-unite in *actions* parts which have been differently cultivated in *function*. What Professor Bain call an emotional wave, I think of under the fancy of an arterial wave. I think the occurrence of a particular action is probably due to the local stoppage in this wave. I think so because there is, I believe, evidence to show that subjective movements and sensations in disease are due to local debility of nerve tissue, as Radcliffe has long taught. Moreover, we may, I think, on Radcliffe's hypothesis, at least more easily, explain periodicity and intermissions in such diseases as chorea, epilepsy, ague, etc.

The vascularity of the region of the corpus striatum is, I think, a fact of much significance in the wider study of the relations of nutritive life and functional activity. The subjective sensation of smell (of colour, etc.) (the so-called aura in some epileptiform attacks), I liken to a sort of involuntary memory of past impressions and the spasm of the muscles of the hand—the so-called aura or partial fit--which occurs in some patients who are liable to unilateral epileptiform seizures to one of motor impulses. The subjective sensations of disease differ, however, from the rememberings of health and the contending actions of the whole of the muscles of the hand—the extensors striving with flexors, and the stronger getting most of their way—differ from particular purposive movements. In disease it is as if a row of keys were struck down together in mere order of continuity, producing not music, but noise; whilst the revived sensations and motions (or motor impulses) of health are like chords formed of a few notes related in harmony. That there must be some process by which one part of the nervous system arouses in the nervous systems of sense and in the various motor apparatus past impressions there can, I think, be little doubt, and I would suggest that one link in the mechanism of this process may be the contraction of muscular coated vessels supplied by ganglionic nerves; or, more generally, that within certain limits life and function are in an inverse ratio. Of one thing I feel pretty confident, that disordered function in some epileptiform seizures occurs in parts of the brain which lie in arterial regions, and I have little doubt that clinical evidence points to Radcliffe's conclusion that the part of the nervous system related to muscles convulsed in epileptiform attacks is, from some cause or other, below par. In the subjective sensations called *phosphenes*, produced by pressure on the globe of the eye, there is, I think, demonstrable evidence that there is less blood in the retina as firmer pressure makes the optic disc bloodless. Yet I do not wish to argue much from this fact at present, as I have no certainty that the part pressed on is more anæmic than the rest of the retina.

From this point let me again urge students, who wish to make cases things to think from, to avoid the too free use of technicalities and to study one case by the light of many. It is, I think, important to study chorea and epilepsy in reference to speech as well as to study cases of what may be called pure aphasia or aphemia.

# REPORTS OF HOSPITAL PRACTICE
IN
# MEDICINE AND SURGERY.

◆

## SPECIAL REPORT ON THE TREATMENT OF FRACTURES IN THE LONDON HOSPITALS.

### FRACTURES OF THE LEG.

Mr. Holthouse, in his article on fractures of the lower extremity in "Holmes's System of Surgery,"(a) in speaking of fractures of the leg, says, "Perhaps there are no fractures more easy or more difficult to treat than those of the leg, a starch bandage or laying the limb on a pillow being all that is necessary in some cases; while the utmost ingenuity and the most constant supervision is required in others." Bearing these remarks in mind, we shall proceed to describe the various methods of putting up these fractures that we have seen in use in the Hospitals we have visited. We shall commence, then, with

### FRACTURES OF THE TIBIA.

*Fracture of the Head of the Tibia into the Knee-joint.*—This, unassociated with fracture of the condyles of the femur or compound fracture into the joint, is a comparatively rare accident. The treatment generally adopted for it is simply that of laying the limb out straight on a back splint and raising it, so that the muscles acting on the joint may be relaxed. In order to keep the joint at rest, gutta-percha, leather, or pasteboard splints may be applied to the sides of the knee. The limb should then be swung. Passive motion may be commenced in about a month or six weeks.

*Fractures of the Shaft of the Tibia.*—In cases of fractured shaft where the displacement is, if any, slight, after the fragments have been accurately adjusted, the limb is put up immediately by some Surgeons in plaster of Paris or starch bandages, the methods of applying which we have already described in a former paper. This early putting up of fractures in the stiff apparatus should only be had recourse to when, as we have before observed, the displacement is slight and the integuments are not severely bruised.

With regard to the splints and contrivances in use for putting up the more complicated forms of fracture, we can only say that we have seen those of the most simple possible construction; these, and the methods of fixing them to the limb, we now proceed to describe. We mention them here particularly with the tibia, as it is in fractures of that bone that they are most frequently used; but it will be seen that the same methods apply equally well to fractures of the fibula or of both bones together.

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(a) "Holmes's System of Surgery," vol. ii., p. 28.

In cases, then, of fractured shaft, when the fragments have been placed in apposition (which they may be judged to be, when the ball of the great toe is in a line with the inner border of the patella), a very common method of putting the fracture up is that of applying two side splints with foot pieces to either side of the limb. These, having been of course previously well padded, may be kept in position by taking a turn or two of bandage, first round the foot and ankle, and then round the foot-piece. The bandage should not be continued the whole way up the limb, as it is of importance in all cases of fracture that the actual seat of injury should be exposed to view; a few turns round the upper part of the leg-pieces will be sufficient to retain the splints in position. The limb may either be swung or placed between sand-bags; if the latter, a wire cage should be put over it to keep off the pressure of the bed-clothes. These splints may either be hollowed out or plain. Sometimes only a single side splint with a foot piece is applied to the outer side of the limb, the leg being slightly flexed, and placed on its side.

McIntyre's iron splint, or Liston's modification of it, is much used in some Hospitals. Care should be taken in applying the splint, that it be thoroughly well padded throughout, and that cotton wool or tow be inserted between it and any of the soft parts that may be subjected to pressure. No part of the splint should press upon the heel, as this part of the foot frequently becomes ulcerated from the carelessness with which this splint is applied. In applying it, after the foot and ankle have been carefully bandaged to the foot piece, and the thigh to the thigh piece, it is not necessary to cover the limb entirely with bandage. The apparatus should be swung either from a common cradle or Salter's swing. Mr. Erichsen says, "In some cases of fracture of the bones of the leg, however, M'Intyre's apparatus is not applicable. This is more particularly the case when the fracture is very oblique, from above downwards and from before backwards. Under these circumstances, the fragments cannot be got into good position, so long as the limb is kept extended and resting on its posterior surface, the bones riding considerably, and one or other of the fractured ends pressing upon the skin in such a way as often to threaten ulceration."(b) In some Hospitals, in addition to the two side splints above mentioned, a back splint, with a foot piece (capable of being fixed in the required position by a screw) corresponding with the sole of the foot, and with the leg piece extending as far up as the ham, is used. The splints may be retained in position either by bandage or fillets.

At St. Bartholomew's, Mr. Paget uses the following method:—The limb is placed upon an ordinary iron back splint; to this it is secured at the foot and knee by means of wide pieces of gutta percha moulded to the shape of the limb, and laced under the splint by narrow tape. Two straight wooden side splints are then applied; these are buckled together at their lower extremity (which is exactly on a level with the sole) by means of a thin leather strap passing across the sole from the one to the other. In the remainder of their length, which reaches up the thigh to the same point as the back splint, they are fastened more or less tightly, according to the degree of lateral pressure which it is thought advisable to apply to the limb, by two or three webbing straps and buckles. The leg is then "swung" in the usual manner. It will be seen that this way of putting up fractures of the leg recommends itself by its simplicity, and if the term may be allowed, by its conciseness. No bandage at all is employed, and the limb is left wholly free from all pressure that can interfere with the circulation. The exact condition of the limb, and the relative position of the fragments can at any time be ascertained, and as the side splints are fixed independently of the back splint, they can be removed either during occasional sponging of the limb, or for any other purpose.

In cases of oblique fracture, with projection of the lower end of the upper fragment, the management of which is generally very difficult, Mr. Hutchinson finds that the simple expedient of raising the leg obviates this trouble.

*Fracture of the Inner Malleolus.*—Side splints, or a single splint applied on the side opposite to the fracture.

## FRACTURES OF THE FIBULA.

*Fracture in the Upper Part.*—The displacement here generally is so slight that plaster of Paris or dextrine bandages may be used at once, or the limb may be placed in McIntyre's or side splints.

*Fracture of the Lower End, or Pott's Fracture—the foot being dislocated outwards, and the tip of the inner malleolus broken off, or the internal lateral ligament ruptured.*—The most general method is to put the limb up on a Dupuytren's splint, which is like a short Liston's splint with a couple of notches at the lower end, through which the bandages pass to produce slight extension.

In applying this apparatus, which is adapted to the inner side of the leg, care must be taken to pad the splint well, especially opposite to the seat of fracture, which padding should fill up the hollow formed by the curve of the leg as it lies on the splint, and so act as a fulcrum over which extension can be made. A few turns of bandage should then be made round the foot and through the notches. The bandages should not be continued up higher than the ankle, and the upper part should be bound securely to the leg just above the calf. Sometimes an ordinary side splint with a foot-piece is used, but it should be carefully padded in the way mentioned above, as the object to be attained is the throwing out of the upper end of the lower fragment. After union the dextrine or plaster of Paris bandage should be applied.

*Fractures of both Bones.*—Any of the above-mentioned splints are in general use. A very simple method we saw in use at the *Dreadnought* Hospital ship, in cases of fracture of both bones. It is very easily applied, and can be readily taken down without disturbing the setting of the fracture. A piece of stout sheeting is to be rolled in opposite directions, so that two pillows or junks are formed by the rolled extremities; upon this the patient's limb is laid. Then a fillet is passed behind the sheeting, and similar ones under the limb. Next two well padded side splints, with foot-pieces, are adapted to either side of the leg, and secured by buckling the fillet passing under the leg. Next the external sheeting is rolled up in opposite directions, until the rollers correspond with the outside of the splint, and the fillet under it buckled over all. The foot may be secured to the first piece by a turn of bandage. Hester's apparatus we have seen very generally used in the Westminster Hospital. In Mr. Heath's valuable work "On Minor Surgery" is the following acconnt of the manner of applying it. He says, "It combines the advantages of the side splint with those of the swing, as the splint is suspended from rollers and a cradle, which allow of the free movements of the patient. In making use of it, the knee is first firmly fixed, a pad being placed below the tubercle of the tibia, and another above the head of the fibula, the foot being well strapped to the footboard. Extension is then made by means of a screw underneath, and thus shortening is effectually prevented, whilst the side splints, when screwed on, keep the limb perfectly steady."

We lately saw, under the care of Mr. Hutchinson, in the London Hospital, a child, about 4 years old, who had, in falling, broken both bones of the leg, and we were told that a second case of the same kind had a short time previously been under treatment. The limb was put up in splints, and "swung" in the usual way. This accident is so rare that it deserves to be mentioned. Every one must have observed that while in adults fractures of the bones of the leg are much more common than fractures of the femur, in children just the reverse is the fact. Fractures of the femur are very common, indeed much more so than in the adult, while fractures of the leg are very rare. We have often asked for an explanation of these facts, but have not yet met with one which is altogether satisfactory. It seems probable that they depend to some extent on the different way in which children and adults fall, the former generally coming to the ground with the legs doubled under, so that the weight of the body falls, through the knees, on the femur, while adults more commonly sustain fracture while the weight of the trunk is being transmitted to the ground through the bones of the leg.

(To be continued.)

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THE amateur morning concert for the benefit of the London Infirmary for Epilepsy and Paralysis, Charles-street, Portman-square, came off on Tuesday, the 12th inst., at Willis's Rooms, which were crowded by a large and fashionable audience. Amongst the performers were Lady John Manners, Mrs. Althaus, Mrs. Sheffield Neave, the Misses Alderson, the Misses Baillie, Miss Conner, and many other distinguished amateur vocalists and instrumentalists. About £180 was realised on the occasion.

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(b) Erichsen's "Science and Art of Surgery," p. 251, *et seq.*

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# Medical Times and Gazette.

### SATURDAY, JUNE 23.

## THE PUBLIC HEALTH BILL.

We called attention last week to a Public Health Bill introduced into the House of Commons by Mr. Bruce, Mr. Fortescue, and Sir George Grey, and which, therefore, may be regarded as embodying the views of the Government, and of the active spirits in the Sanitary Department of the Privy Council Office, as to what is necessary to be done. Perhaps we should be more correct in saying what it is expedient to ask Parliament for in the way of amendment of our sanitary laws. The Bill aims at extending to the provinces some of the more important provisions as to town and house drainage, which we in the metropolis have had the advantage of for some years under the special Acts of Parliament by which our local government is constituted. Another object is the extension to Ireland, not only of the operation of this Bill, but of the Nuisances Removal Acts, which, faulty as they are, have nevertheless done some service to the English public. Thirdly, an attempt is made to amend these latter Acts, and to introduce for the benefit of the country at large some additional clauses calculated to meet a few glaring deficiencies in the present law. Generally speaking, then, this effort of Mr. Bruce is praiseworthy, and Ireland especially may be thankful if the Bill passes. Some such legislation is greatly needed in that portion of Her Majesty's dominions. Politicians are guided by motives which we, as men of science and as Medical Practitioners, cannot always appreciate; one thing, however, is certain that, whereas we have tolerably clear notions of what is really needed, such persons as Mr. Bruce who undertake to improve the state of the law have in addition to gauge the temper of Parliament, and to consider how much they dare to ask for without incurring the risk of an entire refusal. Without saying, therefore, that we are quite satisfied with the Public Health Bill, we are willing to give Mr. Bruce and his coadjutors full credit for their good intentions, and to accept, as far as it goes, the instalment of amendment in sanitary law which is offered to us.

What is really needed is quite another affair; it is fully set forth in a series of suggestions drawn up last year by the Metropolitan Medical Officers of Health, published by Mr. Simon as an Appendix to his Report, and submitted to Mr. Bruce in an interview which they had with him upon the subject a few months ago. We are happy to observe that some of these suggestions have been incorporated into the Bill. Let us briefly refer to the proposed amendments.

1. As respects overcrowded dwellings, it is proposed to regard as a "nuisance" any house or *part of a house* so overcrowded as to be dangerous or prejudicial to the health of the inmates. This amendment gives direct legal sanction to an interpretation of what is meant by an overcrowded house generally adopted by the police magistrates in the metropolis. Another clause is intended to obviate an inconvenience of the present law by throwing upon the defendant the onus of proving that the persons occupying the overcrowded house or room are members of the same family. 2. An attempt is made to extend the most important sanitary provisions of the Factories Acts, so far as they relate to cleanliness and ventilation, to factories, workshops, and work places of any kind. Should this clause pass through Parliament, it will be productive of unmixed good. This clause, and the overcrowding clause together, will, we apprehend, enable sanitary authorities to do all that is necessary for obviating the horrible state of things so often found in the workrooms of large tailoring, millinery, and the like establishments. 3. It proposes to give to what is termed in this Bill the "nuisance authority" control over the nuisance arising from factory smoke. In the metropolis the police take cognisance at present of this source of annoyance. We should like to see some means adopted for preventing the nuisances arising from low private chimneys also, as those of low washhouses, stables, etc., which are in most towns to be found here and there pouring their smoke almost into the very windows of taller houses, and preventing thus their free ventilation by compelling the occupier in self-defence to keep his windows on that side constantly closed. 4. Although house-to-house inspections are made by sanitary officers in some districts at the present time, there is a good deal of doubt as to whether they are strictly legal, and whether they might not be successfully resisted. In some metropolitan parishes the Vestries and District Boards refuse to allow their officers to visit any premises, however manifestly unwholesome, except on complaint. The 23rd clause of this Bill overcomes any such scruple, by stating that "it shall be the duty of the nuisance authority to make from time to time, either by itself or its officers, inspection of the district, *with a view to ascertain* what nuisances exist." This clause has our unqualified approbation. 5. It is proposed to empower the nuisance authority to require owners of houses to cleanse, limewhite, and disinfect wherever it appears that these processes would tend to prevent or check infectious diseases; and, in the event of the order not being complied with, that the delinquent shall be liable to a fine for disobedience to the authority. The necessity for this enactment will appear from the fact that we are acquainted with one instance in which a Medical Officer of Health had actually to argue before a police magistrate in order to convince him that *mere dirt* (as he termed it) was calculated to promote disease. The infliction of a fine for disobedience to the notice of the local boards is a new feature in sanitary legislation, and should be extended to other matters beside cleansing and disinfection—to such faults, for instance, as broken-in drains, overflowing cesspools, and other like dangerous nuisances. At present the fine can only be inflicted for disobedience to the order of a magistrate, and is not actually a cumulative fine, as this clause would render it. The result has been most disheartening delays, and, after all, the virtual victory of the defendant. It is further proposed that any order of the justices for entry to inspect premises shall be in force until all necessary works are completed. 6. The Bill contains several provisions calculated to prove useful in dealing with infectious diseases. For instance, it would empower the nuisance authority to remove from any room occupied by more than one family any person suffering from an infectious disorder—a provision which seems to us not to go quite far enough, since to be of any general applicability it should extend to houses occupied by several families; it would empower the justices to remove to a proper deadhouse any dead body of one who has died from an infectious disease, and which is retained to the danger of health in a room where persons live and sleep; it would provide a summary process for the punishment of persons exposing themselves while suffering from infectious diseases in any public place, and also for enforcing the disinfection of public conveyances contaminated by the use of such persons, and for preventing the improper disposal of clothing, etc.,

which has been used by them. It further enables the same authority to make provision for the reception of such persons in Hospitals, etc. The last, however, is a permissive clause, which there is, we fear, no chance whatever of any local authority ever making use of. We have already had too much of permissive legislation in sanitary matters, and know its full value. 8. Among the miscellaneous clauses there is one by which, on application made by a nuisance authority, the Secretary of State may empower them to make regulations for the regulation and registration of houses let in separate lodgings. Strangely enough, as the clause is drawn, the Metropolis is excluded; let us hope not intentionally. Nowhere is the exercise of such a power more necessary. Lastly, there are some provisions over which all will rejoice greatly should Parliament in its wisdom declare that they shall be law. These provisions are of a nature to compel nuisance authorities to do their duty without having recourse to the expensive process of applying for a *mandamus* in the Court of Queen's Bench. Let the Vestries of Clerkenwell, Bethnal-green, and St. George's, Southwark, look to it, for their negligence and the negligence of similarly constituted Boards will no longer be winked at. Owners of small house property will no longer be enabled to protect themselves and destroy the health and lives of the poor by getting elected as members of their local Board.

## THE CASE OF PERIONOWSKI *v.* FREEMAN AND ANOTHER.

This action, brought by a patient of St. George's Hospital against Mr. Holmes, the Surgeon to that institution, and Mr. Freeman, another of the Medical Officers, is certainly, in its broad aspect, one of the most unjust and vexatious suits ever heard in a court of justice. The following are the facts of the case:—The plaintiff, a Pole, at the time an inmate of one of the wards of St. George's Hospital, was ordered a hot vapour bath by his Surgeon, Mr. Holmes, who prescribed it for him when making his usual round in the wards. After seeing the plaintiff and ordering the bath, Mr. Holmes, in the natural course of things, would pass to other cases requiring his attention, and dismiss for the time the matter from his mind. It is no part of the duty of the Surgeon of a large Hospital to see that his orders are carried out by the attendants in the wards, and he cannot be held responsible for any accident which may occur through misadventure or neglect. After Mr. Holmes and Mr. Freeman had left the man, however, the Hospital nurses—who, it must be remembered, are not chosen for their office by the Surgeons of the Hospital, who are not paid by them, and who therefore are in no real sense their servants—placed the plaintiff in a bath, where, through their carelessness or ignorance, or both, an injury was inflicted on him by scalding. For this injury the plaintiff on leaving the Hospital brought an action, not against the nurses or their employers, but against the Surgeons, who had clearly nothing to do with the matter. It is true that the plaintiff declared that Messrs. Holmes and Freeman had not left the ward when the bath was administered, and that they must have seen or heard his struggles or screams. Both gentlemen, however, clearly proved that they were not present, and the fact that the man was really scalded is sufficient *primâ facie* evidence that neither of them could have been within hearing. The action, therefore, was unjust and ungrateful in the highest degree. It deserves the strongest reprobation, and Messrs. Holmes and Freeman are entitled to all sympathy as having been made the victims of so vexatious and unwarrantable a proceeding.

But the case has another aspect. The jury, although returning an unhesitating verdict for the defendants, appended to that verdict an opinion that the plaintiff had been ill-used. And who can deny the truth of their conclusion? The plain fact is, that a sick man was absolutely put into hot water by the nurses of St. George's Hospital, and in spite of his screams and struggles—for who will doubt that when he found himself being scalded he both screamed and struggled?—was kept there a sufficient time to be so effectually injured that the scalds were visible, as proved by the evidence of the defendants, "a few days" afterwards. Now the supposition of wilful cruelty in such a case is, of course, entirely out of the question; but we do say that this could only have happened from want of care, to say the least, on the part of the nurses, which, under such circumstances, is deplorable. It will be remembered that this is the Hospital where a large section of the Governors are afraid of introducing a sisterhood of trained nurses, on the ground of dreading the effect on the patients' souls; this case, we think, should make them fear the effect of their present system on the patients' bodies, with which, as Hospital authorities, they are primarily concerned. Amongst the revelations of the Metropolitan Workhouse Infirmaries is there any single thing worse than this? Do they scald people *nolentes volentes* at the Strand or Paddington?

Abominable as the system brought to light in many of the London Workhouses is, we suspect strongly that other people are to blame for it besides the Guardians. It is a fact, that heretofore the Poor-law Board have consistently and pertinaciously opposed all attempts, to introduce anything but the most sordid appliances and accommodation for the pauper. Everything cheerful, kindly, æsthetic has been religiously excluded. Workhouse authorities, even if they wished it, have never been allowed to develope any plan for the comfort of the sick, and aged, and infirm which would carry them beyond the iron boundary of Poor-law regulation. The present system is but the natural growth of that which has been fostered and encouraged by the Poor-law Administration; and for the Poor-law Board now to cast all the blame on the Guardians, and to turn on them all the public anger which their system most justly has aroused, is simply atrocious. We are no apologists for Guardians such as those of the Strand Union; but we must not forget that under a different system of Poor-law government and administration such a state of things as has been there revealed would be simply impossible. A Workhouse Master, speaking to a friend of ours the other day, said, "We can get anything we like *now*; but we might have asked and asked again in vain a year or two ago."

This, however, is a digression. The plaintiff in the case of Perionowski *v.* Freeman and Holmes had, it is clear, a perfect right to bring an action, although he had no right to bring one against his Medical attendants. The suit should have been brought against the Authorities of St. George's Hospital, who are responsible for the present system of nursing there. Messrs. Holmes and Freeman have, of course, been put to considerable expense in providing their defence. The least the Hospital Authorities can do is to defray every shilling of their costs.

## THE NIGHTINGALE FUND.

Not long since an article appeared in the *Pall Mall Gazette* containing certain strictures upon the management of this Fund, which appeared to us somewhat hypercritical, and to which we should before this have taken exception had not the demand on our space largely exceeded our power of supply for many weeks past. The *Pall Mall Gazette* objects that "the expense of management and collateral outlay have been so large, while the actual results have been so disproportionately small."

Now we may be certain that criticism of this kind is the offspring of unfamiliarity with the difficulties involved in permanently establishing a scheme of training nurses which shall be at the same time economical, rapid in action, and efficient. Those who are acquainted with the characteristics of a skilful nurse knew that her training is not to be brought about by simply placing her for a few months in the wards of an ordinary Hospital. It is a matter of intelligently directed, persistent — not intermittent — teaching by competent instructors, and this is impossible unless the pupil is under proper superintendence, both morally and otherwise. Hence the primary want is felt to be for persons properly qualified to act as lady-superintendents, and these can of necessity only be supplied by slow degrees and at considerable cost. Then the Council find other impediments in the way of realising such numerical results as would satisfy their critics. They complain of the lack of proper candidates for training; and of those selected, although the utmost care is taken in preliminary inquiries, no less than 40 per cent. within five years have, after more or less probation, failed to acquit themselves satisfactorily. More than ordinary intelligence, and unimpeachable moral conduct, are indispensable qualifications requisite to the making of a good nurse, and the area of selection is consequently limited. Moreover, when the nurse has been trained and is turned out ready for work, the wage which is ordinarily offered her is inadequate, but this is certainly no fault of the Council. There will always be difficulty in this respect, until the pay is made worth the service required, and the scale ought to be graduated so as to make promotion depend on efficiency and experience.

It should be remembered, however, that the shortcoming of numerical and economical results in the management of the Fund of which the *Pall Mall Gazette* complains, is mainly attributable to the excellence at which Miss Nightingale aims. She would raise the standard of education and character among nurses as a class, and this can only be effected by small beginnings, and necessarily, while the thing is in its infancy, at an expense which appears disproportionate. She prefers to do a little effectually and according to her own advanced ideas rather than to make a great show with no real public advantage.

## MIDWIVES IN FRANCE.

The *Journal de la Société de Statistique de Paris* for April contains an article by Dr. Viallet on "Midwives in France, and the necessity for opening a school of Midwifery in each department," which very properly directs attention to an important want in the Medical service particularly of country districts by the deficiency of duly instructed midwives.

Unhappily there can be no doubt whatever that few countries are as well off in that respect as they ought to be, and it is a matter for profound thankfulness that child-birth is not oftener attended with fatal results, considering the very unnatural conditions under which great numbers of mothers bring forth children. In the rural districts of England the women of the poorer classes are, in a majority of instances, unable to obtain any assistance at the time of their delivery from the parish Doctor, who is wanted in a hundred opposite ways at once, and all the necessary requirements are, therefore, left to be fulfilled by uneducated, uninstructed nurses, whose heads are oftentimes full of crotchets very much in opposition to Medical science.

Dr. Viallet laments that the same state of things prevails in the poorer districts of France, and he points to the establishment of a school of midwifery in every department as being the only way of supplying properly instructed midwives in number sufficient for the service of the poor. He gives no data from which we can estimate the fatality of child-birth in France, but he asserts generally that in the *cantons pauvres et isolés* the number of women who die in child-birth or from diseases incidental thereto is very considerable. In this country, taking a series of years, the deaths of mothers from child-birth, etc., have averaged 5 per annum for every thousand children born alive; and for many reasons it is probable that this rate is below the European standard.

If Dr. Viallet's statement of the number of Medical men in France be correct, the amount of Professional aid available for the whole population is twice as great in England as in France for the 19,800 Medical men (including 6300 *officiers de santé*), which he states is the full complement of the service of the Empire, would average but 1 to every 2000 persons, whilst with us the proportion is about 1 to every 1000.

With regard to midwives, however, the balance seems to be in favour of our neighbours. The French census of occupations is so badly arranged that it is impossible to ascertain the exact number of *sages-femmes*, but Dr. Viallet puts them at less than 5000, or 1 to every 7000 of the population; in England their numbers declined from 2021 in 1851, to 1913 in 1861, when the average ratio was 1 midwife to every 10,000 persons. Dr. Viallet estimates that at least 13,000 midwives are required in France so as to allow for 1 to every 3000 inhabitants, and this certainly is a moderate estimate. Comparing the number of declared midwives with the yearly births in the two countries, we find that the average ratio is about 1 midwife to 400 births in England, and 1 to 200 in France. Dr. Viallet would have not less than 1 midwife to 80 births, and it cannot be said that he asks too much.

He gives an instance of the effect of closing the midwifery course of instruction in Aveyron, where, in 1847—the date when the course was discontinued—there were 112 midwives; in 1859, when by Dr. Viallet's influence the lectures were recommenced, the number had diminished to 74, of whom many were upwards of 70 years of age. In the five subsequent years, Dr. Viallet has prepared forty-five midwives for the service of the department, but at least 50 more, he says, are necessary to satisfy all wants and to fill up vacancies caused by death. In some of the departments it appears that the midwives have the direction of the School of Midwifery, and the Medical men are considered to be under their orders! Dr. Viallet is cognizant of the same difficulty with regard to the establishment of a midwife in a poor district which the Council of the Nightingale fund experience here, but he very pertinently asks, "*Pourquoi la commune ou les communes réunies du canton (dans les campagnes) ne leur accorderaient-elles pas une subvention? La sage-femme n'est-elle pas aussi nécessaire que le maître d'école? Ne s'agit-il pas de sauvegarder la vie des mères et de leurs enfants?*"

Undoubtedly some such course as Dr. Viallet suggests must be adopted in poor, thinly populated districts where it is sought to establish a midwifery nurse. It is useless to take an intelligent woman, train her for a special calling, and then send her to some out-of-the-way place with only the wages of an ordinary domestic servant. In many cases she would be more valuable even than the schoolmaster, and her services should be adequately remunerated.

The supply of trained nurses, both for the sick and for midwifery, is a very important question, and Dr. Viallet's endeavours to increase that supply in France will have the heartiest good wishes of the Medical Profession in England.

## THE THERMOMETER IN DIAGNOSIS.

In the previous articles laid before our readers we have seen that the temperature of the body is raised in all acute specific fevers, in acute inflammation of any of the organs of the body, in ague, and also in tuberculosis. Fever is also present in many other diseases. Of these we shall subsequently speak.

We have seen that many of the diseases that simulate phthisis cause no elevation of the temperature, and that this absence of any abnormal elevation of the temperature enables us to decide that the patient is not the subject of tubercular disease. If, on the other hand, the temperature be abnormally elevated, it is highly probable that the tubercle is being deposited in one or other of the organs of the patient. If this elevation should be due to some febrile disease other than tuberculosis, which may be accidentally present, this can usually be detected. Still in some cases the detection of such an intercurrent disease may be difficult or impossible. How can we exclude this source of error? This question we shall now attempt to answer.

But few diseases can cause a daily elevation of three or four weeks' duration. Acute inflammations cease, and the temperature consequently falls, long before this period has elapsed. The same remark applies to most of the acute specific fevers. The temperature in typhoid fever generally becomes normal by the twenty-fifth or thirtieth day of the disease. The diseases at present known to be able to cause such a long continued elevation of the temperature as that above mentioned (namely, a month or more) are tuberculosis (the deposition of tubercle in any of the organs of the body), rheumatism, ague, abscesses, suppuration (such as occurs in empyema, large open psoas abscesses, etc.), and certain forms of chronic induration of the lung with ulceration of the bronchi and the formation of cavities.

Under the term tuberculosis we include scrofulous pneumonia, the product of which disease was formerly, and still is by some, considered to be one of the forms of yellow tubercle.

All these diseases, with the exception of tuberculosis, are accompanied by such characteristic symptoms that we have usually no difficulty in forming a correct diagnosis. Rheumatism makes itself known by the pain in the joint, or by the physical sign of peri- or endo-carditis. The symptoms of ague are mostly so characteristic that the disease can seldom be mistaken, abscesses, empyema, profuse suppuration, can always be detected (abscesses may evade detection, however, for some time). Of all the diseases mentioned, chronic induration of the lungs, both in respect of physical signs and symptoms, closely simulates phthisis. In a subsequent paper we hope to show that by means of the temperature this disease can be correctly diagnosed, and how it can be distinguished from tuberculous disease of the lungs.

The length of time, therefore, that the elevation of the temperature continues affords us much help in making our diagnosis. If this elevation has continued some time—say a month—the number of diseases we have to decide between is small, and these for the most part have characteristic symptoms, and thus the diagnosis becomes easy. Tuberculosis, however, may exist, as we have seen, without any physical signs being present, and at the same time the symptoms may be very slight and utterly insufficient for a correct diagnosis. In such a case, if the patient continue febrile for a month or six weeks, the disease is in all probability tubercular.

The question, therefore, that we put to ourselves at the commencement of this article is answered.

In cases where we are in doubt whether the patient suffers from phthisis or not, if the temperature be elevated, tubercle is probably being deposited in one or more of the organs of the body. Such elevation may be due to some co-existing febrile disease not tubercular; but such a disease mostly ceases in a few days, and in the case of typhoid fever mostly at the end of the fourth week. If, therefore, the temperature continues to rise daily for more than a month, we are justified in diagnosing in such a case (provided none of the other diseases capable of producing a chronic elevation of the temperature be present) that the patient is tubercular.

It may be said that before a month has elapsed the physical signs and symptoms will be so marked that all difficulty of diagnosis will have ceased. Such, however, is not the case, for tuberculosis of the lungs or other organs of the body may continue for a much longer period than that mentioned, and yet produce no physical signs, while the symptoms, moreover, may be slight and utterly insufficient to insure a correct diagnosis.

Hence it follows that in some cases the temperature of the body affords us the earliest indication that tubercle is being deposited in the body; *for if we have a chronic elevation of the temperature, and this be not due to rheumatism, ague, suppuration, or chronic induration of the lung, such an elevation must be considered to be due to a tubercular deposit in the body.*

## THE FELLOWSHIP OF THE COLLEGE OF PHYSICIANS.

The names of the gentlemen proposed by the Council for the Fellowship of the College of Physicians have been sent to us. Some of the juniors are men of promise, but we do not hesitate to say that, with one or two exceptions, none of the selected possess claims equal to those of many who have been passed over. If the Fellowship of this time-honoured Institution is to be regarded as a mark of Professional standing, and not to wear the aspect of favouritism exercised by a few men, acting more or less in concert, and voting in secret, it is high time that the mode of election be altered. On a not very distant occasion the Fellows at large when called on to confirm the selection of the Council, refusing to be led by them, rejected the names proposed. Such was a legitimate and useful exercise of authority.

With one exception, there is no name in the present list of longer standing as a Member than of 1858, and no fewer than four of 1860. To many the names of some of the selected will be suggestive of the cause of their proposed early elevation. But have the claims of many gentlemen in every way qualified for the honour been duly considered? It must be answered without hesitation—they have not. Some highly educated, honourable men, who have done good work for the Profession, and who passed the ordeal of examination at the College, are excluded. If, on the other hand, we turn to the list of Fellows, it would be as easy to point to a number whose claims to admission, except on the principle of *Lucus a non lucendo*, it would be difficult to establish.

It is high time, we repeat, that access to the College Fellowship be made to rest on some more equitable basis than the present one. Admission by examination as at the College of Surgeons, a mode of selection which has been successfully adopted in some important offices of the State, is, perhaps, on the whole, the best.

## THE WEEK.

### A BARONETCY CONFERRED ON THE PRESIDENT OF THE ROYAL COLLEGE OF PHYSICIANS.

The whole Profession will receive with great gratification the following announcement, which we take from the London *Gazette* of Tuesday, June 19. We think that we are representing a unanimous feeling when we state our belief, that had the whole Medical body been asked on whom of their number they would desire a baronetcy should be conferred, they would at once have returned the answer, "on Dr. Watson." It is not merely that Dr. Watson, as President of the Royal College of Physicians, represents the highest Medical corporation in the State, or that his skill as a Physician has insured him the confidence of the highest ranks, not excepting that of Royalty; but it is that to Professional merit unsurpassed he has added all social virtues, all the high qualities of heart and intellect which should distinguish one who is singled out by his Sovereign as the representative of a learned and generous Profession:—

"Whitehall, June 18.—The Queen has directed letters patent to be passed granting the dignity of a Baronet of the United Kingdom unto Thomas Watson, of Henrietta-street, Cavendish-square, in the parish of St. Marylebone, and county of Middlesex, Doctor of Medicine, President of the Royal College of Physicians, and one of her Majesty's Physicians Extraordinary, and the heirs male of his body lawfully begotten."

### THE ARMSTRONG FUND DINNER.

The Committee for raising a fund to defray the legal expenses of the Messrs. Armstrong in the late trial, "Rudman *versus*

Armstrong and another," held their final meeting at the Rosherville Hotel on Tuesday last. The Messrs. Southgate, the able legal defenders of Dr. Armstrong, were present, and on the vote of the Committee to that effect, Mr. Hunt, the Honorary Treasurer, handed over the full amount of the costs. When, in addition to this, the Committee expenses were paid, a small balance remained, which the Committee voted to the Gravesend Infirmary. The business over, the members of the Committee entertained Dr. Armstrong and Mr. Armstrong at a dinner, at which nearly forty gentlemen were present. The Mayor of Gravesend, the solicitors of Dr. Armstrong, the Rev. Mr. Scarth, and several other influential residents of the town and neighbourhood were also there.

Dr. Richardson presided, and in proposing the health of the Messrs. Armstrong, which was most enthusiastically responded to, pointed out that these demonstrations of Professional unity were the surest means of preventing trials of the nature they had that day met to oppose. The Messrs. Armstrong replied in feeling terms, and after a most pleasant evening, the members separated.

### BILL FOR THE REGULATION OF SCIENTIFIC WITNESSES.

A very important and much-needed Bill is about to be introduced, not into the House of Commons, but (during the present paralysed state of that body) into the Court of Sewers of the City of London, and there is little doubt that if formally sanctioned there, as it has already been in substance, that it will very soon become the law of the whole land. It is, we understand, to be introduced by personages so distinguished as Mr. Rudkin and Mr. Deputy Bunnell, and, according to the draught we have seen, will stand thus:—"*Preamble.*—Whereas it is expedient for promoters of gas bills, water bills, and railway bills, and for other speculators and projectors to make out their case by the evidence of scientific men, and whereas scientific men, if duly paid, hired, or retained, ought to give such evidence as suits the case of their employers, hirers, and retainers, be it therefore enacted, &c., as follows:—1. All scruples of conscience are abolished from and after the passing of this Act. 2. Every oath administered to a scientific witness shall be considered as binding only so far as suits the case of his hirers or employers. 3. Every scientific witness who shall decline to give such evidence as he is required to give shall be subject to fine and imprisonment; and if he be a public servant or official, shall be suspended from the duties and emoluments of his office. 4. Whereas, one Letheby, who is Health Officer and Gas Analyst to the City of London, did contumaciously refuse, as aforesaid, to swear as his employers desired him, that the said Letheby be appointed to his offices for three months at a time only, and that he be admonished to show better behaviour for the future. The present Act to be retrospective and prospective."—See the Proceedings in the City of London Court of Sewers, as reported in the *Journal of Gas Lighting*, June 12.

### THE CASE OF HELEN FORESTER.

We regret that there has been a miscarriage of justice in a case recently tried at the Central Criminal Court, from, as it would seem, the peculiar stringency of the law respecting dying declarations. The case was that of the woman, Helen Forester, who was charged with having caused the death of Ann Venables, *alias* Sloman, by making use of an instrument to procure abortion. The following account of the case conveys the useful lesson that the law will not admit any statement as a dying declaration unless it can be proved that the person uttering it has at the time lost all hope of recovery:—

"The deceased, who was a married woman and the mother of several children, went to the prisoner in April last, and gave her £3 to procure a miscarriage of the child of which she was then five months pregnant; the miscarriage was caused, but the operation then performed upon her by the prisoner was alleged to have produced her death in about a fortnight afterwards.

"Mr. Daly, as before, appeared for the prosecution, and Mr. Montague Williams and Mr. Straight for the defence.

"Mr. Augustus Brown, M.D., of Belitha-villas, said that about 10 o'clock on the night of the 26th of April he was called to attend the deceased. She lived at 8, Barnsbury-grove, Barnsbury-park. She was in a very excited state of mind when he first saw her. She had had a painful hæmorrhage, her body appeared swollen, and her pulse was beating at the rate of 120. From these symptoms he augured that she had been recently delivered. It was impossible to say how long she had been in the family-way. She died on the evening of the 6th of May. He made a *post mortem* examination, in company with two other Medical men, Mr. Morrison and Dr. Walker. They found that the uterus had been lacerated and punctured through, by which inflammation was caused, and eventually death. She made a statement, but at the time she did so he did not tell her she would die. On the night he first saw her she told him she was sure she would die. She lived 10 days afterwards.

"Mr. Justice Byles asked what were her words, as nearly as the witness could tell?

"The witness replied that her exact words were, 'I am sure to die.' Again, before she made the statement, she expressed an opinion that she would not recover. That was a day or two before she made the statement. Witness told her she was very seriously ill. He wrote the statement she made, and it was embodied in the depositions.

"Mr. Daly tendered this statement in evidence, and asked that it might be read.

"Mr. M. Williams objected on the ground that under the circumstances in which it was made it could not be received.

"Mr. Justice Byles yielded for the present to the objection, and thought Mr. Williams ought to exercise his right at once of cross-examining the witness.

"Witness, in cross-examination, said he did not tell her she would die before she made the statement. He told her she was in great danger; that as long as there was life there was hope; but that they, as her Medical advisers, had lost all hope of her recovery. That was immediately before she made the statement. He expressed no opinion about her death before she made it. She spoke of her friends, and wished them to be written to. He sent for a magistrate, but he did not attend.

"By Mr. Daly: She said she knew she should die before the statement was made.

"Mr. Justice Byles: What was the last expression by her with reference to her state before you actually wrote her words down?

"Witness: 'I am sure I shall die.'

"What was the last expression of your opinion as to her state before you wrote what you did?—I told her she would not recover.

"Mr. Daly again tendered the statement as evidence; and

"Mr. Williams objected, as before, that it was not receivable under the circumstances in which it was made. He remarked that the witness, without meaning it, had contradicted himself two or three times.

"Mr. Justice Byles said there was undoubtedly an inconsistency in the witness's evidence.

"Mr. Williams submitted that to render the statement receivable it must be shown that Mrs. Sloman, at the time she made it, had lost all hope of recovery. He called attention to a case reported in 7th 'Carrington and Payne,' p. 254, third edition, where Mr. Justice Coleridge held that he thought he ought not to receive the statement of a deceased person, though the latter said before it was made that 'she thought she would not recover;' the exact words used by Mrs. Sloman, and, accordingly, the Judge rejected it. In page 253 of the same volume Baron Hullock was reported to have held that the principle on which a declaration was receivable as evidence was, that the party making it was *in articulo mortis* at the time, and that it was made under an impression of almost immediate dissolution. Upon these two cases, he submitted that the statement could not be received.

"Mr. Justice Byles thought that, in order to render it receivable, it was necessary, among other requisites, to show that Mrs. Sloman was under the impression at the time that her death was impending, or under the impression that she had received an injury from which death must ensue, or, as the popular phrase went, that she then believed she was at the point of death.

Mr. Daly quoted a passage from "Archbold," in which the authorities on this point were all collected, and where it was stated that dying declarations were receivable if the person making them believed he was in a dying state at the time, even though he did not die for eleven days afterwards.

Mr. Justice Byles held that the person making them must either be, or suppose himself to be, in a dying state. He had thought at first to reserve this point, but now he should not do so. He would decide at once that the objection was a valid one, and that the statement tendered could not be received. He could not decide in favour of the prosecution unless he believed that the woman knew she was in a dying state at the time she made it. The evidence of the Medical man was not to be reconciled, and the statement here made was not upon oath.

Mr. Daly admitted that the Medical man had contradicted himself.

"Mr. Justice Byles said he must reject that statement, because he did not see clearly that Mrs. Sloman knew she was passing out of this world, and that all terrestrial things, so far as she was concerned, were coming to an end.

"Mr. Daly admitted that if the statement were rejected the case for the prosecution must fail.

"Mr. Justice Byles then told the jury that, assuming upon the evidence that the unfortunate deceased died from the criminal attempt made upon her to procure abortion, there was no evidence to prove who made that attempt, and the prisoner must be acquitted.

"The jury immediately returned a verdict of "Not Guilty."

"The same prisoner and her daughter, Caroline Forester, were then indicted on the Coroner's inquisition (the bill against the latter prisoner having been thrown out by the grand jury) for the manslaughter of Mrs. Sloman.

"Upon this indictment Mr. Daly offered no evidence.

"A verdict of 'Not Guilty' was taken, and both the prisoners were discharged.

### FROM ABROAD.—M. GUERIN ON THE SUBCUTANEOUS METHOD.

M. Jules Guérin, the veteran author of the "subcutaneous method," not satisfied that his views have even yet become thoroughly comprehended, constantly reiterated though they have been, read last week a paper at the Academy of Medicine, in which he summarily re-stated them, and which he introduced in the following terms:—

"During the now well nigh thirty years that I have made known the fundamental difference presented by the cicatrisation of wounds under the skin and exposed to the air, I have had frequent occasion to convince myself that this difference is not always sufficiently appreciated, and that the expressions which I proposed to characterise it have not always been accepted in the sense and extent which I assigned to them. Quite recently, on the occasion of my laying a communication before the Academy on the 'Treatment of Exposed Wounds by Pneumatic Occlusion,' I met with, on the part of one of the most able of my colleagues (M. Velpeau), a renewed manifestation of that difference of opinion, which dates on his part as far back as the original exposition of my ideas on the immediate organisation of subcutaneous wounds. Such diversity would justify this new development of so important a question in pathological physiology, were I not likewise led to it by the necessity of specifying in a more complete manner the order of the phenomena which constitute the scientific basis of the new Surgical method which I have recently proposed. (*Medical Times and Gazette*, Feb. 17, p. 180.)

"I now am about to recapitulate in a definite manner the facts and considerations which are fitted to establish,—1. That the physiological process which I have designated by the term *immediate organisation* of subcutaneous wounds is a process essentially different from the process of cicatrisation of wounds when exposed to the air. 2. That this process, wrongly considered as the product of *adhesive inflammation*, or of the *agglutination* of surfaces brought into contact, is, from its initial phenomenon until its last stage, the analogue of the primary formative process of organs. 3. That the immediate organisation of wounds subtracted from contact with the air is really the result of the absence of such contact, just as the suppurative process of inflammation, which inevitably precedes the cicatrisation of exposed wounds, is truly the effect and result of contact with the air. 4. Finally, the methods which are privileged to induce the immediate organisation of wounds owe this to the property which they have of preserving the wounds from contact with the air; and that consequently their essential character, their originality, and their efficacy are derived far less from the material dispositions of the operative procedures than from the complete knowledge of the principle which constitutes their basis, and the appropriation of procedures which are well calculated to correspond to this principle and to develope its benefits.

"Such are the four propositions which appear to me, when suitably developed and confirmed by the various proofs upon which they are based, capable of carrying conviction into every mind as to the fundamental character of the physiological process by which wounds are cicatrised when sheltered from contact with the air, and the originality of the methods which have given rise to this result."

### PARLIAMENTARY.—ARMY AND NAVY MEDICAL OFFICERS—CAPITAL PUNISHMENT BILL—LUNACY ACT (SCOTLAND) AMENDMENT BILL—MEDICAL ATTENDANCE AT POLICE STATIONS.

In the House of Commons, on Thursday, June 14,

Colonel North asked the Secretary to the Treasury whether the recommendations of the Committee presided over by Admiral Sir Alexander Milne, relative to the Medical Officers of the Navy and Army, and upon which the authorities both of the Navy and Army had been for some time in communication with the Treasury, were likely to be decided upon shortly. He begged to remind the House that the Committee reported early in February.

Mr. Childers: In reply to my hon. friend, I have to state that the circumstances are these:—In July last the College of Physicians wrote to the War Office complaining that the *status* of Army Surgeons was unsatisfactory, and to the Admiralty that Navy Surgeons were, both as to pay and rank, not on a par with Army Surgeons. In consequence, the War Office and the Admiralty appointed a Departmental Committee, consisting of military and naval officers, and of Medical men recommended by the Colleges of Physicians and Surgeons, to inquire into the rank, pay, and position of the Surgeons of the two services. The Treasury were not parties to the inquiry, and they have as yet only been officially in communication with the Admiralty on the subject. When we are in possession of the definite views of both the departments, we shall be in a condition to deal with the cases of both the Army and Navy Surgeons at the same time. The question is a very important one, involves a large amount of money, and requires careful consideration.

Colonel North asked whether no communication had been received from the War Office.

Mr. Childers said the War Department had not yet made their recommendations upon the report of the Committee; but he personally had been in communication with his noble friend.

In the House of Lords on Friday,

Upon the re-committal of the Law of Capital Punishments Bill, Lord St. Leonards took occasion to urge several objections against private executions, and argued that the deterrent, and consequently the beneficial, influence of capital punishment would be diminished by a departure from the present system of public executions.

The Duke of Richmond and the Lord Chancellor, on the other hand, agreed that, however beneficial public trials might be, public executions were objectionable; and Lord Dunsany urged the adoption of precautions to ensure the efficacious application of the capital law, incidentally remarking, as an Irish grievance, that the only skilful hangman was an Englishman, who was never sent over to perform his duties in Ireland.

Lord Romney favoured public executions as public warnings; but

The Bishop of Oxford took a different view, doubting the deterrent effects of public executions.

Upon a division, the clause empowering private executions was agreed to by 75 to 25.

After some further discussion upon details, the Bill passed through committee.

Upon the report of amendments on the Lunacy Act (Scotland) Amendment Bill being brought up,

The Earl of Shaftesbury moved that a clause should be inserted in the Bill empowering the directors of any chartered Lunatic Asylum in Scotland to grant retiring allowances out of the funds at their disposal to any of their officers who had served for fifteen years, and who were more than 50 years of age. In the interest of the lunatics, as well as of their attendants, it was of importance that the faithful and laborious services of the latter should be compensated by the reduction of the term of service requisite to entitle them to a retiring allowance from twenty to fifteen years, as had already been done in England.

The Report was then agreed to, and the clause was inserted. We trust that this clause will include the Medical officers of the Lunatic Asylums.

On Monday, June 18,

The Marquis Townshend asked whether any instructions had recently been given to the police relative to the treatment of persons in a state of insensibility taken to police stations.

Lord Stanley of Alderley was understood to say that the police had been instructed on such occasions to send for Medical assistance.

The Lunacy Acts (Scotland) Amendment Bill was read a third time and passed.

## SYPHILITIC INOCULATION.—A FEW REMARKS BY THE WRITER OF "MODERN SYPHILOGRAPHERS."

In an age so eminently characterised by a critical and experimental tone of thought as the present, it is not surprising that the etiology, pathology, and therapeutics of syphilitic diseases have undergone a rigid examination. Different, and, in many instances, conflicting views, are held and taught. A spirit of dogma has been supplanted by one of scepticism, and from scepticism to heterodoxy the step is short.

So far from controversy, however, retarding the progress of truth, it accelerates its movement. The writer disclaims entirely any feeling of enmity or prejudice to a system of treatment because it is new. He desires that the therapeutical effects of Syphilisation should be fully and fairly tried.

The question as to the identity or non-identity of the virus producing the indurated constitutional and the soft local chancre, possesses no interest apart from a scientific one. So long as a Surgeon practically recognises a distinction, well and good; but so long as he ignores it altogether, and treats all venereal ulcers by mercury, he does so at a grievous and unnecessary cost on his patient's time and strength.

There are some facts connected with the Etiology and Pathology of venereal sores, which appear to be more capable of explanation upon the theory of the non-identity of the causes—of which the local soft venereal ulcer and that which is the precursor of general syphilitic manifestations are the effects; but there are, undoubtedly, other facts which are susceptible of the opposite conclusion. The proper attitude for the present is a suspension of judgment, but such an attitude is of course very distasteful to all those who have already made up their own minds. If we take a hundred cases at random, it will be found, as a rule, that, in the case of the indurated sore, a far longer interval has elapsed between the date of the infecting coitus and the manifestation of any diseased action, than in the other form. It is not at all uncommon to see an induration appear at the base of a soft ulcer, and to witness an indurated chancre evolved on the same structure as a soft one, but always subsequently, and never the reverse. If the specific cause be identical in both cases, why does it not occasionally happen that the indurated sore precedes the soft?

It will be said, perhaps, that the inflammatory reaction, the ulceration and secretion of pus, mark the activity of the process and the peculiar potency of the virus by which it was induced, while they indicate the reason of the constitutional immunity. The poison disintegrates the tissue, and discharges itself in the pus products, instead of producing a local deposit of firm lymph, which offers a barrier to its local elimination. But is it so? Although there are many authorities who believe that you can prevent constitutional manifestations by an early cauterisation or excision of the chancre, yet, the results have not been so encouraging as to make the practice a common one. Our own experience is, that if you destroy a lesion in its initial stage, before its character is developed, you will sometimes have induration appearing at the site of the wound; and if you remove an indurated sore by these methods you may have the same thing, or an artificial ulcer only, but you will not save the patient's system in either case. Again, if we induce the most rapid ulceration and suppuration in a hard sore, or upon the surface of an ulcer before it has assumed hardness, we cannot protect the system by it; nor is the patient saved from constitutional syphilis if a suppurating bubo complicates the primary lesion, providing that lesion be of the infecting character.

Assuming the virus to be same in both cases of sore, how can we explain the fact that you can successfully inoculate the indurated with the pus of the soft sore? It would be impossible to re-vaccinate at the site of a successful vaccination. But, in the instance before us, the same, or a variety only of the same poison, can be made to reproduce its effects not only on the same soil, but even when implanted upon the self-same spot of that soil where the morbid effect has been already set up. When you succeed in inoculating the pus from a hard sore, you do not induce another hard, but a soft sore. Why should not such inoculations reproduce the specific deposit? Indurations on the penis and other parts of the body may undoubtedly appear as secondary syphilitic manifestations, and these sometimes accurately resemble hard chancres, and this proves that there is no absolute insusceptibility on the part of the system to reproduce the lymph which forms the induration.

Chancre-isation appears to us a more correct term than syphilisation—at any rate for the present.

We do not dwell upon the history of these diseases. True syphilis—constitutional syphilis—might have been present in the world since the time of Cain's curse; but no one has succeeded in tracing an account of it. We have, on the other hand, the evidence of men living at the close of the fifteenth century, who described the main differences between the old local, soft, and the—to them—new, infecting, indurated chancre. Clinically, the best observers are agreed in this—that, in their symptoms and consequences, the two forms of sore offer points of contrast. It sometimes requires tact, experience, and some careful watching on our parts, to determine the character of a venereal ulcer; but the hardening process is, we suspect, almost invariably present in some degree—in the chancre, its cicatrix, or the neighbouring glands.

That a previously syphilised individual should contract a chancre with modified characters—a soft ulcer—from inoculation with the secretions of a syphilitic lesion (if such inoculation has any effect at all) we can well believe, because instances of it have often occurred in our own practice. The product of the inoculation is then an abortive effect, such as we usually obtain by revaccinating an adult who has been previously vaccinated in childhood. What would be the effect of vaccinating infants from such an aborted vaccine pustule we do not know. It may be, that the pus of such a sore,—derived from a prostitute who has once been the subject of constitutional syphilis, but who does not at the time labour under its manifestations,—is the cause of the local soft sore in the infected individual; but we really know nothing of the causes, and next to nothing of the origin, of these diseases.

The most we can do is to trace the descent of the two affections, in order to discover whether they are separate or distinct, or interchangeable. It is confessedly difficult to do this; but if it could be proved that the virus of the local soft sore, derived from a soil untainted by constitutional syphilitic manifestations, could give rise to the indurated one and secondaries in another individual, the ground would be cut from under the feet of the so-called dualists. But precision and exactness are required, because it is imperative that the virus used be that of the local soft sore, and nothing but that. The source of the contagion must neither be suffering from constitutional syphilis nor exhibit subsequent manifestations of that disease, as a consequence of the lesion from which the virus was obtained.

We have been on the "look out" for evidence on these points, and so far as we have any satisfactory data at all it seems to us that syphilis produces syphilis, and the chancroid poison chancroid. There can be no doubt that the secretions of the hard sore are sometimes inoculable in a syphilitic soil, and this fact is pointed to as conclusive evidence of the identity of the virus in the two forms of primary lesion. And it certainly is strong, although not conclusive evidence. The infecting power of the syphilitic virus appears to diminish very markedly the farther it is removed from the primary lesion. As modified chancres present themselves in patients recovered from syphilis, so you might induce such chancres in a person suffering from secondary symptoms by the inoculation of pus obtained from the hard chancre of another individual, even more easily, perhaps, than by auto-inoculation. If, however, that pus were inserted in virgin ground, it would, we suspect, always produce an indurated infecting sore, and none other.

Now let me add a few words upon the subject of mercury. By none would another and a better method of treating syphilis be more welcomed than by us Surgeons. We are fully alive to the shortcomings of mercury, spite of what Dr. M'Loughlin may write. If the verdict be in favour of the great therapeutic superiority of syphilisation, it will soon be adopted. For the present we hesitate.

There is one form of this disease which demands a word. There is no primary lesion of uncertain character to fight about; the nature of the case is plain. We allude to infantile syphilis.

What may be the exact impression left upon the minds of our leading Physicians we know not, but, to judge from the number of such cases in the out-patient department of our great Hospitals, and the very common—almost unanimous—employment of mercury in some form or other for their treatment, we shall not be far wrong in assuming that its great therapeutic influence is generally recognised.

The rapidity and comparative certainty with which the manifestations of infantile syphilis disappear under mercury have made a very strong impression on our own mind. Delay in its employment is so much time wasted, and worse than wasted, because its administration is sometimes too late when the syphilitic cachexia is advanced and pronounced. There is, too, this circumstance attending its use: you can almost foretel the amelioration which will take place from week to week, and you can corroborate the truth of your prophecy by the observation of the patient; and there are very few drugs in the Pharmacopœia of which you can say as much.

We think that there must be great difficulties in the way of practising syphilisation in this country, except in our Lock Hospitals and Public Services. A Medical friend, who witnessed the process of syphilisation as pursued on a patient by M. Bidenkap, at the Richmond Hospital, Dublin, told us that the results obtained there, by inoculating the secretions from hard sores, were so negative or unsatisfactory that M. Bidenkap had recourse to some chancre virus obtained from Norway. After some two months' inoculation, the patient's syphilitic symptoms did not appear to be at all ameliorated, and the numerous cicatrices on his body were not an encouraging spectacle for other patients to pursue the same treatment.

**Western Medical and Surgical Society of London.**—At the annual meeting, held on June 1, the following officers were elected for the next session:—*President*—Dr. Fuller. *Vice Presidents*—Mr. P. Hewett, Dr. Marcet, Mr. T. Dickinson, Dr. Anstie. *Council*—Dr. Way, Mr. Vasey, Dr. D. Davies, Mr. Traer, Mr. Knight, Dr. Daniell, Dr. Blandford, Mr. T. Holmes, Mr. J. R. Lane, Dr. Morell Mackenzie, Mr. Naylor, Dr. Fyfe. *Treasurer*—Dr. Baines. *Honorary Librarian*—Dr. Godwin. *Honorary Secretaries*—Mr. Milner and Mr. C. Hunter. *Auditors*—Mr. T. Taylor and Mr. Hall.

## TREATMENT OF CATTLE PLAGUE BY INJECTION OF ARTIFICIAL CHYLE.

Dr. Richardson has forwarded to the Government of Ireland his proposition, made in January last to the Home Secretary, Sir George Grey, for the treatment of animals suffering from cattle plague. This proposition has already been before the Profession for several months, but has scarcely received the attention we should have expected. We may, therefore, place in the hands of our readers the following facts, taken from the correspondence between the author of the proposed method, the Home Secretary, and the Royal Commissioners. In his first letter, which was addressed to Sir George Grey, and was forwarded on the 16th of January last, Dr. Richardson writes to ask if Her Majesty's Government would allow him for experiment a hundred head of cattle suffering from the Rinderpest at various stages of the disease, together with the means of subjecting the animals to treatment. For his purpose he should simply require accommodation in a healthy shed or stable for five or six animals at one time, with proper food for the animals, medicines, two keepers, and a reporter of cases. The only further favour he asks is that two or three scientific commissioners should be deputed to watch the results of the treatment, and to certify to the correctness of those results on his report. He adds that previous to taking this step he had placed all the details of his proposed inquiry before the President of the Royal College of Physicians, and the President, after carefully considering these details, had expressed his opinion that the proposal altogether was based on sound scientific principles, and was of a nature to deserve earnest consideration. This letter led to the placing of the proposition before the Royal Commissioners who were then sitting. The proposition was accompanied with explanatory notes, certain of which we subjoin.

In the first place, as to the curability of the disease, Dr. Richardson offered the following arguments:—

"I premise that the disease is curable, and for the following reasons:—

"1. According to my observation it is a disease affecting one set of organs only—the organs of vegetative life. The secondary changes which occur appear to me to be due altogether to a modified oxidation of the blood. In so far as I can gather, derangement of the nervous centres is no essential part of the malady. I look on these facts as tending to simplify very much every suggestion in respect to treatment, and as affording hope of the discovery of a means of cure.

"2. I observe that there are many instances of a spontaneous recovery in affected animals, a fact which I think especially favours—nay, indeed, proves the possibility of cure. Three days ago I saw two animals, of the same breed and age, in the same stall, fed on the same kind of food, breathing the same kind of air, and suffering from the malady in the same stage and in the same degree of severity. To-day I find that one of these animals died seven hours after I saw it, while the second animal—both having been treated alike—began, soon after the first died, to recover, and did recover so rapidly that now it is comparatively well. If the disease were incurable, why did not both these animals die? It is plain that there is a period during which the malady may be said naturally to last, and that the mode in which that period shall end turns on the power of the animal to pass through the said period. If, while its force is largely expended in eliminating from its body the morbid products that are common to the malady, the animal can also produce sufficient force to sustain a low form of life, it will begin to recover so soon as the elimination of diseased product is perfected. If it fail to produce sufficient force to sustain both elimination and the power necessary to keep the heart and the chest muscles in action, it will die. In plain words, the natural cure of the disease is elimination; and whether the cure be effective or not turns on the ability of the animal to sustain the eliminative process and its own natural processes at one and the same time. I hold, then, that art should step in and should do so little, and yet so much, as should place all animals on a par in respect to their power of sustaining natural recovery.

"The means I would suggest for the scientific treatment of the cattle plague are based on the principles I have laid down in the preceding paragraphs. There are, in my opinion, two clear lines of treatment open, applicable to two special periods of the malady. In the first stage, while the force of the animal has been but little interfered with or reduced, it would be advisable, I think, to increase the process of elimination and to secure as rapidly as possible the removal of the poison from the organism. In the second and later stages, it would be correct to sustain the animal force so that time might be gained for the perfection of the process of elimination.

"I believe it is possible to carry out both these intentions by means that are rational in principle and easy in application."

Having described a method of securing elimination by subcutaneous injection, Dr. Richardson continues :—

"To carry out the second intention of treatment, I suggest the artificial feeding of the animals during the later stages of the malady, so as to enable them to live on through the period of natural elimination of the poison. As the disorder presents itself to my mind, the circumstance of recovery turns in every case on the sustainment of secreting force by the animal; while the sustainment of secreting force, in its turn, depends on the power of the animal to take in and apply the source or store of force—food and drink. The common experience is to the effect that if the animals can be fed they live; if they refuse food, or if taking food it remains undigested in the first stomach, they die. In plain words, the blood not being supplied with new force burns out, and as is common in all this class of epidemic disorders, there is thus produced a condition which I have elsewhere designated as asphyxia commencing in the blood; the blood is not oxidised, the animal fire declines, and death—inertia—is the result. How, then, can this condition be met? In the first place, it can largely be met by paying great attention to the feeding and nursing of the animals. If the animals are placed in a warm room, and if they are steadily and persistently fed with food warmed to 96° Fahr., finely cut up, and well softened and diluted with water, the chance of recovery is unquestionably increased. Evidence of a very satisfactory nature on this point admits of being collected.

"But there are many cases in which, though food be introduced into the alimentary system of the animal, it undergoes there no proper digestion nor absorption, the surface of the alimentary canal being itself unnatural and unable to perform its ordinary functions. In these cases feeding by the mouth is of little service. Here I think art ought to step in and render important aid.

"I propose that in these instances the animal *should be fed artificially through the veins*, with a fluid resembling that which it manufactures in its own digestive organs, and throws into its own veins, I mean *an artificial chyle*.

"That an animal can be fed through the veins is a fact proved by experiment. I have fed a dog with blood through the jugular vein for many days together, and into a young dog, that was feeding ordinarily on milk, I have successfully injected milk in the place of blood. Dr. Bovell, of Toronto, in 1854, injected milk even into the veins of men in the last stage of cholera, and with very satisfactory results. We might, therefore, safely inject either blood or milk into the veins of cattle in the later stages of Rinderpest with promise of advantage.

"There would, however, at all times stand in the way the practical difficulty of obtaining blood or milk on a sufficiently extensive scale. My plan, therefore, is to substitute for the fluids an artificial chyle made by subjecting the ordinary food of cattle to artificial digestion out of the body.

"I have produced a fluid for this purpose so closely analogous to natural chyle that it would be difficult to distinguish it from the natural fluid by common observation. This artificial chyle has a specific gravity of 1,030, a dirty-white colour, and an albuminous consistency; it contains albumen and solid matters to the extent of 8 per cent.

"This fluid, warmed to 98° Fahr., I propose to use as food for animals in the later stages of the disease, by injecting it into the external jugular vein in the neck.

The operation of injection would be as simple as that of ordinary blood-letting. It would merely be necessary to insert a bougie into, and tie it firmly in, the vein, securing the vein above by a firm ligature. The feeding tube in the vein, if provided with a stopcock, need not be removed for many hours, so that several supplies of food might be introduced by the same channel. In introducing the food, it would be best not to use a syringe, but to place the liquid in a gallon barrel, provided with a quarter-inch tap. A tube of india-rubber should pass from the tap to the bougie in the vein, the tube being filled first so as to exclude the air. Then the fluid being allowed to flow, an elevation of two feet above the animal would give sufficient pressure of current to feed the vein."

The Secretary of the Commissioners acknowledged the receipt of these suggestions on February 8, and intimated that they had been placed in the hands of Dr. Bence Jones, as chairman of the experimental committee.

How far the experiment of artificial feeding through the veins would have succeeded we cannot of course say, though we regret that so simple a means was not tried, and we would urge the Irish Government to test the matter fairly and faithfully. We need scarcely add that Dr. Richardson's plan anticipates by many months the suggested curative measures, by transfusion, which have appeared in the *Times* and other papers during the past month.

# REVIEWS.

*A Treatise on the Principles and Practice of Medicine, Designed for the Use of Practitioners and Students of Medicine.* By Austin Flint, M.D., Professor of the Principles and Practice of Medicine at the Belle Vue Hospital Medical College, and in the Long Island College Hospital, etc. Philadelphia: Henry C. Lea. 1866. Pp. 867.

The first teaching that a student receives at the schools is necessarily dogmatic. It must and ought to be so. It is for each man to correct and modify the opinions first inculcated by his own careful observation and experience. The book before us is of that class that students thus usually read when attending their first course of lectures on Medicine, and avoiding as it does the discussion of controverted questions, while it presents a very fair summary of the present condition of Medical science and art, we have no hesitation in expressing a favourable opinion of it.

Regarding it as embodying the results of Dr. Flint's own experience, there are one or two points which we shall refer to as of general Professional interest. And, first, as to cholera, a subject of importance just now. Like the majority of the Profession in Great Britain, Dr. Flint insists upon the necessity for arresting by astringent remedies the progress o any intestinal flux that may occur during an epidemic season, and recommends that any constipation that it may be desirable to overcome at such a time should be treated rather with enemata than with purgatives. The last, however, is a matter which each Practitioner must decide when the special instance is before him, and upon the basis of the peculiarity of the particular case. We are indisposed to endorse the above as an absolute rule of practice. What we wish to call special attention to is that Dr. Flint's experience, as given in the succeeding quotation, is that of all who have had anything to do with the public arrangements made under similar circumstances to the present :—"The great difficulty as regards the prevention of cholera is in the prompt application of simple, but effectual, treatment in all cases of diarrhœa during the epidemic. Very many pay no attention to the premonitory diarrhœa through ignorance, and not a few of those better informed neglect it either from recklessness or because they cannot appreciate the fact that a disorder so slight and ordinary can be a precursor of a malady of such gravity as cholera. Public announcements by handbills, articles in newspapers, etc., of the importance of promptly resorting to treatment for diarrhœa fail in accomplishing the object. The only effectual plan is to organise a sanitary benevolent police, and provide for one or two domiciliary visits daily at every house within the limits of the epidemic, the purpose of the visits being to inquire if any one be affected with diarrhœa, to impress the importance of immediate attention to it, and, when circumstances render it necessary, to supply at once appropriate remedies. This plan, faithfully carried out, would, I believe, demonstrate that cholera is in a great measure preventible."—P. 428.

Dr. Flint writes thus respecting the use of mercury in acute peritonitis :—"It is, perhaps, questionable whether in so grave an affection as acute peritonitis we are fully warranted in omitting this remedy. I must confess, however, that for some years past it has not entered into the treatment of the cases of which I have had charge."—P. 462. His reticence exhibited in the first part of this quotation is then merely in accordance with a practice not yet abandoned generally in the United States. He gives no rule as to the quantity of opium to be given when the opium treatment is adopted, except that, avoiding, of course, undue narcotism, the opiate given in a full dose at first is to be repeated at intervals of from two to three hours in doses sufficient to prevent return of pain. Our own practice is guided very much by the condition of the pupil in severe cases. Narcotism is not easily brought about; the opium seems rather to favour wakefulness, and our custom is to contract the pupil, and to take care to keep it contracted as long as the activity of the disease persists. The quantity of opium necessary to be given for this purpose is a matter of little importance, and need not create any dread of overdosing in the mind of the Practitioner, so long as the doses are sufficiently divided and the patient visited sufficiently often. We are also glad to have our own opinion confirmed by the experience of Dr. Flint as to the uselessness of mercurialising pericarditic patients. We have long ago dropped mercury out of our list of remedies in pericarditis. Dr. Flint says—"In treating of this point in my work on 'Disease of the Heart,' I expressed myself with a certain amount of reserve; but further reflection and observation have prepared me to take a more decided position against the importance of this measure (mercurialisation). Since that work was written (and, indeed, for the most part previously) I have treated the cases of pericarditis which have come under my observation without mercury, and I have found no reason to be dissatisfied with its omission."—P. 270. He gives the number of cases, their complications and results, in proof of his success, adding (and we entirely concur with him), "Opium is invaluable in this as in other acute inflammations."

We shall conclude by the extract of a case of importation of typhoid fever. We are rather astonished that Dr. Flint sees in it nothing more than an instance of the communication of the disease by contagion, laying no stress whatever upon the important fact as to the use of the well-water or the possible contamination of it by the excretions of the first patient. The case is so interesting that we shall give it in full:—"Many instances of the kind have been reported; but the most remarkable of any on record came under my observation in 1843 in a little settlement called North Boston, situated eighteen miles from the city of Buffalo, consisting of nine families, all being within an area of 100 rods in diameter; but the few houses in which the disease occurred were closely grouped together around a tavern, the house farthest removed from the tavern being only ten rods distant. A stranger from New England, travelling in a stage coach which passed through this settlement, had been ill for several days, and on arriving at this stopping place was unable to proceed further. He remained at the tavern, and after a few days died. He was seen by several Physicians of the vicinity; and there can be no doubt that his disease was the same as that with which others were subsequently affected. Up to this time typhoid fever had never been known in that neighbourhood. The sick stranger was seen by the members of all the families in immediate proximity to the tavern with a single exception. One family, named Stearn, having quarrelled with the tavern-keeper, had no intercourse with the family of the latter, and very little with the other families, all of whom were tenants of the tavern-keeper. No members of the family of Stearn either saw the sick stranger or any of those who were taken ill after the stranger's death. Members of the family of the tavern-keeper were the first to become affected, the first case occurring twenty-three days after the arrival of the stranger. Other cases speedily occurred in the surrounding families. In a month, more than half the population, numbering forty-three, had been affected, and ten had died. Of the families immediately surrounding the tavern, that of Stearn's alone escaped; no case occurred in this family. The occurrence of the disease produced great excitement in the neighbourhood. Poisoning was suspected, and Stearns was charged with having poisoned a well used in common by all the families except his own. A fact which encouraged this suspicion was, the common well being owned by the tavern-keeper, he had refused permission to use it to Stearns, who had in consequence to dig a well for his own use. An examination of the water from the common well showed it to be perfectly pure. The disease was undoubtedly typhoid fever. Visiting this settlement during the prevalence of the disease, and recording the symptoms of several cases then in progress, the clinical history furnished abundant evidence of the nature of the disease. Moreover, I made an examination of the body of one of those who died with the disease, and found the Peyerian patches ulcerated and the mesenteric glands greatly enlarged."—P. 711.

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*Dr. J. Moore Neligan's Practical Treatise on Diseases of the Skin.* Second edition, enlarged and revised. By T. W. Belcher, M.A., M.D Dub., B.M., M.A. Oxon., Fellow, Censor, Examiner in Materia Medica and Medical Jurisprudence, and in Arts, and Hon. Librarian King and Queen's College of Physicians in Ireland; Physician to the Dublin Dispensary for Skin Diseases, etc. 1866. Dublin: Fannin and Co. London: Longmans and Co.

The late Dr. Neligan's Treatise must be well known to many of our readers as one of the numerous modern works on the diseases of the skin which have rescued the treatment of these maladies from the quacks, or from being a narrow specialism, and established it as a part of the domain of scientific Medicine, and so fully has this been accomplished that the production of a work on the diseases of the skin—of the external lung, if we may so term it—no more marks a Physician necessarily as a specialist than does his having enriched the literature of the internal lungs. A very striking proof of the earnestness with which diseases of the skin have been studied, and of the extent of that study, is seen in the fact that the "Bibliographical Index" added by Dr. Belcher to this work covers sixteen pages.

It is generally sufficient, when any work attains a second edition, simply to mention the fact, which is in itself notice and comment; but Dr. Belcher has done so much by way of "revision and enlargement" for Dr. Neligan's Treatise, that his edition of it demands a fuller notice. We cannot better give an idea of what he has done for the work than by quoting from his Preface the following list of "additions now made:"—

"1. A Copious Table of Contents. 2. Considerable Additions to chap. i., on Classification; chiefly as regards the modern nosologies of Hardy, Hebra, Buchanan, and others. 3. Derivations and meanings of technical terms, and their synonyms. 4. References to Dr. Neligan's 'Atlas of Cutaneous Diseases,' as also to the plates of Cazenave and Hebra. 5. References to Professor Macnamara's Sixth Edition of Dr. Neligan's Materia Medica. 6. Quotations from, and references to, authorities in every case. 7. Explanations of the peculiar modes of treatment, and in some cases the prescriptions, of the best home and foreign dermatologists. 8. An entire translation of the numerous prescriptions of the first edition, with those now added, into the technical language of the British Pharmacopœia. 9. Posological table of the most important, and mostly poisonous, medicines used in the treatment of cutaneous diseases. 10. A Copious Bibliographical Index of the Chief Authorities quoted."

Notices of many diseases, not alluded to in the first edition, have been added; such as of rubeola, scarlatina, variola and its allies, furunculus, anthrax, pustula maligna, lepra Hebræorum, elephantiasis, pellegra, morbus Addisonii, etc. The chapter on Parasitic Diseases, or Dermatophytæ, has been revised, and considerably added to; also that on Diseases of the Hair and Nails, and that on Therapeutics; and the General Index has been enlarged and re-written. All the work has been done well, and the result is a very useful and trustworthy "practical treatise." Dr. Belcher brings to his work considerable experience and knowledge of skin disease, and an extensive acquaintance with the literature of the subject; this last he draws on very freely and largely, and he is most careful in acknowledging on every occasion the writers to whom he and Dr. Neligan have been indebted. The works of Mr. Erasmus Wilson and Dr. Tilbury Fox have been found especially useful—they are referred to on almost every subject. Almost the only objection we have to make to the work is to the "phraseology employed." Where Dr. Belcher gives his personal opinion and experience, his remarks "are given in the third person singular," which produces a rather awkward and rugged effect. We cannot but think that he had better have written in the first person, as Dr. Neligan did, and enclose his remarks in brackets. But of the value of the book there will be, we think, only one opinion, and we believe Dr. Belcher will find that he is justified in his "trust that the work will not only suit the busy Practitioner, the man of one book (on this subject), for whom this volume is primarily designed, but also the industrious Medical student, the Practitioner 'getting up' a paper for a Medical society, and the lecturer, for ready reference and saving of valuable time."

*Atlas of Portraits of Diseases of the Skin.* Issued by the New Sydenham Society. Fifth Fasiculus.

THIS fasiculus contains three portraits—those of Pityriasis Versicolor, Pemphigus, and Psoriasis Vulgaris, var. Inveterata. They are "drawn from nature" by E. Burgess, and chromo-lithographed by W. West. The portrait of Pityriasis Versicolor is really good, and the others better than usual. It is the best number of the Atlas yet published, we think, and we are happy in being able to give it a word of hearty commendation.

*A Companion to the British Pharmacopœia, comparing the Strength of the various Preparations with those of the London, Edinburgh, and Dublin, United States, and other Foreign Pharmacopœias; with Practical Hints on Prescribing.* By PETER SQUIRE, F.L.S., Chemist in the Establishment of the Queen, etc. Third Edition. Churchill and Sons. 1866. Pp. 262.

IN reviewing the former editions of this work, we spoke in the highest terms of the matter, of the style, and of the general *get up* of the publication. It was a book perfect at all points, and now has not been improved so much as enlarged by the addition of fresh matters of practical interest. The author has corrected it so as to introduce the preparations of the seventh edition of the Prussian Pharmacopœia. As we have said before, the book is so exquisitely arranged as to type and headings that the busiest man can find what he wants in a minute. He finds all the essence of the British Pharmacopœia, and a comparative statement of the analogous preparations in all other known Pharmacopœias. He finds also all the popular non-officinal preparations (chlorodyne, etc.), which ought to be in the P. B., but are not. Practical hints, such as only could be supplied by a man in the daily habit of dealing with drugs, are largely added to this edition. For instance, Mr. Squire tells the chemist what mucilage will make a good emulsion; how he may best make pepsine into pills; how to make the Mist. Ferri Comp.; what are the substitutes for lard; and how to dissolve quinine without turbidity. Above all, it contains such an addition of formulæ useful to the prescriber that we shall not be surprised at the speedy appearance of a fourth edition.

*On Disease of the Right Side of the Heart.* By THOMAS MEE DALDY, Member of the Royal College of Physicians of England, late President of the Hunterian Society. London: Bell and Daldy, 186, Fleet-street. 1866.

THIS book contains much novelty, and, we believe, real originality. There are parts of it open to much criticism, and very many to cavil. We believe, however, that it is the result of honest work and of much consideration. Dr. Daldy is not a man who writes for the sake of writing, but evidently for the better reason that he feels he has a long while observed certain facts which have not been sufficiently studied by the Profession, and because he has deduced from them some principles of treatment which he thinks will be of real use in practice. We will give his conclusions, and leave our readers to study the arguments on which they are founded:—

"1st. That feebleness of the right heart, and especially of its auricle (utterly independent of obstruction *a fronte*) is a phase of disease constantly presented to our notice, but not sufficiently observed.

"2nd. That dulness on percussion to the right of the junction of the xiphoid cartilage with the lower third of the sternum, and the propagation of the heart-sounds in the direction of the right clavicle, conjoined with the derangement of the circulation of one or more distant organs, are the diagnostic signs of an habitually distended right auricle.

"3rd. That the pathological condition to which I refer—viz., the reduction of the muscular structure of the auricle to something like elastic tissue (not fatty degeneration) is not readily recognisable on necroscopic examination, unless the abnormal distensibility of the auricle during life be carefully borne in mind.

"4th. That this feeble condition of the right heart is frequently hereditary, and traceable through two or even three generations.

"5th. That it gives rise to the following definite results:—(α) The habitual congestive headache from which many persons suffer through their whole life. (β) The vertigo so constantly ascribed to determination of blood to the head, but really consequent upon impeded return of blood from the head. —(γ) Deterioration of the brain-tissue (called softening) by impeding the return of blood through the *superior* vena cava, comparable to the results which occur to the tissues of the lower extremities, and of the organs below the level of the heart when the right auricle is unable readily to receive the blood from the *inferior vena cava*; or, viewed from the other side of the circulation, to the results of embolism, feeble left ventricle, or any other cause interfering with the due supply of arterial blood *to* the capillaries. (δ) Mania."

*Journal of Social Science.* March, 1866.

THIS number contains much of general and Medical interest. There is a paper by Mr. Hare suggesting an improved constitution of local governing bodies, with special reference to the local government of the metropolis. It also supplies us with the proceedings of the Metropolitan Association of Medical Officers of Health during the current year, including Dr. Montgomery's paper on the origin and propagation of cholera in India by means of religious festivals and pilgrimages, Mr. Beggs' paper upon the dwellings of the poor, and a memorandum of a plan of united action in the case of an epidemic of cholera which was adopted at a recent meeting of the Association, and which is intended for distribution amongst the members of vestries, etc., as embodying the views of the metropolitan Health Officers as to what ought to be done to meet it.

*Die Seelenstörungen in ihrem Wesen und ihrer Behandlung.* Von Dr. ED. RICKER. Erlangen: Enke.

*Mental Derangements: their Nature and Treatment.* By Dr. ED. RICKER. Erlangen: Enke. Pp. 146.

THIS little work is an essay which obtained a prize offered by the "German Society for Psychiatry and Legal Psychology," and is published by this Society. The prize was offered for the best treatise on mental alienation, written in a style which would fit it for use among the general public, and we must say that the conditions have been well complied with. Containing as it does only well-known facts, illustrated by well-marked cases, it does not require any lengthy notice at our hands, and we shall only say that it consists of six chapters—the first devoted to mind and body, and how these are brought into connexion; the second on these in a state of disease; the third on the various forms of insanity, with their diagnosis; the fourth on the causation of insanity; the fifth on its treatment; and the last on asylums. The whole is written in a pleasing style, in plain and readily intelligible German, and is well adapted to the wants of any student of mental disorders turning his attention to German for the first time.

## GENERAL CORRESPONDENCE.

### THE RADICAL CURE OF HERNIA.

LETTER FROM MR. JOHN WOOD.

[To the Editor of the Medical Times and Gazette.]

SIR,—In your Journal of last week is a report of the debate at the Royal Medico-Chirurgical Society upon a new operation for the radical cure of hernia, by Mr. Durham, which I was unavoidably prevented from attending. Some remarks were therein made upon the method of cure practised by me, which appear to have originated in a misapprehension of the real facts, and which I feel, therefore, that I can properly make the subject of this communication.

I have now performed my operation in upwards of 160 cases, chiefly (and almost weekly) in the theatre of King's College Hospital, where the cases may be followed by any one interested in the matter. Out of this number I have had only one death (the case of pyæmia detailed in my work on "Rupture"). Serious symptoms of any kind are now so rare as at once to excite attention and remark. This rate of mortality no competent and candid judge will consider worthy of being entitled as "dangerous," even in an operation of expediency as distinguished from one of necessity.

In the practice of other Surgeons I have seen or heard of a fatal result in three instances. In these the causes of death (as in most cases the causes of failure) have seemed to me so clearly apparent, and so perfectly avoidable by skill and experience, that I am led to consider that, though useful as warnings, they by no means constitute a valid argument against the operation. The six cases referred to as the only ones treated by me entirely without truss were so treated as experiments, to test the reality and efficiency of the result obtainable by operation alone and unsupported, and in this they were successful. This, however, by no means justifies one in discarding the prudence of some truss support for a short time after the operation, to afford the new adhesions time and opportunity to contract and strengthen. So far as an earnest desire to get at the truth has hitherto enabled me to attain it, I find that the proportion of my success is 65 to 70 per cent. The subject of one very large case, who was operated on nearly five years ago, and who has since then done continuous hard work as a porter, without truss, for two or three years, was shown at King's College Hospital last week, quite well and free from protrusion. Others as good have been also exhibited there from time to time, as the *habitués* of the Hospital well know. Conclusions as to Wutzer's operation I may safely leave to the judgment of the Profession, already pretty plainly pronounced. With respect to that advocated by the author of the paper, I will only remark that proceedings closely similar have been practised here and abroad with such fatality and want of success that they were relinquished; but that if the author, after further experience than that afforded by one exceptional case, is more successful, I shall be very glad to greet him with welcome, and so I believe will all Surgeons who feel that an accumulation of results of this kind is worth much more in our progressive art than either old-fashioned prejudices or prophetic theories.

In conclusion, I must needs claim for my method of operating the power of placing the ligature not "accidentally" but at the pleasure of the Surgeon (if well skilled in anatomy and experienced in hernia), quite as close to the deep opening or internal ring of the rupture, more safely, and quite as completely as by the plan described by the author of the paper. I am, &c. JOHN WOOD.

4, Montague-street, Russell-square, W.C., June 18.

# REPORTS OF SOCIETIES.

## ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MAY 22, 1866.

DR. ALDERSON, F.R.S., President.

MR. G. GASKOIN contributed a paper on

### CONTINUED INOCULATION AND RECENT VIEWS ON SYPHILIS.

In noticing the inoculation of syphilis on warm-blooded animals as first effected by M. Auzias Turenne in the year 1844, this paper instanced the jealous opposition these experiments encountered at the hands of leading syphilographers in Paris, who were already pledged to a different set of views. This prejudice was increased to a more active antagonism when, as he pursued his demonstrations, M. Auzias alighted on the discovery of a natural limit to the number of these inoculations. The law of immunity from the assault of a particular virus acquired by repeated inoculation of the same was proclaimed by M. Auzias in a paper addressed to the Academy of Sciences at Paris in the year 1850, and his ideas having by this time become matured by reflection as well as by experiment, the terms of the address were so ample as to appear ostentatious; a handle was thus afforded to ill-will and to Parisian ridicule, of which those in possession of the field did not fail to take advantage at his expense. The academical censure, however, which fell on syphilisation in France was not a premeditated attack, but arose out of circumstances foreign to this question; it was a *contre-coup* of other discussion, and it occurred as follows:—A young German Physician, L——n, having acquired syphilis experimentally, consulted both M. Auzias and M. Ricord, and these gentlemen conjointly made one or two inoculations on him, which L——n repeated afterwards a few times with great irregularity. When these sores wore temporarily a bad appearance, M. Ricord, under the influence of prejudice against M. Auzias, brought the patient under the eyes of the Academy of Medicine; not very considerately as far as he himself was concerned, for L——'s case was an unmistakable proof of contagion from secondary syphilis. M. Velpeau, the eminent Surgeon, with a view to the discomfiture of M. Ricord on this question of contagion, moved for a report on the case—a report which, maintained in its first view, could hardly have terminated otherwise than in a censure of M. Ricord's fundamental doctrine of the non-contagion of secondary syphilitic affections, an opinion which he had borrowed from the work of John Hunter, and engrafted on the Medical mind of France long after it had become effete in this country. M. Ricord, however, whose influence was then paramount both with the press and in the Profession, and extraordinarily great in the Academy, with great skill managed to displace the question; the committee of reporters constituted themselves a jury for examining the doctrines of M. Auzias, and condemned syphilisation at a time when materials for opinion were not procurable. Messrs. Malgaigne and Depouil got severely handled for upholding the right of free inquiry, and a veto and an anathema were placed on syphilisation by the press and by the verdict of the Academy throughout France. The consequence of this intrigue was, it is wonderful to say, accepted as law by Europe, if we except Piedmont and Norway. In the first-named country the Cavalier Sperino was already, in spite of much violent opposition, in the path of clinical observation. In none of these countries did the governments lend themselves as instruments of oppression to thought or action; the barrier to progress of ideas arose purely out of Professional interests and prejudice. The paper went on to state that more recently in France these questions have undergone revision: M. Auzias holds a well-merited scientific position; the late Dr. Melchior Roberts obtained permission to practise syphilisation in the public Hospitals of Marseilles, and was gratified by his success; Messrs. Nélaton, Gibert, and Gosselin have made essays in the same line of treatment; M. Bazin laments the want of freedom to carry out his intention. Certain of the French societies and publications have seemed favourable to this method, but the public will be with difficulty reassured. After noticing the apparent benefit of material culture in modifying syphilis in England as compared to other countries, the labours of Dr. Wm. Boeck in Norway, both as regards leprosy and syphilis, were briefly alluded to. Reference was made to the French school of syphilography as little favourable to native talent, borrowing first the ideas of Hunter and now of Carmichael. The doctrine of non-contagion of secondaries, the keystone of Ricord's teaching, received its *coup de grâce* in the year 1859, when the Home Minister, on the instance of M. Auzias Turenne, demanded a report from the Academy of Medicine; and to this report M. Ricord, as a member of the committee, was fain to accede on the 31st of May of that year, conceding the fact of the contagion of secondary syphilis, and putting an end, it is to be hoped, to a renewal of scandals which have fallen heavily on many innocent individuals. The pretension of the French school to rest diagnosis on the inoculability of the chancre was declared to be futile. Their "*chancre mixte*," or mixed chancre, is a species brought into being to support that view. By such means it would seem the subject is made unnecessarily complicated, and the faculty of observation discouraged. A case was adduced of a young man in the Lock Hospital, with hard, dry chancre and secondaries. In this patient the chancre was stimulated into secretion by savine ointment. He was inoculated daily from this sore on the arms, with few intermissions, for the space of seventeen days. At the end of that time a positive result was obtained, and the matter of the ensuing inoculation was carried into a series of eight generations. The same matter was brought into use in syphilising other Hospital patients, and was returned to him from one of these at an early period of his syphilisation, when it went through a further series of seventeen inoculations. In due course immunity was obtained. The patient is in robust health, and apparently cured of his disease.

Dr. DRYSDALE had at first been prejudiced against syphilisation, but had changed his opinion, and believed the inoculations to be of value. He passed a high eulogium on the experiments of Dr. Boeck. He argued that as syphilis might be like variola, inoculation might do good; and reminded the Society that small-pox was much diminished in severity by the practice of inoculation; and this might to some extent hold good in some instances with respect to syphilisation. As to its being a curative agent—had we a better? was there a better?

Mr. HENRY LEE stated that the facts referred to in the paper were very few. Mr. Gaskoin had mentioned that the indurated syphilitic sore had been inoculated upon animals; and he had referred to the case of a patient named D—— as having been inoculated from his own indurated sore. With regard to the first point, he had given no proof whatever to support his assertion; and with regard to the latter, he had omitted the important fact that D—— was inoculated at the same time, and by the same lancet, with the secretion from a suppurating sore. Before we could reason upon the effects of syphilitic inoculation we must define our terms. It was not easily demonstrated that the secretion of an indurated sore could be inoculated upon a syphilitic subject. If inoculated, that which resulted was a non-indurated sore; and even granting, for the sake of argument, that this was really the inoculation of the infecting kind of syphilis, it yet remained to be demonstrated that a patient's constitution was susceptible to the action of the poison. The term "syphilisation" was not appropriate until these actions could be defined. It had been stated by Dr. Drysdale that the treatment by syphilisation (so-called) was very uniformly successful; we had, however, no proof of this hitherto in England. It was well known that some deaths had taken place under the treatment. It was also known that in other cases the treatment had been discontinued; and we had yet to learn in how many cases relapses would occur. With regard to the immunity said to be produced by repeated inoculation, a time did no doubt arrive when inoculations failed; but a similar immunity might, by perseverance, be produced to the action of blisters, croton oil, or tartarised antimony. In all these cases the immunity was but temporary. If we allowed a certain interval to elapse, we could again produce the syphilitic pustule, the blister, or the characteristic effects of the croton oil or tartarised antimony. He (Mr. Lee) considered that nothing had been proved, during the past year, with regard to the absorption of the syphilitic poison into the constitution of a patient already syphilitic.

Mr. James Lane said there were two things to be considered in discussing the question of syphilisation—one was its practical value as a method of treatment; the other was its value in elucidating difficult questions in the pathology of syphilis. With reference to its therapeutic effect, he had carefully watched all the cases which had been under treatment at the female Lock Hospital; but their number had not yet been sufficient to enable him to express an independent opinion from his own observation. It was a subject requiring a long and patient attention, and calm and unprejudiced judgment. Mention had been made, as he thought somewhat unfairly, of deaths which had occurred in this country in patients submitted to syphilisation; but these deaths being, as he explained, in no way attributable to the treatment, he trusted their unfortunate occurrence would not be allowed to operate to its prejudice. He very much feared that one death, if not more, might shortly occur, in consequence of a serious epidemic of sloughing phagedena which was present in the Hospital at this moment, and which had affected some of the patients undergoing syphilisation in common with the others. Looking at syphilisation from the scientific as contrasted with the practical point of view, there were two things specially worthy of remark: one was the immunity obtained by repeated inoculations; the other was the inoculability of the indurated sore on a syphilitic patient. With respect to the immunity which had been so much disputed, he had no hesitation, from what he had seen, in testifying to its reality; and it was a point well worthy of notice, now that the unity or duality of the syphilitic poison was being so much discussed, that the immunity was obtainable, whether the matter used for inoculation had been derived originally from hard or soft sores. Whichever matter was employed, the immunity extended to both, and the time required for its production was on the average about three months. The inoculability of the indurated sore on a syphilitic patient was well illustrated by the case of D., which had been related in the paper. This, with other cases which have recently occurred in the Lock Hospital, would have fully convinced him of the inoculability of the hard sore, if he had ever had any doubt upon the subject. Mr. Lee, in his remarks, had, to Mr. Lane's surprise, said that this patient, D., was the only one whom Dr. Boeck had succeeded in inoculating from an indurated sore. This man had not been Dr. Boeck's patient at all, but Mr. Walter Coulson's; and it was by the latter that the successful inoculations were made in his case. Dr. Boeck had, however, under his (Mr. Lane's) observation, inoculated a female patient from D.'s indurated sore, and obtained a positive result of a most unequivocal character, having made six punctures, all of which were successful, and which were afterwards carried through a lengthened series. Mr. Lee had suggested doubts about the genuineness of D.'s case, because he was being inoculated at the same time with matter from soft sores; and Mr. Lee thought some mixture of the two kinds of matter might possibly have taken place. He (Mr. Lane) was not disposed to attach much weight to this objection; but, however it might be as regarded the man, the case of the female was free even from this suspicion, for she was inoculated from D.'s indurated sore two days before he had been inoculated with any matter from soft sores, and no soft matter had ever been used upon herself. In addition to this case by Dr. Boeck, he had himself had a case of successful inoculation from an indurated sore; and he had witnessed a third by Mr. Gascoyen. Besides these three, which were inoculations on syphilitic patients, there had been two cases of auto-inoculation by Mr. Walter Coulson at the Lock Hospital: one being the case of D., which was questioned for the reason alluded to; the other being a case in which Mr. Coulson succeeded on the fifth trial, and in which he believed Mr. Lee himself had been unable to detect a flaw. But they were told that the indurated sore was only inoculable when artificially irritated—with savine ointment, for instance,—and that therefore it was not true syphilis which was inoculated. If it was not syphilis, what was it? Was it savine ointment from which this long series of ulcers exactly resembling soft chancres was obtained? It must be either the one or the other. To his mind, the repeated production of non-indurated sores by inoculation from indurated sores was one of the strongest points in favour of the unity of the syphilitic poison, and completely negatived the idea that each variety always produced its like. He hoped at some future day to lay before the Society an account of all the cases which had been treated by syphilisation at the Lock Hospital, and thus to bring the subject again under their notice.

Mr. Hulke made some remarks condemnatory of the reading of long papers, chiefly of an historical character, and containing scarcely any facts. The paper before the Society had occupied twenty-three minutes in reading; but the facts it contained might have been stated in three minutes. He thought the secretaries should have the power of curtailing such papers.

Mr. Gaskoin said it was true he did not present himself before the Society with any pretensions to originality on this occasion. His object was to place beyond the reach of cavil and to record important facts which, however established on clinical evidence, had been openly denied; and at the same time, by a review of occurrences not very remote, to show how scientific opinions were subject to be dictated and controlled by one man or a knot of men. He wished to oppose himself to the current of *à priori* decisions and to the tyranny of preconceived ideas. It certainly did not speak highly of the prospects of Medical science among us when we had to protect ourselves in our right to observe; and yet the London school used to be one of observation—or at least that of Brodie, in which he had been trained. It was not in the interests of "syphilisation," but of observation, that he spoke. It was a fact beyond dispute that we had no school of syphilography in London; we were content to borrow from the French professors, and our opinions were governed by their intrigues. The moderate degree of attention the subject excited proved how little English Practitioners were equal to the task of observation; and no less did the false estimate formed as to the severity of a disease which was one of the most formidable that afflict humanity show how little, in this field at least, observation was the order of the day.

At the meeting of the Society on May 8,

Mr. Moore introduced a young man, aged eighteen, who had been born with a completely fissured palate and upper lip, and with the right nostril open throughout into the mouth. The hare-lip was closed by Mr. Moore when the patient was six weeks old, and in his subsequent growth the separated alveolar ridge had come into contact without actually uniting. The fissure at present therefore began at the level of a line drawn across between the lateral incisor teeth; it widened to the breadth of nearly an inch, and ended by a double uvula. With the view of avoiding an operation, Mr. Moore requested Mr. Turner, Assistant Dental Surgeon to the Middlesex Hospital, to attempt to fill up the gap.

Mr. Turner exhibited to the Society the obturator which he had constructed. It consisted of a piece of soft or partially cooked india-rubber, adjusted to the free margins of the cleft, and overlapping both their upper and under surfaces; a pendulous portion filled up the space between the halves of the divided uvula, allowing them free action in front of it. The apparatus was fixed to one tooth on either side of the mouth by a metallic bar, which fitted across the palate. Mr. Turner thought this to be the most complete mechanical contrivance yet applied to the correction of deficiencies of the palate, and likely ultimately to supersede the ordinary plastic operation. By its use the trouble and pain of the operation, with its attendant risks of complications and failures, were avoided; and the natural arch of the palate, which the plastic operation more or less depressed according to the width of the fissure, was preserved. Where, moreover, the paucity of soft tissue round the fissure of the hard palate rendered complete occlusion difficult, if not impossible, the patient might, after all, be compelled to use an artificial palate. (This obturator was the invention of Dr. Kingsley, an American dentist, by whom it was introduced into this country.)

## OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, APRIL 4, 1866.

Dr. BARNES, President.

THE following gentlemen were elected Fellows:—Drs. J. Carless, Astley Cooper, Horniblow, Sheraton, T. J. Walker, A. Wiltshire, John Wilkins; Messrs. A. J. Lowe, R. Roberts.

Dr. GERVIS exhibited a specimen of a Fœtus possessing many points of interest in its physiological development.

Dr. MEADOWS exhibited a specimen of Cystic Development of the Fallopian Tubes consequent on obstruction at the ostium uterinum. The left tube contained two cysts; the right, one. They were each about the size of a small walnut, and filled with a thick brownish fluid. The patient had died of pelvic peritonitis, the result of menstrual suppression from cold.

Dr. MEADOWS also showed a new Intra-uterine Stem. It consisted simply of a solid glass rod, the size of No. 6 catheter, two inches long, and having a flat disc at the vaginal end. He had been led to adopt this form from the inconvenience sometimes arising from the irritation of the ordinary metal or ebonite stems, glass being not only cleaner and free from corrosion, but for these reasons more easily borne than either of the others.

Mr. MARSHALL, of Dover, related a case of

DISEASE OF THE PLACENTA;

with notes by Dr. GRAILY HEWITT, who considered that the condition of the placenta was not one of fatty degeneration, but likely to be the result of effusion of lymph at a period probably two or three months antecedent to delivery. The yellow layer described had the appearance of syphilitic disease; but there was no history of that disease having affected the patient. The drawing before the Fellows well illustrated the chief features of the specimen.

The PRESIDENT considered the case not so very uncommon. The physiological explanation consisted in the fact of there being an excess of fibrin in the blood of pregnant women. He believed the case to be neither one of fatty nor of fibrous degeneration, but one in which fibrin had been thrown out. The yellow layer and whole appearance of the placenta did not, in his opinion, necessarily indicate the existence of syphilis in the system.

Dr. GREENHALGH gave the history of a case of

OBSTRUCTIVE DYSMENORRHŒA.

He considered dysmenorrhœa to be either congenital or induced; and the stricture to be of two kinds, absolute or relative. After referring to the various modes of treatment, the author stated that, in the case under consideration, he had had extreme difficulty in passing a sound. He was obliged to draw the uterus down by Sims's needle, and then made use of his (Dr. Greenhalgh's) metrotome. In the course of four days after the operation the patient complained of an ill-defined pain all over her. She gradually got worse, vomiting came on, and she died on the ninth day after the operation. At the post-mortem, peritonitis of a low form, with considerable tubercular deposit, was found; the uterus was bound down by old adhesions, and the incision had not gone right though the os internum. Her death was considered to be due to her want of care after the operation. The author concluded by referring to all the cases he had operated on, which had usually done well, and stated his strong objection to the introduction of sponge-tents after operating.

Dr. BARNES considered that the danger rested in cutting the os internum. He thought very little danger was to be feared from incision of the os externum. The cervix uteri might be treated by dilatation. He agreed with Dr. Greenhalgh that absolute rest was necessary after operation, and believed that the case would be a lesson to all, and make them adopt every precaution, or even hesitate to incise the internal os.

Dr. ROUTH expressed his thanks to Dr. Greenhalgh for bringing the case before the Society. He thought the operation was one of danger, and required the greatest possible care both before and after. The case was a very unfortunate one, from the length of time occupied in operating, as also from there being no loss of blood; he always liked to see three or four ounces lost. He did not think there was any danger from cutting the internal os when the fundus uteri was free from inflammation. Fatal cases were known after passing the ordinary sound.

Dr. ROGERS agreed with all that Dr. Routh had said. He considered the internal os to be frequently the seat of stricture. He added his testimony to the danger that sometimes attended incision of the cervix, and stated that he had also lost a case after operation.

Dr. RASCH said that he had never met with a case where there was stricture of the internal os, nor had he ever failed to pass a sound. Cases said to be strictured he had found flexed, which on being reduced admitted the sound.

Dr. MEADOWS remarked upon the necessity of ascertaining, as far as possible, the condition not only of the uterus, but of its appendages also, in all cases where operative measures were contemplated. He believed that in those cases where a fatal result had followed even so simple a proceeding as the passage of the uterine sound, some organic lesion would be found to have been the cause of the mischief, the uterus being exceedingly sensitive of any interference under these circumstances. Unfortunately the diagnosis of some of these conditions was often very difficult, and the real state of the case was only discoverable on a post-mortem examination. In Dr. Greenhalgh's case there was reason to suppose that some displacement of the uterus existed, and the history was one indicative of previous metro-peritonitis. This being so, and the fundus uteri having become adherent in its malposition, he would regard such a case as positively contra-indicating any operative interference. He believed that in all cases of flexion of the uterus, especially when of long standing, or of version when replacement was a matter of difficulty, the use of the knife was very likely to lead to evil and even fatal results.

Dr. Gervis, Dr. Head, Dr. Balls, Dr. Eastlake, and Mr. Baker Brown, jun., also took part in the discussion.

Dr. GREENHALGH having replied to the various speakers the meeting adjourned.

## WESTERN MEDICAL AND SURGICAL SOCIETY.

FRIDAY, MARCH 2.

Mr. POLLOCK, President, in the Chair.

Dr. MARTYN related a

CASE OF DOUBLE FEMORAL HERNIA.

Miss P., aged 70, of spare habit, had been healthy generally, except that she suffered from a swelling in each groin. As these swellings disappeared occasionally and did not give her pain, she attached no importance to them. On January 4 (Thursday), she awoke in the morning with violent pain in her belly, and sickness. The sickness and pain continued more or less until Dr. Martyn was called in on Monday evening, January 8. There had been no movement of the bowels or passage of wind per anum from the time of the attack. Dr. Martyn found his patient walking the room, holding her belly with her hands and stooping much. This posture, coupled with the history of the attack, he considerd, marked the case as one of strangulated bowel. She had taken two or three doses of purgative medicine. The quantity vomited had been very great, but, so far, not feculent. Placing the patient on her bed, he found a lump in the site of the crural canal on each side; that on the left of the size of a walnut, that on the right a little larger. The left was hard, and felt much like an enlarged gland. It afforded no impulse on forced cough; was not tender. The right was also hard, but there was a sligh impulse and some tenderness. The belly was tender, pulse quick, tongue brown and dry. He could not reduce the swellings by taxis, and then urged that an operation should be immediately performed, but the patient would not consent. He then applied an ice-bag to the more tender hernia; gave opium, and ice to swallow. Tuesday, 9th.—Patient suffering much less; sickness, scarcely any; but in the evening of this day some feculent matter was discharged from the stomach. 10th.—Dr. Martyn operated, selecting the right groin as the seat of stricture; the result justified him. He found here a knuckle of intestine tightly strictured, and some omentum. The bowel was very dark, but still shiny. He divided the stricture and reduced the bowel. Chloroform was given; the patient vomited soon after. She then improved very much, became comfortable and warm; slept and took food. She passed wind per anum, but there was no stool. On the third day the wound became offensive. She gradually grew worse. Some vomiting returned; injected a little warm water, but no motion followed. On the fourth day after the operation, she passed no water; became sleepy, and died comatose on the sixth day. *Post-mortem.*—Found the left hernia was old omentum alone. On exposing the bowels, some were seen to be full and some empty. There was evidence of inflammation, some adhesion, etc. The full bowel was of a dark chocolate colour down to the part strictured; here the bowel was free; near to the crural ring the contents evidently had not passed the strictured part. The bowel at this point was of a much darker colour, and had doubtless suffered too much from the original stricture to perform its function. The strictured part of the intestine was shown to the Society.

The President remarked that the case was one of the greatest interest, from the fact that an irreducible femoral hernia existed on both sides; he had only met with one such case. In such cases, when the patient is unable to guide you as to the seat of stricture, and other signs are obscure, great judgment is demanded as to where to operate. He farther said that the operation in strangulated femoral hernia could scarcely be too early done; he would not defer it after sickness sets in.

## BOOKS RECEIVED.

Who Am I? By C. Jones, author of "Warning." London: Trübners. No date. Pp. 156.

⁂ The writer believes that he possesses a true interpretation of the Bible, which we suppose is to be found in this book. We say we suppose, because a busy Professional life gives us no leisure to read "Who am I" with great care; and a few hasty dips entirely fail.

Walsall Cottage Hospital.

⁂ The annual report of the institution, which was established in 1863 to render prompt surgical aid and good nursing in connection with mining and the management of machinery about Walsall. Since the opening, nearly 2000 cases have received attention—289 in, and 1690 being out-patients.

On the Seeds of Pharbitis Nil (Cholsy). By E. J. Waring, M.D., F.L.S. Reprinted from the "Pharmaceutical Journal." Pp. 4.

⁂ An account of a drug derived from a good family of purgatives (Convolvulaceæ). The plant is common in India, and the seeds have an action analogous to jalap. The author suggests that in India especially it might be used with advantage, as rendering Practitioners independent of imported articles.

## MEDICAL NEWS.

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**Queen's University in Ireland.**—At a meeting of the Senate of the above University, held on Wednesday, the 20th inst., in the Council Chamber, Dublin Castle, the following Degrees in Medicine and Surgery were conferred by the Right Hon. the Lord Chancellor of Ireland, Vice-Chancellor of the University:—

*Doctors in Medicine.*

Thomas St. John Clerke, of Queen's College, Cork; William Collins, of Queen's College, Cork; George John Gibson, of Queen's College, Cork; John Macaulay, of Queen's College, Belfast; Newenham Edward Maher, of Queen's College, Galway; Edwin Field Nelson, of Queen's College, Belfast; Samuel Parke, of Queen's College, Belfast; James Edward Saunderson, B.A., of Queen's College, Galway; William Sharpe, of Queen's College, Galway and Belfast; George V. Wood, of Queen's College, Cork, Belfast, and Galway; Alexander Young, of Queen's College, Belfast.

*Masters in Surgery.*

William Collins, of Queen's College, Cork; Barry Delaney, M.D., of Queen's College, Cork; Alexander Filson, B.A., M.D., of Queen's College, Belfast; George John Gibson, of Queen's College, Cork.

**Royal College of Physicians of London.**—At a general meeting of the Fellows held on Friday, June 15, the following gentlemen, having undergone the necessary Examination, and satisfied the College of their proficiency in the Science and Practice of Medicine, Surgery, and Midwifery, were duly admitted to practise Physic as Licentiates of the College:—

Arthur Wolcot, Nankivell, Torquay; Frederick William Humphreys, 19, Trinity-square; Thomas George Palmer Hallett, 6[illegible], Queen's-crescent, Haverstock-hill; Henry May, Birmingham; Thomas Webster, Redland, near Bristol; Richard Eaton Power, Portsea; Daniel Walter Parsons, Liverpool; Francis Oppert, M.D. Berlin, 31, Great Russell-street.

At the same meeting the following were reported by the examiners to have passed their Primary Examination:—

William Toulmin, Guy's Hospital; Frederick Walter Smith, St. Thomas's Hospital.

**Apothecaries' Hall.**—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, June 14, 1866:—

James Forbes Sargent, 6, Bentinck-terrace, Regent's-park; Thomas Harvey, 338, Waterloo-road; Georg Frederick Julius Schott, Francfort-on-the Main; Jonathan Atkinson Harrison, Wirksworth, Derbyshire; George Jesse Barnabas Stevens, Stroud, Kent; George Spearman, Plymouth; William French Thurston, 2, South Bank, Notting-hill; John Hancocke Wathen, Fishguard, Pembroke.

The following gentlemen also on the same day passed their First Examination:—

William Jobson Stothard, Guy's Hospital; John Frederic Cedrington, Guy's Hospital; Alexander Paull Fiddian, King's College.

### APPOINTMENTS.

⁂ The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Bond, T., M.D., has been elected Resident Medical Officer to the Public Dispensary, Carey-street.

Brietzcke, H., L.R.C.P.L., has been appointed House-Surgeon to the Public Hospital, Sheffield.

Gargery, C., M.R.C.S.E., has been appointed Resident Medical Officer to the Worcester Dispensary.

Moir, J., L.R.C.P. Edin., has been elected Assistant House-Surgeon to the Ardwick and Ancoats Dispensary, Manchester.

Pearse, G. E. L., M.R.C.S.E., has been appointed Senior House-Surgeon to the Royal Infirmary and Dispensary, Manchester.

Risk, F. S., L.K.Q.C.P.I., has been elected Resident Medical Officer to the Isle of Man Hospital and Dispensary.

### BIRTHS.

Curtis.—On June 15, at 8, Camden-place, Cork, the wife of J. G. Curtis, M.D., of a daughter.

Rooke.—On June 11, at Cheltenham, the wife of T. M. Rooke, M.D., of a son.

### MARRIAGES.

Drysdale—North.—On June 12, at St. James's, New Brighton, J. J. Drysdale, M.D., to Emily, eldest daughter of J. North, Esq., of Lunebart, Cheshire.

Fowler—Cotgrave.—On June 12, R. S. Fowler, M.R.C.S., of Bath, to Elizabeth Burgess, eldest daughter of Lieut.-Col. Cotgrave, R.A.

Lawson—Solomon.—On June 13, at Kensington, Henry Lawson, M.D., of Woodfield-lodge, Streatham, to Ella, widow of the late Abraham Solomon, Esq. No cards.

Strange—Pirrie.—On May 24, at 253, Union-street, Aberdeen, W. H. Strange, M.D., of Belsize Park, London, to Anna Jane, third daughter of W. Pirrie, M.D., of Aberdeen.

### DEATHS.

Childecott, W., M.R.C.S., at Holmwood, Dorking, on June 1, aged 67.

Drawbridge, John H., M.R.C.S., at 1, Upper Hill-street, Liverpool, aged 71.

Tripe, Cornelius, M.D., at Laira, recently.

## POOR-LAW MEDICAL SERVICE.

⁂ The area of each district is stated in acres. The population is computed according to the last census.

### RESIGNATIONS.

*Bethnal-green Parish.*—Mr. Haycock has resigned the Fourth District salary £100 per annum; no fees.

*Hackney Union.*—Mr. Howell has resigned the Workhouse; salary £180 per annum.

### APPOINTMENTS.

*Helston Union.*—Charles Forrester Bullmore, M.R.C.S.E., L.S.A., L.M., to the Wendron District.

**Scottish Universities.**—A Parliamentary return gives the number of members on the books of the General Council of the Universities of Scotland, whether by degree or by attendance on classes during the requisite number of sessions. Edinburgh is returned as having 2400 names on its register; Glasgow, 1165; Aberdeen, 898; St. Andrew's, 369.

**Skilled Nurses.**—The Prussian Government have applied to the Deaconess Institution at Kaiserworth to send them sixteen deaconesses to superintend the nursing of the army.

The Royal Irish Academy.—The following have been elected members of the Royal Irish Academy:—J. A. Baker, F.R.C.S.I.; E. H. Bennett, M.D.; F. R. Cruise, M.D.

Aluminium.—A trial has just been made at Florence o a cuirass in aluminium, which is as light as an ordinary waist coat, nearly as flexible, and is capable of turning a musket ball fired at the distance of thirty-eight paces and of resisting a bayonet thrust from the heaviest hand. Each cuirass costs only 25f. Two regiments are to be immediately provided with them.

Hopkins *v.* the London and North-Western Railway Company.—Court of Queen's Bench, Westminster, June 14.—This was an action by a dairyman to recover compensation for injuries sustained through the negligence of the defendants' servants, by which, on August 30 last, a luggage train ran into an excursion train near Chester, in which the plaintiff was a passenger. The plaintiff was considerably knocked about and bruised by the concussion, and was rendered insensible. Since that period he had been subject to singing in the ears, his sight has been affected, and the nervous system has evidently been injured. He was advised that he could not safely continue to carry on his business, which, through his inability to attend to it personally, had not been so profitably conducted. The defendants admitted the injury to have been caused by the negligence of their servants, and paid a nominal sum into court. The case for the defendants was that the plaintiff's injuries were much exaggerated. Four Medical witnesses were called for the plaintiff and three on behalf of the company. The jury returned a verdict for the plaintiff, damages £1000.

British Medical Association. — Lancashire and Cheshire Branch.—The thirtieth annual meeting of this branch of the British Medical Association was held on Wednesday, in the Medical Institution, Mount-pleasant. There were present a considerable number of the Profession belonging to Liverpool and other towns in the neighbourhood. In the absence of Mr. T. Turner, of Manchester, the retiring President, Mr. T. Mellor, one of the retiring Vice-Presidents, moved that Dr. A. T. H. Waters, of Liverpool, the President-elect, take the chair. The proposition was carried unanimously. The President then delivered a long and able address to the members. After returning his thanks for the honour which the Branch had conferred on him in electing him President, he said it was a remark which they by no means unfrequently heard that Medicine made no advance; but if they looked back for the period of fifty years, and compared the practice which then prevailed to that of the present day, he ventured to say that there was no one who would deny that, in many respects, undoubted improvement had taken place. On so important a subject as this he would speak with feelings of diffidence; but if he might venture on an opinion with reference to the characteristics of modern Medicine, he thought he might say that they had learned to pay more regard to the constitutional condition of their patients, and to address their remedies with greater precision to those states than was the case even twenty or thirty years ago.—Dr. Henry Simpson, of Manchester, read the annual report of the branch. The financial statement showed a balance in the hands of the secretary of £25 6s. 2d. Dr. Vose moved that the next meeting of the branch be held in the city of Chester, that Mr. John Harrison be appointed President elect, and that Mr. Britten and Mr. William Roberts be the Vice-presidents elect.—Dr. Wilkinson, of Manchester, seconded the motion, which was unanimously agreed to.—On the motion of Dr. Edward Waters, of Chester, seconded by Mr. J. P. Langshaw, the following gentlemen were appointed the local secretaries, namely—Mr. W. H. Manifold, Liverpool; Mr. C. Johnson, jun., Lancaster; and Mr. J. Sharp, Warrington—At half past four o'clock about 50 gentlemen belonging to the Medical Profession assembled at the Adelphi Hotel, where they partook of an excellent dinner, which was served up in the elegant style for which that establishment has been for so many years noted. Dr. Waters, the President of the Branch, presided.

A Scene in Callington Market.—On the last market day at the quiet town of Callington an amusing scene occurred. It appears that one of the gentry who vend worm lozenges—worms being of course at the root of all diseases—was expatiating on the virtues of his nostrums, and in relating instances of their curative powers, he mentioned with no small delight a case in which he had been the means of saving the life of a patient of the greatest Physician in the West of England, Dr. Budd, who had dismissed the patient as incurable. Unfortunately for the quack, "the greatest Physician in the West of England" was passing near his stall at the time, and hearing his name mentioned was naturally arrested at the sound, and listened. The Doctor's temper was roused, and just saying "Let me get at him," then and there administered sundry kicks on the nethermost person of the unfortunate quack, which had the effect of putting him *hors de combat*. Roars of laughter greeted the onset of the valiant Doctor, in the midst of which the vendor beat a hasty retreat. The Doctor enjoyed the scene as much as the bystanders, and related the circumstance with much gusto many times during the day.—*From Western Mercury.*

The various manners in which different insects provide for the wants of the young are most remarkable; and all the more so because these wants are so different from those of the perfect animals themselves. Thus, the butterfly which lives on honey, and did live on leaves, lays her eggs on a twig. She seems to feel that honey will not suit her young, and that the leaves will wither and fall before another spring comes round. The gnat, which lives in the air and feeds on blood, lays her eggs on the surface of water; and the sugar-loving housefly knows that very different food is necessary for her young. The nut-weevil chooses the embryo of the nut; the goat-moth the bark of the willow; the rhipiphora braves the dangers of the wasp's nest; the œstrus lays on cattle; the ichneumon in caterpillars; the gall-fly in the still almost imperceptible bud; and some insects even in the eggs of others. Generally, the larvæ forage for themselves; but, in some cases, the mother supplies her young with food. Thus, the solitary wasp builds a cell and fills it with other insects. If, however, she imprisoned them while alive, their struggles would infallibly destroy her egg; if she killed them, they would soon decay, and the young larva, when hatched, would find, instead of a store of wholesome food, a mere mass of corruption. To avoid these two evils, the wasp stings her victim in such a manner as to pierce the centre of the nervous system, and the poison has the quality of paralysing the victim without killing it. Thus deprived of all manner of movement, but still alive, it remains some weeks motionless and yet fresh. But, perhaps the ants are the most remarkable of all. They tend their young, they build houses, they make wars, they keep slaves, they have domestic animals, and it is even said that in some cases they cultivate the ground. Nor must it be supposed that even now the habits of insects are anything like thoroughly known to us. In spite of Reaumur and De Geer, the two Hubers, and many other excellent observers, there is in this subject still a wide field for patient and conscientious labour; the observations already made have been far from exhausting the mine, though amply sufficient to prove the richness of the ore.—*Sir J. Lubbock on the Metamorphoses of Insects.*

Mr. Ibbetson on Fossil Teeth.—In the paper upon fossil teeth of fishes in the Palæozoic and lower members of the Mesozoic rocks, read before the Odontological Society by Mr. Ibbetson, a few preliminary remarks were made upon the faithful history of the animal kingdom furnished by fossil teeth generally; and in examining the fauna of the different rocks, the advantage of commencing with the most ancient and taking them in their order of stratigraphical super-position rather than proceeding from the most recent to the earlier beds, was clearly stated. Adopting this method, the leading species, genera, and families of the class fishes were noticed according to the order of their succession in *time*, not in *rank*, as they appeared in the various formations from the Silurian beds to the Lias. Of the 8000 or more known species of fishes, about 1000 belong to the Ganoid and Placoid orders, and to which those found below the Lias are limited, no instance of any of the 7000 or more species of either the Ctenoid or Cycloid orders being known below the Oolitic series. The existence of fishes was formerly believed to date from the Bala beds of the Cambrian rocks, but what were supposed to be the defensive spines of the Onchus Murchisonii have since been proved to be the caudal appendages of a Crustacean. The earliest known evidence of their existence is furnished by fragments of jaws with teeth found in the Ludlow group of the upper Silurian deposits. The affinities of these fragmentary remains have not been clearly determined. Agassiz refers them with a doubt to the genera Plectrodus and Sclerodus of his Placoid order. Murchison in the last edition of his Siluria—on the authority of Sir Philip Egerton—supposes them to belong to a small species of Ganoid fish; whilst Mr. J. W. Salter suggests that they may have belonged to Pteraspis or Cephalaspis, the teeth of these genera—even if they possessed such organs—being yet unknown. The earliest evidence of the existence of the class whose affinities can be defined, is furnished by the teeth of several genera of fishes in the Devonian rocks, in which occur Ctenoptychius and Ctenodus genera of the family of Cestracionts, and belonging to the order Plagiostomi. The various species of the different genera of Cestracionts were enumerated as they respectively occur in the successive rocks from the Devonian to the Lias, Acrodus was referred to as possessing special interest, from the faithful interpretation which is afforded of the genus by its consanguinity with the Cestracian Phillippi of the Australian seas, the sole existing representative of this family of fishes, so rich in genera and species in the Palæozoic and Mesozoic ages. The species and genera of the Hybodontidæ were next noticed. In entering upon the order Ganoidei, Pteraspis and Cephalaspis were referred to as existing in beds of earlier date than those in which Plectrodus and Sclerodus are found; therefore in the event of the suggestion of Mr. J. W. Salter being confirmed, these genera would become the earliest known indication of the Class fishes. The species and genera of the Families Cælacanthi, Dipteridæ, Acanthodei, Sauroidei, Lepidoïdei, and Pycnodontei were all referred to as they respectively occur in *time*, and the dental distinctions of the various species and genera were noticed. Occasion was taken to refer to the removal by Professor Owen of the genus Placodus—found in the Muschelkalk—from the family Pycnodontei, and by Professor Huxley, of the genus Stagonolepis—found in the Devonian rocks—from the family Dipteridæ, of the class Fishes, to the class Reptiles, and the dental characters and other correlations of structure upon which the amended classifications were established, were pointed out. The paper was illustrated by a valuable collection of fossils, and a number of beautifully executed diagrams.

**The following are the last week's Cattle Plague Returns.**

| Census Divisions. | 1. Attacked. | | | Back cases reported in the week ending June 9, 1866. | 2. Result of reported Cases from the Commencement of the disease. | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Week ending May 26. | Week ending June 2. | Week ending June 9. | | Attacked. | Killed. | Died. | Recovered. | Unaccounted for. |
| **Metropolitan Dist.** | 4 | 8 | 10 | .. | 7893 | 3412 | 3712 | 318 | 451 |
| **South Eastern Co.** | 2 | 2 | 5 | .. | 4868 | 1687 | 2538 | 465 | 178 |
| **South Midland Co.** | 140 | 133 | 99 | 11 | 20492 | 8498 | 10068 | 1539 | 387 |
| **Eastern Counties** | 49 | 37 | 21 | .. | 11386 | 5367 | 4834 | 788 | 397 |
| **South Western Co.** | 3 | 6 | .. | .. | 1756 | 656 | 822 | 207 | 71 |
| **West Midland Co.** | 193 | 135 | 96 | 9 | 14605 | 5996 | 6090 | 1511 | 966 |
| **North Midland Co.** | 246 | 170 | 111 | 27 | 18732 | 10710 | 6258 | 1218 | 546 |
| **North Western Co.** | 342 | 311 | 536 | 343 | 70233 | 23591 | 35000 | 7943 | 3698 |
| **Yorkshire** | 93 | 76 | 40 | 1 | 34470 | 7826 | 18349 | 5083 | 2361 |
| **Northern Counties.** | 58 | 33 | 21 | 1 | 8622 | 4917 | 2613 | 974 | 118 |
| **Monmouthshire & Wales** | 42 | 23 | 36 | 4 | 8252 | 1110 | 5791 | 1054 | 297 |
| **Scotland** | 32 | 24 | 12 | 1 | 46821 | 6227 | 28085 | 10706 | 1803 |
| Totals | 1207 | 960 | 987 | 396 | 248025 | 79997 | 124160 | 32658 | 11210 |

This Return shows that 987 attacks were reported to have occurred during the week ended June 9, being an increase of 27 on the previous week.

Correcting the total by adding an estimated average of attacks commencing during the week, but which may be subsequently included under the heading "Back Cases," the number for the week will be 1284.

*Note.*—3 Inspectors who reported cases last week have not reported in time for this return—viz., for the county of Lancaster, 1; Lincoln, 1; and for the Metropolis, 1. These inspectors returned 14 cases last week.

## NOTES, QUERIES, AND REPLIES.

◆

He that questioneth much shall learn much.—*Bacon.*

Dr. Jüncker's paper on Nyctalopia shall be inserted immediately.

An article on *Cholera Literature*, including reviews of Macpherson, Greenwood, Anstie, Southwood Smith, Pearce, Rowell, and others, is unavoidably postponed till next week.

*The Memorandum of the Medical Officers of Health of the Metropolis, on a Plan of United Action in Cases of Cholera*, is to be procured very cheaply of the printer, Mr. Fieldson, 6, North-street, Manchester-square, W.

*Dr. J. M'Gregor Croft.*—Garibaldi's taking the field is a mere political movement, with which the Medical Profession, as a Profession, have no sympathy.

*G. P., Ordnance Survey Office.*—That gentleman is a legally qualified Medical Practitioner, but we have no knowledge of his plan of treatment.

*King's College Associate.*—Sir Edward Hulse was created a Baronet in 1738. There is a good mezzotint portrait of the gentleman.

*Variola, M.D.*—The Princess Amelia and the Princess Caroline were *inoculated* for the small pox in 1722. The King of Spain, Louis I., and the Duchess of Bedford died in 1724 of the disease.

*A Country Surgeon.*—You are too late in your application, as the examinations commenced on Tuesday last, as you will see in another column of this journal. Write to the Apothecaries' Hall.

*The Oldest Member.*—The titles in 1744 were "Master and Wardens," when John Medley was Master, and Jos. Sandford, Humphry Negus, and William Cheselden were Wardens of the Barbers-Surgeons. The Company held its meetings in Monkwell-street, City. The separation of the Barbers and Surgeons took place in the following year. There is a painting of Cheselden in the Council-room of the College of Surgeons.

*Mr. Campbell.*—The late Mr. Ure, of St. Mary's Hospital, was a candidate for a seat in the Council of the College of Surgeons in July last, when he polled 20 votes. He intended offering himself again this year, notwithstanding his illness, but was a day too late in his application for the necessary papers, and died on the following day.

*A Fellow and Dr. S.*—There was an examination in classics, etc., on Tuesday and following days for the Fellowship of the College of Surgeons. The long-promised regulations are now ready, and may be obtained on application to the Secretary.

*M.B. Univ. Cantab.*—It is stated that some members of the Medical Council of Education and Registration attended the recent preliminary examinations both for the Fellowship and Membership.

*R. N., Portsmouth.*—The first number of the *Medical Times* made its appearance at an earlier date—viz., September 28, 1839. The papers on Admiralty Injustice to Naval Surgeons, and on Relative Rank and Pay, appeared with many others on the same subject in vol. xix. for 1849, and were contributed by a gentleman still on the staff of this journal, and not by the gentleman named.

*Lithotomist, Borough.*—Mrs. Stephens received £5000 from Parliament for communicating the secret of her solvent for stone in the bladder. It was useless. Mr. Henry Smith removed from the bladder of a young man, in King's College Hospital on Friday last, a glass tube used for the purpose of carrying flowers in the coats of our modern dandies, but which the patient had used for improper purposes. The gentleman named would no doubt recommend castration as freely as he does clitorotomy to cure the vice.

### WIDOW OF A DECEASED SURGEON.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—We beg to acknowledge with thanks the following contributions for the "Widow of a Deceased Surgeon," and to be allowed to renew our appeal on behalf of this distressed family:—Sir William Fergusson, £1 1s.; Dr. S. L. Gill, £1 1s.; H. J., £2 2s.; Mr. Brande, £1; D. D. B. H., £1; J. B. (Edinburgh), 10s.; Dr. John Watson, 10s.; R. B. P., 5s.

We are, &c.,
Signed for HENRY LETHEBY.
W. SPENCER WATSON.

27, Montague-street, Russell-square, June 20.

### MEDICAL SERVICE IN THE AUSTRIAN ARMY.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Kindly insert in your widely-circulated paper the following regulations relating to the entry of Surgeons to the Austrian services:—Army.—Entry-pay: 7 florins (14 shillings). Rank and Title: On entry, Lieutenant; after probation, Captain; Surgeon of Regiment; Major. After the War: 1. Retire with bonus; 2. Absorption into army as vacancies occur. *Note.*—All rations found. Navy, similar to Army.

I am, &c.,
AN OLD SUBSCRIBER.

### POOR-LAW MEDICAL REFORM ASSOCIATION.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Permit me again to trespass on your valuable space to inform the Poor-law Medical officers that I have to-day received from the Poor-law Board a reply to my letters of May 17 and June 7, which is as follows:—"I am directed to state that your observations on the proposed Bill on Poor-law Medical Relief will receive the consideration of the Board. They are, however, unable to appoint a time for the attendance of a deputation on the subject. Enfield, Secretary." From the foregoing reply, and from what we read in the journals, I think it more than probable that some general measure for the amendment of the Medical relief of the poor is in contemplation by the Poor law Board.

I have applied to several Members of Parliament to bring in the Bill proposed by the Association, copies of which were sent to the subscribers in March last; but the general opinion appears to be that, situated as Parliament now is, with the Reform Bill before it, no private Member would have a chance of carrying a Bill of the kind this session unless it had the support of the Poor-law Board, or be brought on by that Body as a Government measure. Under these circumstances, we must wait and carefully watch the movements of the Poor-law Board in Parliament, and it is just possible we may, whilst united and with money in hand, find ourselves sufficiently powerful to amend any Bill brought in by them should it not meet our views. This course was eminently successful with the Vaccination Bill, and, although we have not been able to make it all we could wish, still we have been the means of inducing the Select Committee to make improvements in it, which will benefit the public vaccinators of England and Wales to the extent of some thousands per annum, and amply repay the Association for the labour of the last ten years, even should no other reform be accomplished; but I feel confident other beneficial measures are still in store for us. I am, &c.,

12, Royal-terrace, Weymouth, June 13. RICHARD GRIFFIN.

### GRIFFIN TESTIMONIAL.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Will you kindly insert this circular which has been posted to every Poor Law Medical Officer in England and Wales, and also to every subscriber to the Griffin Testimonial Fund?

I am, &c., ROBERT FOWLER.

145, Bishopsgate-street, June 20, 1866.

"*Griffin Testimonial.*

"Dear Sir,—I beg to inform you that the presentation of the above will take place at a public meeting, to be held at the Freemasons' Tavern, Great Queen-street, on Thursday, July 5th proximo, at 3 p.m. in the day.

"If you have not forwarded me your subscription to the Fund, I would respectfully ask that you at once do so.

"Let each and all thus show some slight appreciation of, and some gratitude for, those untiring energies which, during the last ten or eleven years, our champion has bestowed on the cause of Poor Law Medical Reform. I enclose a copy of Mr. Griffin's last letter to the journals, to show you how continually watchful he is of our interests.

"If also you have not sent me your *carte de visite* (as very many of the subscribers have done), I hope to receive it in time for the photographic album of Mr. Griffin's friends and admirers, with which it is decided additionally to present him. Let your *carte de visite* have your designation, profession, title, and (if a Poor Law Medical Officer) the name of your Union plainly written on the back.

"Should it be your intention to attend the meeting (no banquet), it would be a great convenience if you would inform me thereof on or before the 30th instant.

"The testimonial is now on view at the manufacturers', Messrs. Mappin and Webb, 71 and 72, Cornhill. "Yours faithfully,

"ROBERT FOWLER, M.D., Treasurer and Hon. Sec.

145, Bishopsgate-street Without, June 20, 1866."

COMMUNICATIONS have been received from—

MR. JOHN ADAMS; DR. CHOLMELEY; DR. BEALE; DR. PAVY; MR. CHATTO; DR. HUGHLINGS JACKSON; MR. E. BELLAMY; DR. B. W. RICHARDSON; DR. MUSPRATT; DR. R. NEALE; J. THORBURN, Esq.; J. L.; WESTERN MEDICAL AND SURGICAL SOCIETY; JOHN WOOD, Esq.; ROYAL COLLEGE OF PHYSICIANS; DR. MURRAY; R. FOWLER, Esq.; ETHNOLOGICAL SOCIETY: W. SPENCER WATSON, Esq.

## VITAL STATISTICS OF LONDON.

*Week ending Saturday, June* 16, 1866.

### BIRTHS.

Births of Boys, 1000; Girls, 932; Total, 1932.
Average of 10 corresponding weeks, 1856-65, 1753·4.

### DEATHS.

| | Males. | Females. | Total. |
|---|---|---|---|
| Deaths during the week .. .. .. | 760 | 610 | 1370 |
| Average of the ten years 1856-65 .. .. | 587·2 | 520·5 | 1107·7 |
| Average corrected to increased population.. | .. | .. | 1218 |
| Deaths of people above 90 .. .. .. | .. | .. | .. |

### DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

| | Population, 1861. | Small pox. | Measles. | Scarlatina. | Diphtheria. | Whooping-cough. | Typhus. | Diarrhœa. |
|---|---|---|---|---|---|---|---|---|
| West .. | 463,388 | 5 | 8 | 4 | — | 11 | 3 | 5 |
| North .. | 618,210 | 7 | 13 | 8 | 2 | 12 | 10 | 1 |
| Central .. | 378,058 | 1 | 11 | 5 | — | 6 | 2 | 4 |
| East .. | 571,158 | 18 | 27 | 9 | 1 | 21 | 15 | 6 |
| South .. | 773,175 | 8 | 21 | 5 | 5 | 21 | 10 | 4 |
| Total .. | 2,803,989 | 39 | 80 | 31 | 8 | 71 | 40 | 20 |

### COMPOSITION AND QUALITY OF THE METROPOLITAN WATERS IN MAY, 1866.

The following are the Returns of the Metropolitan Association of Medical Officers of Health:—

| | Total Solid Matter per Gallon. | Loss by Ignition.(a) | Oxydisable Organic Matter.(b) | Hardness. | |
|---|---|---|---|---|---|
| | | | | Before Boiling. | After Boiling. |
| *Thames Water Companies.* | Grains. | Grains. | Grains. | Degs. | Degs. |
| Grand Junction . . | 19·10 | 1·04 | 0·31 | 14·0 | 3·5 |
| West Middlesex . . | 18 89 | 0·80 | 0·29 | 14·0 | 3·5 |
| Southwark and Vauxhall. | 19·06 | 1·04 | 0·39 | 14·5 | 3·5 |
| Chelsea . . . . | 18·87 | 0·81 | 0·27 | 14·0 | 3·5 |
| Lambeth . . . . | 18·99 | 0·99 | 0·32 | 14·0 | 3·5 |
| *Other Companies.* | | | | | |
| Kent . . . . | 28·32 | 1·13 | 0 05 | 18·5 | 7·5 |
| New River . . . | 17·84 | 0·68 | 0·22 | 14·0 | 4·5 |
| East London . . . | 21·68 | 0·79 | 0·38 | 14·5 | 4·0 |

(a) The loss by ignition represents a variety of volatile matters as well as organic matter, as ammoniacal salts, moisture, and the volatile constituents of nitrates and nitrites.

(b) The oxydisable organic matter is determined by a standard solution of permanganate of potash, the available oxygen of which is to the organic matter as 1 is to 8; and the results are controlled by the examination of the colour of the water when seen through a glass tube two feet in length and two inches in diameter.

## METEOROLOGY.

*From Observations at the Greenwich Observatory.*

| | |
|---|---|
| Mean height of barometer .. .. .. .. .. .. | 29·710 in. |
| Mean temperature .. .. .. .. .. .. .. | 58·5 |
| Highest point of thermometer .. .. .. .. .. | 83 8 |
| Lowest point of thermometer .. .. .. .. .. | 47·6 |
| Mean dew-point temperature .. .. .. .. .. | 51·6 |
| General direction of wind .. .. .. .. .. | S.W. & W.S.W. |
| Whole amount of rain in the week .. .. .. .. | 0·14 |

### BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, June 16, 1866, in the following large Towns:—

| Boroughs, etc. | Estimated Population in middle of the Year 1866. | Persons to an Acre. (1866.) | Births Registered during the week ending June 16. | Deaths. | | Temperature of Air (Fahr.) | | | Rain Fall. | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Corrected Average Weekly Number.* | Registered during the week ending June 16. | Highest during the Week. | Lowest during the Week. | Weekly Mean of the Mean Daily Values. | In Inches. | In Tons per Acre. |
| London (Metropolis) | 3067536 | 39·3 | 1932 | 1400 | 1370 | 83·8 | 47·6 | 58·5 | 0·14 | 14 |
| Bristol (City) . . | 163680 | 34·9 | 98 | 73 | ‡164 | 71·5 | 49 9 | 56·1 | 0·59 | 60 |
| Birmingham (Boro') | 335798 | 42·9 | 264 | 163 | 128 | 75 0 | 47·7 | 56·9 | 0·67 | 68 |
| Liverpool (Borough) | 484337 | 94·8 | 373 | 281 | 312 | 68·0 | 48·0 | 57·4 | 1·35 | 136 |
| Manchester (City) . | 358855 | 80·0 | 273 | 203 | ‡187 | .. | .. | .. | .. | .. |
| Salford (Borough) . | 112904 | 21·8 | 82 | 57 | 54 | 72·0 | 44·0 | 54·4 | 2·46 | 248 |
| Sheffield (Borough) . | 218257 | 9·6 | 175 | 115 | 117 | 75·3 | 46·1 | 56·1 | 1·57 | 159 |
| Leeds (Borough) . | 228187 | 10·6 | 213 | 116 | 129 | 77·8 | 41·0 | 55·8 | 0·81 | 82 |
| Hull (Borough) . | 105233 | 29·5 | 81 | 49 | 54 | .. | .. | .. | .. | .. |
| Nwcastl-on-Tyne, do. | 122277 | 22·9 | 95 | 65 | 63 | 70·0 | 46·0 | 56·0 | 0·86 | 87 |
| Edinburgh (City) . | 175128 | 39·6 | 149 | 84 | 75 | 69·7 | 45·0 | 56·7 | 0·20 | 20 |
| Glasgow (City). . | 432265 | 85·4 | 364 | 252 | 235 | 67·6 | 36·2 | 53·7 | 0·27 | 27 |
| Dublin (City and some suburbs) . | 318437 | 32·7 | 162 | †156 | 164 | 68·7 | 46·5 | 56·9 | 0·73 | 74 |
| Total of 13 large Towns . . . | 6122894 | 34·4 | 4261 | 3014 | 2952 | 83 8 | 36·2 | 56·2 | 0·88 | 89 |
| | (1863) | | | | Week ending June 9. | Week ending June 9. | | § | | |
| Vienna (City) . . | 560000 | .. | .. | .. | .. | .. | .. | .. | .. | .. |

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·710 in. The pressure of the atmosphere was 29·99 in. on Sunday morning, and fell to 29·35 in. on Saturday.

The general direction of the wind was S.W. and W.S.W.

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* The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.

† Registration did not commence in Ireland till January 1, 1864; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in that city were the same as the averages of the rates in the other towns.

‡ The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

§ The mean temperature at Greenwich during the same week was 61·0°.

## APPOINTMENTS FOR THE WEEK.

### *June* 23. *Saturday* (*this day*).

*Operations* at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free Hospital, 1½ p.m.

### 25. *Monday.*

*Operations* at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.

### 26. *Tuesday.*

*Operations* at Guy's, 1 p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; St. Peter's Hospital for Stone, 3 p.m.

ETHNOLOGICAL SOCIETY OF LONDON, 8 p.m. Sir John Lubbock, Bart., "On Remarkable Archæological Discoveries in Ireland." Professor Steenstrup and Sir J. Lubbock, Bart., "On the Ancient Manufacture of Stone Implements at Pressigny."

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8½ p.m. Meeting.

### 27. *Wednesday.*

*Operations* at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.

### 28. *Thursday.*

*Operations* at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.

### 29. *Friday.*

*Operations*, Westminster Ophthalmic, 1½ p.m.

**LIEBIG'S FOOD FOR INFANTS & INVALIDS.**

Prepared strictly from the Formula of
Baron Liebig, by

**HOOPER,**
OPERATIVE CHEMIST,

TRADE MARK

Sold in Tins, 1 lb., 1*s.*; 3 lb., 2*s.* 6*d.*; 6 lb., 5*s.*,
by all Chemists and Druggists,
and direct from Mr. Hooper's Establishments,
**7, PALL MALL EAST,**
**And 55, GROSVENOR STREET.**

Wholesale of Barclay, Edwards, Newbery, all Patent Medicine Warehouses, and Wholesale Druggists.

**THE PANCREATIC EMULSION,**

A NEW REMEDIAL AGENT.

Originated by Dr. DOBELL, Physician to the Royal Infirmary for Diseases of the Chest.

*Vide* The Lancet, *Nov.* 11*th* and 18*th*.—"A third report of cases of consumption treated with Pancreatic Emulsion at the Royal Infirmary for Diseases of the Chest."

**This Preparation is now made on an extensive scale, and the Price is therefore considerably Reduced.**

N.B.—The TRUE PANCREATIC EMULSION has an acid reaction, and is readily miscible with water or milk.
Preparations in IMITATION of it have an alkaline reaction, and are not miscible with water or milk.

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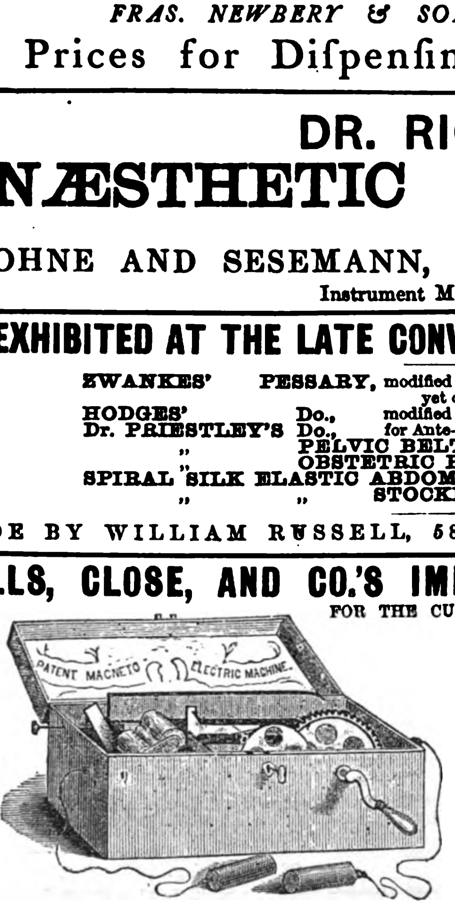
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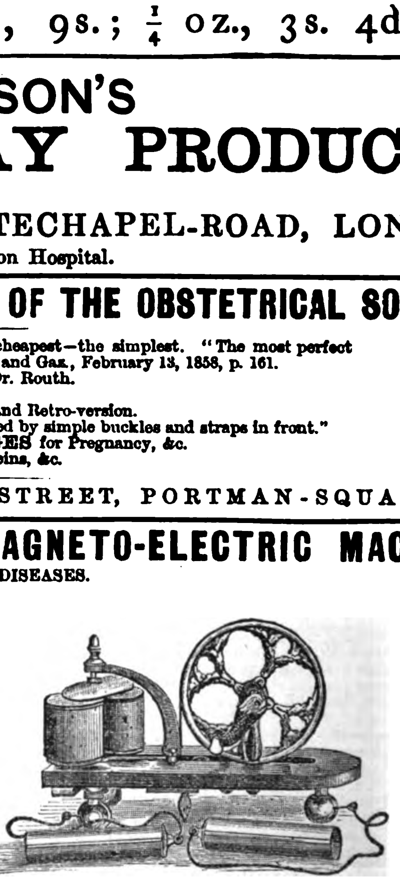

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# ORIGINAL LECTURES.

NOTES ON

## SOME OF THE MORE RARE FORMS OF FRACTURES AND DISLOCATIONS,

BEING EXTRACTS FROM LECTURES (CLINICAL AND OTHERWISE) DELIVERED AT The London Hospital.

By JONATHAN HUTCHINSON, F.R.C.S.,
Surgeon to the Hospital and Lecturer on Surgery.

(Continued from page 518.)

GENTLEMEN,—The youngest student amongst us ought to be perfectly familiar with the contour and positions of the styloid processes of the ulna and radius. He carries them about with him, and can refresh his memory at a moment's notice. Any one having a clear notion as to these points need never make the common mistake of a fracture just above the wrist for a dislocation at the wrist. The resemblance of the fracture to the dislocation is, as far as the eye is concerned, very close; but the diagnosis by the finger ought to be quite easy. If it is a fracture, or what comes to the same thing, a detachment of the epiphysis, then these styloid processes remain in their normal relations to the carpus; if it be a dislocation, the carpus is displaced from them, usually behind them. Dislocations at the wrist are, as is now well known, very rare. I have never myself seen one. A few years ago one occurred amongst my patients, and was reduced by the House-Surgeon before I saw the case. From the account given to me I think there was no room for scepticism that this was a *bonâ fide* case of dislocation backwards from a fall on the palm of the hand. The patient was an adult; reduction was easily effected and maintained. I have in my lectures frequently repeated the statement that I have never seen a dislocated wrist, and in consequence, on several occasions, different gentlemen have very kindly offered me opportunities of doing so. To my great disappointment, however, in each of these I have found that the lesion had been mistaken, and that it was really a separation of the lower epiphysis of the radius.

As far, therefore, as dislocations at the wrist joint are concerned, I have nothing to say excepting in regard to the diagnosis. In many of the fractures, and in all the detachments of epiphysis, the line of separation is almost transverse, and leaves only a short fragment still in apposition with the carpal bones. In these the displacement is usually only partial, but now and then it is complete, so that the lower fragment rides on the posterior aspect of the upper one. It is in these, when the displacement is great, perhaps complete, that a suspicion of dislocation is most likely to occur. Very often in these cases of fracture no crepitus can be elicited. The recognition of the relation of the styloid process of the radius to the carpus and to the shaft is, therefore, the all-important symptom. We will turn now to fractures in the lower part of the radius. These common injuries are very important, on account of the difficulties which often attend their satisfactory treatment. They have also since the time when Mr. Colles drew attention to their peculiar features, afforded materials for much learned controversy. My own belief is that we have tried in reference to what is now called Colles' fracture to be much more precise than nature permits, and that we have needlessly encumbered ourselves with theories. I will try to simplify the subject, and if in so doing it becomes less definite and more vague than many published accounts would make it, the blame will not, I think, be mine.

In the first place let us remark that when Mr. Colles wrote his description of the common form of fracture which now bears his name, he had not dissected a single specimen. His knowledge of it was of the same kind as we can, any of us, obtain in fair plenty in our receiving-room. Mr. Colles wrote not to speculate as to whether the distortion is caused by impaction or by muscular action, still less to theorise as to which single muscle was at fault, but to draw attention to the fact *that fractures in the lower extremity of the radius were common and were often mistaken for mere sprains.*(a)

Every one familiar with Surgical practice will admit the correctness of this statement, and also the general accuracy of Mr. Colles' description. Injuries to the lower extremity of the radius are common at all ages, and they are usually attended by great thickening just above the wrist, by considerable distortion with projection of the end of the ulna, and displacement of the carpus and hand backwards and to the radial border. At first, crepitus cannot be obtained, but you can usually rectify the deformity by direct extension, and having done so, you can by rotating the lower fragment then elicit this conclusive sign of fracture. Thus much is certain, and most of you have practical familiarity with the facts to which I refer.

Now we come to the uncertain and debateable points. When fracture in the lower end of the radius occurs, is it usually found at any one particular point, or may it vary much in different cases? How high above the wrist joint does it usually occur, and is it transverse or oblique? Is the lower fragment usually in one piece, or is it comminuted? and, lastly, what is the chief cause of the peculiar and unmanageable displacement? To these queries several others concerning points of detail might be added.

If we turn to authors we shall find very various replies on these points. Mr. Colles thought that the fracture occurred an inch and a half above the joint. Dr. Robert Smith says that it is never higher than an inch, and usually not so high. Some writers, including Dr. Smith and Mr. Callender(b), speak as if the fracture were always directly transverse, and rarely attended by comminution; others hold different views. Lastly, the differences of opinion as to whether or not impaction is commonly present are most curious. Voillemier proved that it was. Dr. Robert Smith confuted him by reference to specimens; and now Mr. Callender, by reference to specimens, confutes Dr. Smith. How can we explain these strange discrepancies? In the first place, I think that we have been far too ready to infer that this form of fracture commonly conforms to one and the same type. The truth is, that fractures of the lower end of the radius, like fractures of the head of the humerus and of the neck of the femur, and other bones at their expanded extremities, assume great variety as to their direction; scarcely two are exactly alike. As I have said, it is not fair in any author to attempt to restrict the term Colles' fracture to transverse fractures three-quarters of an inch above the carpus; these are only one division of the group. The features which all fractures in the lower part of the radius have in common are—the character of the deformity, the difficulty in producing crepitus, and the difficulties in maintaining efficient reduction. These are the features to which Mr. Colles drew attention, and his name, if applied to any, must be applied to the whole group. Another fruitful source of error is the habit of trusting to the examination of old specimens for deductions as to the position of the fragments in a recent fracture. A delusive appearance of impaction is produced in a great number of specimens after union is perfected, although no impaction existed at the time. When I use the term impaction, I mean to imply penetration of one fragment by the other *and fixation.* Penetration is a very common event in all fractures near to joints—in other words, near to large surfaces of cancellous tissue. Penetration with fixation of the fragments, the one into the other, so that they are immovable, is, I believe, exceedingly rare. In the living subject we are constantly misled on this point by the mere locking of fragments together by muscular action. This locking together of fragments may, when the surfaces of bone involved are large, easily be so complete as to prevent movement, and prevent the production of crepitus, whilst yet if you were to dissect the specimen you would find that the fragments were quite loose. I had an opportunity recently of showing you a specimen of a united fracture of the neck of the femur, apparently a most beautiful example of impaction. The neck of the bone was driven into the cancellous tissue at the base of the great trochanter, and there firmly fixed. Yet, in this instance we had the patient under observation from the first, and we knew for certain that, so far from there having been any true impaction, the fragments were as freely moveable on each other as they could possibly be. I have little doubt that a similar history attaches to most of the supposed specimens of impaction in our museums. The only proof, then, which we can accept of true impaction is the examination either of a dead recent specimen by dissection, or of the living under chloroform. I am not arguing about a mere word, I am endeavouring to establish a distinction of great importance in practice. As regards the existence of impaction in recent fractures of the carpal end of the radius, I have myself never seen a good example of it. I have dissected two cases in which the fragments were firmly locked together by muscular force, but in both as soon as the bones were denuded of soft coverings the fragments were quite loose.

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(a) "The injury to which I wish to direct the attention of Surgeons has not, as far as I know, been described by any author; indeed, the form of the carpal extremity of the radius would rather incline us to question its being liable to fracture. The absence of crepitus, and of the other common symptoms of fracture, together with the swelling which instantly arises in this as in most other injuries of the wrist, render the difficulty of ascertaining the real nature of the case very considerable."—Mr. Colles' paper in *Edin. Med. Surg. Journal*, vol. x., April, 1814.

(b) See a very able and interesting report on Injuries near to Joints in the first volume of the St. Bartholomew's Reports. Mr. Callender bases his report on a painstaking examination of all the specimens in London museums.

That penetration of the lower fragment by the upper one occurs in most of the cases in which any material degree of displacement attends this injury, there can be no doubt, and this peneration will, of course, be at the back of the bone, seeing that it is here that the fragments are bent towards each other. But this penetration is not attended by any fixation, and is rarely of any material depth.

Another source of error, which I feel sure that those who have written precise descriptions as to muscular agency in displacement have fallen into, is, that of not making allowance for the effect of rigor mortis. In examining one of these injuries after death, you will, I believe, usually find that the fragments are so locked together that you cannot without great force produce any movement. All the muscles are rigid, and those towards the side to which the fragments are bent, of course, stand out prominently. They could not possibly do otherwise. If you divide them in succession, you will find that it is not until you divide the last that the fragments are liberated—*ergo*, it was this last which, during life, caused the displacement and produced the fixation—a most unwarranted conclusion.

To arrive at correct conclusions respecting this accident, we must, I think, reject all pathological evidence excepting that afforded by recent specimens, and we must avail ourselves also of every opportunity of putting the clinical and pathological facts in their due relation with each other.

During the last few years at this Hospital I believe that seven or eight good specimens of recent fracture of the lower part of the radius have been dissected—one by Mr. Couper, three or four by Mr. Dove, and three by myself. In all of them the characteristic displacement was present during life; and had the patients recovered we should have considered them as examples of the fracture to which Mr. Colles called the attention of the Profession. In all of these the fragments were more or less locked together; in none was there any real impaction, and in every one the lower fragment was comminuted. We have in the Museum one well-marked specimen of a transverse fracture half an inch above the joint without comminution. It would appear that in this instance the displacement was in the usual direction, but not to any great extent, and there is no impaction. Unfortunately no history has been preserved with this specimen.

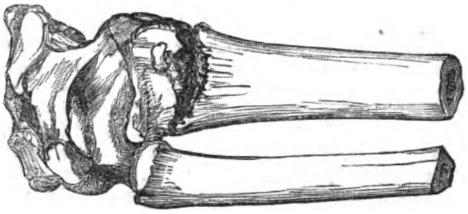

FIG. I.—Transverse fracture of radius, about half an inch above the wrist. Some displacement of lower fragment backwards, leaving the fracture gaping in front. From a specimen in the London Hospital Museum.

We have another showing a recent fracture extending obliquely into the wrist joint, and detaching the styloid process of the radius with its adjacent parts, and a third which is an excellent example of the alteration in the shape of the bone resulting in union in malposition.

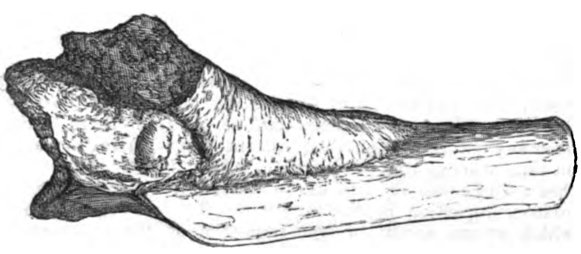

FIG. II.—United fracture of the lower part of radius, probably about half an inch above the wrist, and transverse. The lower fragment has been displaced backwards, and there is a large deposit of new bone on the dorsal aspect.

It appears to me that in seeking to explain the displacement in this fracture the chief cause has been comparatively lost sight of. This cause is not the influence of muscles whether extensors, supinators, or pronators, nor yet the occurrence of impaction, but simply the direction of the original violence. You have but to reflect upon the manner in which this accident is produced. A person falls forwards on to the palm of his hand, the radius gives way at some part within its lowest inch, and of course the lower fragment would be pressed backwards; the weight of the shoulder received upon the upper fragment drives the latter with great force downwards, almost always penetrating, and very often splitting the lower fragment. If the line of fracture is oblique in its antero-posterior direction, the obliquity is sure to be from behind downwards and forwards. The surface of the bone at its back, and the adjacent cancellous tissue would be crushed. The radius in consequence of this crushing and penetration of fragments will be somewhat shortened; hence the prominence of the ulna, and as the direction of the force is sure to have been from the hand towards the trunk, the hand and carpal fragment must necessarily be driven towards the radial border, thus further explaining the twisting over of the hand in this direction which is so characteristic of the deformity. You have but to put your own hand in the position supposed, and you will easily understand what I mean.

Thus, then, it is certain that the original displacement is purely and simply the result of the violence, and that the muscles have nothing to do with it. If we can suppose it possible that a bone were broken through without any displacement occurring at the time, then the different sets of muscles would antagonise one another, and firmly lock the fragments together, but would be quite unable to effect any special displacement. If, however, displacement have once occurred, then it is easy to understand how muscular action may reproduce it over and over again, after reduction by the Surgeon. The bones will tend to slip back into the hollow which has been made for them. All the lines of obliquity in the fracture will facilitate their passing in this one direction, and will tend to prevent their passing in any other. Excepting in comparatively rare instances, in which a bone is broken near the thinnest part of its extent, in which the line of fracture is nearly transverse, and in which the two fragments are liberated from each other very completely, it is very unusual for muscles to effect any displacement, excepting in the direction of the original violence. I make this as a general statement, applicable to all fractures; what you have to do is to get to understand the direction of the original force, caring comparatively little about the influence of special sets of muscles. In many instances different sets of muscles will tend to counterbalance each other, and the result will be a *movement en totalité*—that is, a displacement of the whole of the part of the member below the site of fracture, in that direction into which it can most easily slip. It will slip again where it slipped at first, and the original displacement will thus be reproduced. These remarks are especially applicable to Colles's fracture of the radius.

## ORIGINAL COMMUNICATIONS.

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# STRANGULATED FEMORAL HERNIA IN A MALE SUBJECT.

By J. FAYRER, M.D., F.R.S.E.,
Surgeon to the Medical College Hospital, Calcutta, and Consulting Surgeon to the Howrah General Hospital.

ON April 8, 1866, I was asked by Dr. Bird, of Howrah, to see a case of strangulated hernia in the Howrah Hospital. The patient was a Madras Portuguese servant, of about 25 years of age. He had been admitted into Hospital at about 5 a.m. on that day. It appears that, the previous night, whilst chasing a cat he fell and injured the lower part of his abdomen. He felt great pain at the time, and a swelling in the groin immediately appeared. This rapidly became intensely painful, accompanied by great abdominal pain, especially in the umbilical region, and vomiting. Dr. Bird ascertained that he had ruptured himself, and, under the influence of chloroform, he tried to reduce the hernia. The tumour appeared to subside somewhat, but the symptoms were not relieved. The tumour became so painful that he could not bear it to be touched; vomiting continued, and great constitutional depression set in, indicated by rapid, feeble pulse and cold, damp skin. With this there was tympanitis and abdominal tenderness. In this condition I found him: the pulse was 120, feeble, and thread-like. He was very restless. The pain was not only severe in the groin, but over the whole abdomen. It was evident that there was no inguinal hernia, for the swelling was below Poupart's ligament. It was irregular, soft, nodulated, and intensely painful when touched. I could not isolate any one spot as more painful than another, nor could I make out any particularly tender inguinal gland. These glands were all painful, but it was evident from the general symptoms that there was a strangulated hernia somewhere; so after putting him under chloroform and trying the taxis without success, I determined, with Dr. Bird's consent, to cut down on the seat of the probable strangulation. Accordingly, I made a ⊤-shaped incision, the upper limb just below Poupart's ligament, the vertical one over the femoral canal. I found that the inguinal glands were enlarged, and the lymphatics dilated, a quantity of pale pinkish fluid flowing from the wound. On dividing the cribriform fascia a very small knuckle of intestine was found protruding through the femoral ring. I divided the seat of constriction—Gimbernat's ligament—carefully with a probe-pointed bistoury; the protrusion at once returned. There was no hæmorrhage. I stitched the wound, and applied a pad and bandage. The symptoms soon passed away; the most urgent were at once relieved, and on the 22nd of the month Dr. Bird wrote to inform me that the wound had healed and the patient had recovered.

*Remarks.*—This is a very interesting case, a femoral hernia occurring in a man, and caused, as it apparently was, by a fall, is a most unusual occurrence. The enlarged inguinal glands and the great pain on pressure in the groin were peculiar concomitants. They might, indeed, have almost explained all the suffering, only the suddenness of the attack, and the progressive symptoms of strangulated hernia, were so marked that I put aside all other considerations, and made an incision down to the probable seat of strangulation. I knew it could do no harm if there were no strangulated hernia, and on the other hand, if there were, it was the only chance of saving life. I found the protrusion very small, it is true, but all the more dangerous on that account. The stricture was divided, and the danger all passed away.

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# Medical Times and Gazette.

SATURDAY, JUNE 30.

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## DESECRATION OF LONDON GRAVEYARDS.

Why should we trouble ourselves about the digging up of dead bodies, it may be asked? Are we afraid of pernicious vapours, and if so is not Mr. Condy at hand with his oxygenating water to destroy smell, and Dr. Angus Smith with his carbolic acid to render it less noxious? There is certainly something in this, the physical side of the question; but there is more in the moral side. Our population want lessons in decency, in gentleness, and reverence. We want them to respect humanity in all forms, even the lowest; and we believe that people who are brutal to the dead will be so to the living likewise. If we wanted to make a labouring man a drunkard, a wife beater, one who would not honour his aged parents, nor take care of his helpless children, we should set him to work upon digging up a closely-packed graveyard and "fortify him with liquors" to enable him to go through the degrading and noisome task. The Rev. Mr. Arrowsmith, writing to the *Times* on the digging up of the St. Giles's Cemetery, says:—

> "When, late in the evening of the 13th inst., I advised you on this subject, about a dozen, or perhaps a score, of bodies had been exhumed; it was the uppermost tier of a huge pile of dead. By ten o'clock next morning I should suppose that the remains of at least fifty corpses had been tossed together. The miners had struck upon a rich vein of dead men. Shells of coffins packed like hat boxes, with a thin layer of earth between, cropped out all round; cavities where heads had lain were coated and fringed with bushy hair, and a treacly ooze was sobbing from the rifts in the broken coffins. Even the strong-stomached, case-hardened navvy was softened and sickened. It became evident that, on sanitary grounds alone, no time should be lost, for although fortified with liquors, the men could not be expected to sustain the nauseous stench without imminent risk to health, and the whole neighbourhood might be involved, as the surrounding air to a considerable distance was rapidly becoming tainted. My curate at once went in quest of the officers of health, Drs. Hillier and Buchanan, who, upon examination of the spot, in their turn hastened to find the solicitor of the rector of St. Giles. That gentleman, not without some pressure, consented to accompany them to seek an interview with the Midland Company's solicitor, who was hardly prevailed upon to issue an order for the stoppage of the disinterment."

We ought to do honour to Mr. Arrowsmith for his efforts to check this desecration, which is, to tell the truth, no credit to the Church of England. Whether we think of the solemn act of Episcopal consecration by which ground is set apart for ever for the repose of the mortal remains of the faithful, or at the enormous incomes derived from burial fees in times past, or at the confessed abuses and covetousness which were the shame of all burial-grounds within living memory, we should have expected the Bishop of London and the clergy of St. Pancras to have been foremost in opposing such traffic in men's bones.

It is well known that every burial-ground of our old London churches has been filled over and over again, and that it would be difficult to find a yard or a foot of soil in any of them, to a considerable depth below the surface, which is not made up of human remains. From century to century, from year to year, the number of the dead had increased with the increasing population, and yet our churchyards were still compelled to make room for more, until the Legislature some few years ago interfered and closed them.

To the almost compulsory desecration of removing remains to make room for other burials, succeeded another phase of desecration—the conversion of the abodes of death to other uses. This is the special subject of our present inquiry. We must premise, however, that such conversion of the metropolitan graveyards has been going on for centuries, though scarcely in so indecent a form, and many a block of buildings, many a thoroughfare and street, now stand or pass over the graves of the mouldering dead.

The burial grounds of St. Giles's and Old St. Pancras are now the scene of wholesale desecration. The Midland Railway Extension was empowered by Act of Parliament to make way as it liked, and, of course, the question was to do so as cheaply as possible. Two courses were open—either to avoid the churchyards and go through the property of the living, at the usual great cost of compensation, or to go through the property of the dead at a comparatively much smaller figure.

For the round sum of £20,000 the Vestry of the parish conceded the right of desecration, and the works are now in operation—with rather alarming prospects, however, for the Company.

A few days ago the navvies turned up some four or five hundred remains at the corner of St. Giles's burial ground;

and on Thursday last delved into another vein of decaying mortality, in what was formerly a part of Old St. Pancras Churchyard. Visiting the scene of desecration, we noticed that one of the skulls turned up exhibited not only remarkable proportions, as though indicative of some extraordinary physical and mental peculiarity, but showed on the left side of the forehead what appeared to be the clean perforation of a bullet, evidently fired from above. The frontal bone was of extraordinary thickness, and those of the other parts of the body corresponded to the large development of the skull.

The part of the ground where these human remains were found had been closed to burials ever since 1792, when the Vestry of the day felt compelled to purchase a portion of an adjoining field to extend their burial-ground.

Now, within five years after making this purchase of fresh ground, it was deemed expedient to build a house for the sexton. The question then arose, where was it to be built? On the new ground or on the closed churchyard with its thousand thousand graves? Cupidity decided that it should be built over the graves, and this was accordingly done, as made evident by the recent exhumation. From being the sexton's house, the premises passed into other occupation, and finally formed part of Bessemer's manufactory, through which the Midland Extension is proceeding.

The formidable nature of the dilemma into which the railway company has fallen will appear when we state that the design is not only to construct a railway over these burial-grounds—and already the great beams are fixed over many a venerable tomb—but to *tunnel* them at the depth of ten feet below the surface! Imagine the tunnelling of a burial-ground! Surely it must have been known that many a family grave is sunk from eighteen to twenty feet below the surface, and that at the depth of ten feet is precisely the average level where they will have to bore through a festering mass of decomposing humanity!

We need not state that considerable excitement exists on all sides, and that the relatives of the dead reposing in these ancient burial places are making anxious inquiries respecting the fate of the cherished remains, hitherto respected. The matter has been brought under the notice of the Home Secretary, who has deemed it his duty to order an inspection of the ground to be made by Dr. Holland, the Inspector under the Burial Act.

Doubtless those concerned in the business imagined that doings of this nature might pass unnoticed in a locality at present so low and poor; but they might, perhaps, have remembered that St. Pancras is one of the most ancient burial-grounds in England; that it contains the remains of some of the most distinguished individuals, both native and foreign. Curiously enough, an inscription on the tomb of one of the latter runs as follows:—"A foreign land preserves his ashes with respect; the gratitude of his king and country embalms his memory." This is the tomb of Philip St. Martin, Count de Front, Sardinian Ambassador in 1812.

Only half a century ago St. Pancras was one of the fashionable burial-grounds of the metropolis. In the archives of the Heralds' College will be found the description of the grand processions which attended the burials of the notabilities whose remains repose in the churchyard of this venerable church—the representative of the last church in which Mass was said at the Reformation; and the last Roman Catholic incumbent, according to a legend, starved himself to death rather than resign his cure. At all events, it is certain that a preference has always been shown to this burial-ground by distinguished Roman Catholics, both native and foreign. Here were buried the former Earls of Arundel, the Cliffords, and a large number of notable and titled foreigners, members of that church,—among the rest, Louis Charles, Comte D'Hervilly, Field-Marshal of France; Philip Claude, Comte de Montboisier, Lieutenant-General in the French army; François Claude Amour, Marquis de Bouillé (whose remains were removed a few years ago); and several other French bishops, and an archbishop of Narbonne; Louis Claude Bigor de St. Croix, the last minister of Louis XVI.; Marie Louise D'Esparbes de Lussan, Comtesse de Polastron, Dâme de Palais to the Queen of France.

We need scarcely state that most of these distinguished foreigners were refugees, chiefly after the great French Revolution.

Amongst our English notabilities reposing in St. Pancras' churchyard are Lord Baltimore, Lord Widrington, Thomas, Earl of Limerick, a Somerset, a Vere, a Waldegrave, a Gray, a Montague, a Walpole, and Abergavenny, besides those already mentioned.

Here repose a Belasyse, whose name has been altered into *Belsize*, giving name to the great property in the vicinity of Belsize Park; Lady Barbara Barnewall, the granddaughter of Oliver Cromwell; Lady Henrietta Waldegrave, mother of the Countess of Powis (the present representative of the family recently visited the tomb of her ancestress); a daughter of the Hon. Edward Carlton, Knight Harbinger to James II. (Harbinger means the functionary who preceded Majesty on its journeys to prepare appropriate quarters); Cooper, "the English Vandyke," who painted the miniature of Oliver Cromwell; Daniel Clarke, Master Cook to Queen Elizabeth and King James I. for nine-and-twenty years; Woollet, the engraver, on whose tomb an eminent artist wrote the following words in pencil:—"He engraved well, but is not well engraved," and to whom a monument was subsequently erected in Westminster Abbey. Finally, here also repose the remains of the famous Mary Wolstoncroft Godwin (authoress of "The Rights of Woman"), the mother of the wife of the poet P. B. Shelley.

## THE FEMALE MEDICAL SOCIETY.

The journals of last Tuesday inform us that "The Female Medical Society" held its second annual meeting at the Hanover-square Rooms on the preceding day—the Earl of Shaftesbury in the chair. The objects of the Society were defined to be as follows:—"1. To promote the employment of educated women in the practice of Midwifery and the treatment of the diseases of women and children. 2. To provide for women facilities for learning Midwifery, etc., like those which have long been in the possession of men; and 3. To establish a publicly-recognised board of examiners, so that women who have pursued an appropriate course of study and passed an adequate examination may be distinguished from others. According to the report which was read, a long series of statistics show conclusively that the mortality in childbirth among patients attended by even the present uneducated midwives is less than half that which occurs among patients attended by Medical gentlemen in general practice. This startling disparity in the mortality of mothers is explained by the fact that puerperal fever is often produced among lying-in patients by the accidental conveyance of infection from other patients, and the corollary was put prominently forward that Midwifery should be separated from the general practice of Medicine and Surgery, and that as a general rule this branch of Medicine should be left in the hands of properly-educated women."

We say nothing now upon the question of the desirability of resigning the practice of midwifery into the hands of women, but protest against the statements which have reference to the mortality of puerperics, for they constitute a gross slander upon the Profession at large, and are founded upon a total misrepresentation of the truth. We pointed out last October the fallacy of the supposition that the mortality in childbirth amongst patients attended by midwives was less than amongst those attended by Medical men, and that the conveyance of poison from woman to woman was much more likely to occur through the instrumentality of female as compared with male Practitioners. It must be recollected also that in those cases attended by midwives in which dangerous conditions arise, the Medical man's aid is always requested, and the mortality under these circumstances is always credited to the class of cases said to be attended by the Medical man.

One chief object in referring to this matter is to note the real intentions of the several gentlemen whose names appeared as the supporters of the movement. We mention Lord Shaftesbury and Dr. W. Farr especially as having been present at the annual meeting. It might at first sight be supposed that the report correctly interprets the sentiments of these philanthropists. This, however, is utterly and entirely erroneous, as the reporter might have known. Dr. Farr, we are enabled to state, denies that any statistics exist by which the random statement as to the excessive mortality of women attended by Medical men can be substantiated, nor does he hold that opinion. Dr. Farr's sole motive—and a right one too—is to support any movement by which educated and intelligent nurses can be provided, in lieu of ignorant ones. He is altogether opposed to any scheme which in the least degree tends to weaken the paramount control of the Medical man in all obstetric cases. Dr. Farr, therefore, does not in the least countenance the employment of midwives instead of the Practitioner, and Lord Shaftesbury, in his concluding remarks, was most careful to impress upon the officials of the Society the necessity of not overstretching the proper office of women in midwifery.

## THE WEEK.

### THE HARVEIAN ORATION AT THE ROYAL COLLEGE OF PHYSICIANS.

The annual oration was delivered in English on Tuesday last at the College of Physicians to a large audience by Dr. Paget, of Cambridge. Dr. Paget began by citing the words in Harvey's deed of endowment that the orator was "to exhort the members of the College to study and search out the secrets of Nature by way of experiment." He put the exhortation into the form of examples of the ways in which Medicine had actually been advanced "by way of experiment," and after alluding in eulogistic terms to the dignified position occupied by the President of the College as an observer of disease, and the unanimous approval by the Profession of the honours lately conferred upon him, proceeded to point out the paths by which workers in former times have discovered truth, and the three most characteristic ways in which Medicine has been advanced in accordance with the spirit of Harvey's words—viz., (1) through the sciences of Physiology and Pathology; (2) by the immediate practical study of disease and generalisations from a large experience; and (3) by the immediate application to practice of a single observed fact. In illustration of these three modes of progress the orator gave at some length the examples of Harvey's discovery of the circulation of the blood, Sydenham's clinical investigations in Practical Medicine, and Jenner's discovery of vaccination. Harvey's discovery is often spoken of as a simple inference, as one of those truths of science that are floating abroad ready to be caught, almost perchance, by some lucky observer; whilst in reality it was an evidence of great powers of mind and originality of investigation. Fabricius, four years before Harvey was born, had discovered the valves of vessels, but more than half a century elapsed ere Harvey's great work appeared. In the interim, no one had made use of the fact made out by Fabricius. Harvey had to work out slowly and step by step the basis upon which his final proposition rested, and the intellectual merits of his discovery seem very great when we remember the nature and peculiarities of all the attendant circumstances connected with it. Physiological doctrines were not such as to help forward his discovery; the notions in regard to vessels and tissues were very erroneous. The heart was not known in its office as a propeller; its substance was not recognised as muscular; its movements had never been observed; ideas on the functions of the arteries were, as we now think, absurd; vessels were supposedly the channels for the circulation of what the ancients called "spirits." Notions upon nutrition were crude enough; it was believed that the tissues were nourished entirely by the simple ebb and flow of the contents of the vessels, especially the veins. Thus Harvey had to break through all these doctrines and take his stand upon a new theory of philosophy altogether. The proofs of his discovery were made up of a series of propositions and inferences, worked out with no little difficulty. The inference that the blood passed from the arteries to the veins was a triumph of pure reason. Harvey, well aware of the value of analogical evidence, made himself as proficient as he was able in comparative and morbid anatomy—in fact, master of the current knowledge of his day, and the facts which formed the ground of his reasoning and of his own seeking were in accordance therewith. The influence of Harvey's discovery, the orator observed, on physiology, was great; it shook the doctrines of authority, and vindicated not only the value of experiment, but the importance of attending to the principle of mechanical action in the body. The immediate influence on practical Medicine was small; the practice of the time, as at present, was in advance of theory, and had been arrived at as the result of simple observation; phenomena had been already utilised, though their causes remained obscure. Medicine is not peculiar in this respect; the exigencies of society, cupidity, and the like, lead to successful invention, especially in the field of mechanics. The boomerang and the screw propeller are used successfully now, but the explanations of their actions are still matters awaiting solution. Sydenham's writings and career illustrated the second mode of advancing Medical knowledge, and the vaccination of Jenner the realisation and application of a single fact at once to practical Medicine. The latter suggests that possibly other means of protection against disease analogous to the protective power of vaccination might be discovered. Having by his three first examples illustrated the intellectual powers and processes by which Medicine had been successfully advanced, Dr. Paget concluded his finished oration with one more instance of the proper moral qualities and temper of mind of the Physician. This example was the improvement in the treatment of the insane, the principal heroes being Pinel and Conolly. The spirit that animated these two men was necessary for the true progress of their efforts. It is that which prompted a Larrey to invent an ambulance, and which enables the Physician to prosecute his studies and his duties amidst the sharpest ravages of plagues and epidemics.

### MANSLAUGHTER BY A BONESETTER.

A coroner's jury have returned a verdict of manslaughter against one Matthews Bennett, a Leicester bone-setter. The deceased was named James Squires, and was a man of 66 years of age, and his shoulder was said to have been dislocated for four months. He had one interview with the bone-setter at a public-house in Leicester, who, with the assistance of sixteen men, pulled the limb about for a considerable time. The patient died on the same evening, and the condition in which the bone-setter and his assistants had left him will be best understood by the following report of Dr. Nuttall's evidence before the Coroner:—

"Mr. H. Nuttall said, I am an M.D. and Surgeon in this borough. On Monday, the 11th inst., about half-past eight in the evening, I was requested by the first witness to go and see his father, who was at this house, and, as he believed, in a dying condition. I accompanied him, and on examining deceased I found him dead, but quite warm. The lips and countenance were pale. The right arm was very much swollen, and there was a recent abrasion on the front of the shoulder, near to the armpit. On examining the right elbow, I found it fractured and dislocated. On the following morning I received instructions from the Coroner's officer to make a post-mortem examination of the body. In the afternoon of that day, assisted by Mr. Ward, a Surgeon, I commenced to do so, and on making an incision through the skin and superficial layers on the front part of the right shoulder, we discovered a quantity of blood, some being in a liquid state, and some coagulated. Without proceeding further in the operation, I sent for Mr. Lankester, another Surgeon. When he arrived we continued our dissection, and after clearing away the blood before spoken of, and carefully dissecting down to the muscles, we discovered the larger pectoral muscle, or muscle which takes its origin from the collar bone and four or five first ribs, and is inserted into the upper part of the arm, torn nearly entirely through, about two and a half inches from its insertion. We found also the plexus of nerves which pass from the spine to the arm torn through at about an inch or an inch and a half below the collar-bone. The large artery which passes from within the body to the arm was also torn through at a point nearly corresponding to that where the nerves were ruptured. Continuing our dissection down the upper arm, we found several small patches of echymosis or effusion of blood in the tissues which lie between the skin and the muscles. At the elbow we found a dislocation of the upper arm, on to the front part of the lower arm or ulna. The internal ligament which holds together the upper and lower arms was separated from its attachment to the upper arm, carrying away some fragments of bone with it. There were also one or two loose fragments of bone with effusion in the tissues close to the joint. We then directed our attention to the shoulder-joint itself, and found that the head of the humerus or upper arm was anchylosed, or had grown to the cup and neck of the scapula or blade-bone. It was, therefore, partially dislocated, and it appeared to us that this dislocation had been brought about by the cup in which during health the head of the arm-bone rests having been fractured, thereby allowing the head to become fixed in between the two fractured portions, a considerable quantity of new bone having been formed, by means of which exceedingly firm union had taken place between the arm bone and scapula. We then examined all the great organs of the body, the lungs, heart, stomach, liver, kidneys, etc., and found them perfectly healthy. The brain was also healthy. Judging from the amount of injury done to the larger pectoral muscle, the artery and plexus of nerves, and to the elbow-joint, I am of opinion that death took place by syncope or fainting, which was produced by the injuries done to the structures named. It would require very great force to produce these injuries. Deceased was a very muscular man, and the pectoral muscle would not give way without very great force. The injuries had been inflicted certainly within a few hours of death. There was no evidence of any injury received at the time deceased was at the Loughborough Dispensary. I consider the force of from twelve to sixteen men employed on the occasion was most unjustifiably great. The dislocation at the elbow was recent."

### PERINOWSKI v. FREEMAN AND ANOTHER.

The Profession will be glad to learn that the legal expenses of Messrs. Holmes and Freeman in the recent action are to be defrayed entirely at the expense of St. George's Hospital. We need not repeat that a more unjust action as regards the defendants was never brought into Court, and although they cannot be compensated for the annoyance that it must have caused them, it is satisfactory to know that they will be in no way pecuniary losers by it. The authorities of the Hospital having thus acted in accordance with the dictates of justice, we hope that they will not stop here, but will introduce such changes in the nursing department of their Hospital as will at least prevent the recurrence of similar accidents.

### NEW YORK.

A letter just received from Dr. Elisha Harris, the Registrar of vital statistics of the Metropolitan Board of Health in New York (dated June 5th) says:—

"We have more than 100 cholera patients anchored ten miles down the bay, and to-day have taken possession of sixty acres of land on shore, eighteen miles from the cities, for the purpose of landing and cleansing the infected companies.

"In the cities we have no epidemic of cholera, but we have occasional deaths from cholera that can in no wise be distinguished from Asiatic cholera. Diarrhœal maladies are prevalent, but they are not fatal."

The mortality in the City of New York in the week ending June 2 was at the rate of twenty-six deaths per annum to every 1000 persons living. In Brooklyn the mortality rate was 19·6 per 1000. The mortality rate of London in the same week was 26 per 1000.

Zymotic diseases caused 21 per cent. of the total deaths in New York, and 25 per cent. in Brooklyn, more than half of the mortality from those diseases being ascribed to scarlatina, diphtheria, and typhus. The average proportion of zymotics in London at the same time of year is 25 per cent. of the deaths from all causes. Accident or negligence was fatal to 6 per cent. of the total deaths in New York, and to 2 per cent. in Brooklyn. The ruling proportion in London at this season is about 3½ per cent. This corroborates the descriptions which have been given of the dangers of the passage of the Broadway when the traffic is at its highest pressure, and leads us to be thankful that in this respect our streets are not so bad as they might be.

## THE KING'S COLLEGE DINNER.

### PRESENTATION OF A TESTIMONIAL TO SIR WILLIAM FERGUSSON.

*(From a Correspondent.)*

I cannot pretend, Mr. Editor, to give you a regular reporter's account of this very successful dinner; but I'll try to let absent old King's men know how well it was managed, and give them, if they want any, the temptation to come up next year themselves. Barring the heat of the weather and a thunderstorm, whose vivid flashes were reflected on the silver dessert service, everything went as well as possible. The tables were nicely arranged in three lines, with a cross table at the top for the more eminent of the guests. The chair was occupied by Dr. Druitt (Dr. Budd was ill, and obliged to be absent). On his left was the Rev. Dr. Jelf, for more than twenty years Principal of King's College; and on his right the special guest of the evening, Sir William Fergusson, Bart. There were many King's College Professors, or at least men trained at the College, whose names are household words to the Profession, including Dr. Guy, the able statistician and Medical jurist; Henry Lee, the syphilographer, now of St. George's; Henry Smith, the Surgeon; John Wood, of hernia celebrity; Dr. G. Johnson, of whom Professor Partridge pleasantly said that, like the wise virgins, he was well supplied with *oil* (castor to wit); Salter, of Charing-cross; Professor Garrod; George Lawson and Soelberg Wells, the ophthalmologists; Mr. Nunn, of the Middlesex; Drs. Symes Thompson, Conway Evans, Way, Hood, Sansom, Anstie, Playfair, Liveing, Pollock, Armitage, Hawkesly, Tanner, Meadows, and Murray. There were many men known personally or by report from every part of these islands. Dr. Ross, an old pupil of Sir William's, had come from Inverness; Dr. Macleod, of Ben Rhydding; Dr. Cockburn, of Chatham, who returned thanks for the health of the Army; Dr. Siccama, who returned thanks for the health of the Navy; Mr. Dyer, of Ringwood; Dr. Sheppard, of Colney Hatch; Swain, of Devonport; Bartrum, of Bath; Coobe, of Scarborough; Walters, of Reigate; Davis, of Brentford; Rhodes, of Huddersfield; Godfrey, of Herne Bay; Paley, of Ripon; Elin, of Hertford; Groom, of Wisbeach; Bishop, of Tunbridge; Mathias, of Bridgenorth; Monckton and Hoar, of Maidstone; Saville, of Sunderland; Brace, of Bath; Walton, of Brighton; Monckton, of Rugeley; Jackson, of Nottingham; Bradley and Roche, of Greenwich; Playne and Pearl, of Maidenhead;

Allfrey, of Chislehurst; Rugg, of Clapham; and Geere, of Brighton. There were besides Christopher Heath, Mr. Bellamy, Spencer Watson, and Fairlie Clark, amongst rising Surgeons; Dr. Fowler, of Poor-law fame; and others whom neither memory nor my crib from the honorary secretaries' book have allowed me to bring to mind.

Altogether more than 100 sat down to dinner at half-past seven. In front of the chairman were ranged the very handsome epergne and other pieces of a handsome silver dessert service, with the inscription that they were presented to Sir William Fergusson, Bart., by his pupils and colleagues. This added much to the symmetry and brilliancy of the scene, but was rather an impediment to those who wished to see the notabilities and hear the speeches. And here, before I describe the proceedings in detail, let me say one word as to the tone, bearing, and culture of the assembled friends. I could not conceive of a more merry, nor yet of a quieter and more thoroughly-refined set of guests. For five hours nearly were the proceedings kept up with unflagging interest, and the speeches were listened to and the whole meeting as well organised at last as at first. The music, too, which was contributed by some old King's men, was perfect. They gave us the great treat of good music, song and accompaniment, both rendered by gentlemen, with perfect quietness and good taste, and yet admirable execution. The dinner seemed good; and as I had no headache next day, I need say no more for the wine. The chairman, after dinner, proposed the usual loyal toasts, and hinted emphatically at the superior blessings enjoyed by this favoured land over the Continent. He then proposed the "Church," which was responded to by the Rev. Dr. Jelf, Principal of King's College, in a speech of great good feeling. Then came the Army and Navy and Volunteers, the last of whom returned their thanks by the mouth of Dr. Buzzard in a humorous speech. Then came the toast of the evening. The Chairman, amidst tremendous cheering, proposed the health of Sir William Fergusson, Bart. He began by passing in rapid review the history of the Medical School of King's College; how the political, and social, and religious animosities of George the Fourth's reign were the expression of a want; that the middle classes whose means were slender, and that persons whose religious opinions were not in conformity with the Established Church had been unable to obtain their due share of privileges in education, society, or politics. Then was founded the University of London, whose original institution now flourishes as University College, and which was destined to give a full and liberal education, and the *prestige* of academic rank to those who, for the reasons aforesaid, were unable to obtain them at the elder Universities. No body of men profited more by this than did the Medical Profession; for then first, instead of the old-fashioned "walking the Hospitals" and hearing casual courses of lectures read, was there presented a full course of Professorial instruction in all the sciences which form the basis of Medicine. But fortunately for the world the Conservative party were not behindhand with a counter move. If University College might be supposed to be established by those who wished a new order of things, there was a large and powerful body who, whilst desiring the reform of proved abuses, did not wish to cast off all identity with the past. They desired that our youth should be trained up to revere all that was great and good and solid in Church and State, and at the same time claimed the fullest, freest scope for science and the independent investigation of truth. Hence arose King's College—first suggested, it is said, by an able parish priest, the Rev. Dr. D'Oyley, of Lambeth, and supported by all the Conservatives and Church people—and, as the Chairman observed, "ere the walls had ceased to vibrate with the hammer of the carpenter," courses of Medical lectures began to be delivered, by a staff of the ablest Professors of the day, of whom every King's man was glad to see the buoyant and juvenile Professor of Anatomy not only surviving, but still in the fullest possible vigour. Here, then, was the first stage. The principles of Medicine were taught, and they were combined with something of that discipline which helps to form the Christian gentleman,—the daily recognition of the Creator in the chapel service, and that salutary check on whatever is low, or loose, or riotous, which is given by the fatherly counsel and example of the estimable prelates and clergymen who have adorned the office of Principal. So far a great step was gained; Medical men could get scientific Professional knowledge, combined with the culture which should fit them for the highest society in the land. But there was wanting yet the practical department, in which the Professors should be able to demonstrate at the bedside what they taught in the class-room, and so make the School complete, self-contained, and perfect. For this purpose a Hospital must be built, and the council had the good fortune to secure the services of their distinguished guest of that evening as the first Surgeon to the King's College Hospital. They must not forget the help given by other able men, as Todd, Budd, Partridge, Bowman, Guy; still it might be asserted that the history of the King's College Hospital—he might say the history of modern Surgery—had been closely allied with the doings of Sir William Fergusson. He could not venture to occupy their time by a bare recapitulation of the triumphs in Operative Surgery which had been achieved by their distinguished guest; but as all such acts proceeded from certain antecedent moral causes, he must say a few words on what he believed to be the characteristics of Sir William as a Surgeon and the causes of his success. There was, in the first place, the element of force, the indomitable will, the resolution that a hazardous operation, once begun, shall be completely carried out, and that not by niggling and timid touches, but by going right to the root of the matter, with a resolution typified by that iron grasp of the hand which might be extended, but not increased, by his own "Lion Forceps." Then there was the element of sagacity; the capability of storing up and sorting out for use all the varied cases which his experience met with; the power of bringing to bear the collateral sciences of Anatomy and Physiology on every Surgical operation—as, for instance, the sagacity which prompted him to cut certain little muscles that the flaps might fall easily together after the operation for cleft palate. But, said the Chairman, force and sagacity may make a great Surgeon; they might have made King's College almost as powerful a school as it is; they might have made the fact of being a pupil of Sir W. Fergusson's a passport, as it is, to every Surgical office and honour; they might have made him a Baronet, but they would never have brought you all together as you have come together to-day. There is one more element wanted. It is found in the spirit of tenderness; in that which suggests conservative operations, in the more than feminine grace and delivery with which our distinguished guest can perform the smallest, nicest, neatest, and most trivial operations, just as the steam hammer which now forges an anchor, now gently cracks a walnut. It is the faculty of conciliating what is far better than respect or admiration—the affection of a vast School of Surgeons and colleagues, who now come forward to testify their sympathy with Sir William on the occasion of the honour which the Queen has conferred on him. In their name, Sir William, said the Chairman, I have the honour to present you with the Silver Dessert Service before me, and with this written record of the names of the donors. Generations hence, may some future baronet say, as he looks at them amongst the treasures and muniments of his family, "The founder of our house was clearly an able man; but more, he was beloved by those who knew him." So, amidst much cheering, bumpers were tossed off, and then deep silence prevailed for Sir William's reply; and this I wish I could give with something of the precision of a shorthand writer; for it was one of the most remarkable and useful morsels of autobiography which I ever heard. Sir

William seemed deeply affected, and spoke in homely, plain, inartificial language; but all the more impressively for that. He described his early life, his struggles, and his aspirations. He began, he said, with no large pecuniary resources, no high connexion or those other things which push a man on in the world. But he had set before himself the resolution to attain the highest rank in the Profession; and without looking right or left, he had won it. He mentioned as a quiet anecdote how that, when a student, he had been in company with two friends, and in the course of conversation they were talking about the eminence attained by some first-rate men. "Ah!" said one of them, "not one of us three need look so high." I said nothing, observed Sir William, but I thought to myself, "Speak for yourselves, gentlemen; do as you please, but I'll follow my own plan for all that." They were now village Surgeons in Scotland. But he went on—not by magic, nor by luck, nor by any help from without, but by steady, persevering work, always on the look-out to be learning or doing something. Then a time came when he was invited to London to the King's College Professorship. Some of his acquaintance thought it was presumption and rashness to come, but come he did, and he came with scarcely a friend, save one whom he had always been able to rely on—his esteemed friend Professor Partridge. So he had worked his way steadily upwards; proud of his Profession, of his work, and of his pupils; always striving to do each day's work better than the last. Now he found himself in the proud position of receiving this splendid gift, presented in such terms of eulogy, and which awakened in him the most powerful emotion." I feel, Mr. Editor, that I cannot do justice to Sir William's speech—so quiet, and unassuming, and modest, and yet so pregnant with instruction and comfort; nor need I further occupy your time by saying how Sir William proposed the Chairman's health, and Dr. Henkell that of the Professors, how Mr. Partridge replied in a way to satisfy everybody, and how we lit our cigars at the door, after a capital evening, at about a quarter-past twelve.

# REVIEWS.

## CHOLERA LITERATURE.

*Cholera in its Home; with a Sketch of the Pathology and Treatment of the Disease.* By JOHN MACPHERSON, M.D., etc. London: John Churchill and Sons. 1866.

*Notes on Health in Calcutta and Emigrant Ships, including Ventilation, Diet, and Disease.* By W. H. PEARSE, M.D. Edin. London: John Churchill and Sons. 1866.

*Notes on Epidemics: for the Use of the Public.* By FRANCIS EDMUND ANSTIE, M.D. London: Jackson, Walford, and Hodder, 27, Paternoster-row. 1866.

*On Diseases of the Respiratory Passages and Lungs, etc.* By WALTER GOODYER BARKER, M.B. London: John Churchill and Sons. 1866.

*Memorandum of a Plan of United Action in the Case of an Epidemic of Cholera: to be Communicated to Vestries and District Boards, by the Metropolitan Medical Officers of Health.* London: Published at 6, North-street, Manchester-square. Price one penny.

*The Common Nature of Epidemics and their Relation to Climate and Civilisation; also Remarks on Contagion and Quarantine.* From Writings and Official Reports by SOUTHWOOD SMITH, M.D., Physician to the London Fever Hospital. Edited by T. BAKER, Esq., of the Inner Temple, Barrister-at-Law. London: N. Trübner and Co., 60, Paternoster-row. 1866. Pp. 130.

*On the Unity of the Zymotic or Epidemic Poison and the Nature and Treatment of Cholera.* By HENRY GREENWOOD, M.D., M.R.C.P. Lond. Greenwich: Berryon. Pp. 22.

*On the Effects of Elevation and Floods on Health, and the General Health of Oxford compared with that of Other Districts.* By G. A. ROWELL, etc. London: Williams and Norgate. 1866. Pamphlet. Pp. 46.

THE first work on our list is by Deputy-Inspector John Macpherson, M.D., whose long experience in India gives him a just claim on our attention. His book is not so much an exhaustive treatise as it is a sketch of the most prominent features of the disease derived from his own observation. And we may note as a fact that men who have seen a few cases in a country where perhaps cholera is an exotic and rare visitant, are usually much better prepared with a perfect theory and satisfactory mode of cure than the men are who have had opportunities of seeing it under the greatest variety of forms, and in its very birthplace. Dr. Macpherson belongs to the latter class. Hence he views with philosophic indifference "the rise and fall of theories and methods of treatment," and, as a practical man, would rather dissuade us from the ready adoption of that multiplicity of "cures" which ignorance and enthusiasm are sure to deluge us with the moment the epidemic makes its appearance. The first part of the book is on etiology, under which the author notices, first, the appreciable atmospheric influences, and their effects on the cholera. A fall of the thermometer and fall of rain are known to check an epidemic. The prevalence of "cholera has a marked influence on the prevalence of other diseases. When cholera is epidemic, they are from one-fourth to one-fifth less prevalent than at other times." Cholera has no relation to epizootics. The Calcutta crows are too clever to run away at cholera times. Cholera, though the same in the main, yet may vary in details in different seasons,—as in the degree of blueness, the early occurrence of collapse, the amount of vomiting, purging, and cramps, the frequency of consecutive fever, and the proportion of deaths. The author next treats of less appreciable causes, as malaria, contagion, prevalence in certain localities, etc. Under the head of predisposing and exciting causes, he notices the greater prevalence of cholera amongst new comers and travellers, although these persons are not equally liable to fever, nor to ordinary bowel complaint. The *fixed* population of Calcutta die in the ratio of nearly two to one non-resident of fever, and nearly three to two of bowel complaint; but of cholera, non-residents die in the ratio of three and a-half to one resident. Depressing causes of all sorts, and especially such as disorder the stomach and bowels, are of most moment in Dr. Macpherson's eyes as predisposing. In his remarks on the diffusion of cholera, he negatives Pettenkofer's *ground-water* theory, shows the difficulty of the water diffusion theory (because cholera declines when the wells begin to be possibly impregnated with fæcal matter through the rains), and gives most support to the *dust* theory, though he sees difficulties even in that. In the second part of the work, devoted to pathology, the symptoms and morbid appearances are detailed from the life, and some facts are noticed which require some theories to be altered to admit them, such as the increase of *internal* heat during the intensest collapse. Although Dr. Macpherson has never seen *cholera sicca*, he does not deny its existence; but it is very clear that the vomiting and purging are not in his opinion the essentials of cholera, although, as he says, the effects of elaterium and of putrid shell-fish are wonderfully like it. Then follows a chapter, entitled a "Sketch of Opinions," in which, as throughout the work, the author shows the most acute and vigorous powers of analysis and criticism. He shows that amongst the phenomena of cholera, obstruction of the pulmonary circulation is by no means proved to be a primary one; that the coldness may be present with a tolerable pulse, and consequently with a tolerable pulmonary circulation; that at the *beginning* of an attack blood flows freely on venesection; that it is not true that the state of the blood bears no relation to the vomiting and purging; and that it is not true that collapse passes off while purging continues. The discordance of these views with those of Dr. G. Johnson is clearly visible; equally so is the author's opinion that we are not bound to accept vomiting and purging necessarily as the efforts of nature to eliminate poison. In the chapter on "Treatment," Dr. Macpherson shows that secondary fever occurs when remedies have been used and when none have been used; consequently that remedies, and especially opium and stimulants, are not the cause of secondary fever, for this occurs under cold water treatment. Early and free use of opium is Dr. Macpherson's sheet anchor; but in the stage of collapse opium is not necessarily mischievous, but inert. In the stage of collapse the author gives drink, and probably small doses of ammonia, but attempts no *coup*, and confesses he has no specific. We have said enough of this book to show its character. Instead of a dozen cases and miles of theory, it is crammed with facts and instances, whilst theory —*i. e.*, the notion that we can account in a consistent manner for causes and symptoms—is treated with a contempt almost depressing, and with a severity of criticism almost unequalled. The best advice we can give to any one who deludes himself into believing that he has a theory or treatment of cholera is, read Dr. Macpherson.

The preface by Mr. Baker, to the reprint of Dr. Southwood Smith, seems to a Medical mind somewhat enthusiastic, especially when he says, "Never was a country guided through the perils of an epidemic with greater wisdom and energy than Great Britain during the cholera of 1848-49." So far as we remember, the cholera then went through its accustomed *rôle*. It killed the needy, the dissipated, and occasionally the well-to-do, for the first month, and guided *itself* out of this country in the third month to walk in darkness elsewhere. The first part consists of general commentaries upon epidemics, their common nature, and whether they are within human control (p. 58), and, says the author, "From these facts and observations we see that epidemics *are* under our control; we may promote their spread or we may prevent it. We may preserve ourselves from them. *We have done so.* We have banished the most formidable. We may put an end to typhus: we have actually done so." We have encompassed the model dwellings by a barrier which neither typhus, *nor even cholera*, nor any of the other causes of excessive sickness and premature mortality have been able to pass. To the residents within that barrier the chance of life has been almost doubled; to their children it *has* been doubled; and compared with some children of their own class it has been increased fourfold." Dr. Smith was a non-contagionist of the old school and an anti-quarantineer. "Our true course," he says, "is to make diligent search for all localising circumstances, and to remove them, so as to render the locality untenable for the epidemic. But quarantine makes no such search —hence the signal failure of quarantine."

With all respect to Dr. S. Smith and Mr. Baker, we protest against a reproduction in the present day of the squabbles of thirty years since. With regard to "localising causes," there is no Medical man who will be found to deny the necessity of thorough drainage, ventilation, water supply, and all the other items of the sanitary creed. On the other hand, there is no "localising cause" of any disease so potent as the presence of a patient affected therewith. Let us give up the use of the old words, contagion, infection, and quarantine, which have been battered to pieces; but we affirm that "zymotic" diseases are by their very nature "communicable" or "transmissible;" and that the "isolation" of the sick is an essential measure for the safety of those yet sound. To abuse quarantine because it makes no search for localising causes of epidemics, is like abusing a man who has a good deal of loose cash in his house for keeping out thieves. Lock up your cash by all means, but keep out the thieves too.

Doctor Pearse's book is an "inspiration" on the subject of ventilation on ship-board, which is so hard to contrive when "mostly in the tropics near the Equator, often with heavy rains," calms occur. Then "the thermometer below often ranges from 86° to 90°. At the equatorial rain-belt during the cooler rains, the heat is less intense, the thermometer falling three or four degrees below 86° or 90°;" but Dr. Pearse considers that "such a close condition of the 'tween decks is not so hurtful as it has been commonly thought to be; and the most healthy periods of the voyage have been those of the hot, damp calm latitudes." Dr. Pearse seems to rely very much on the 'tween deck atmosphere being the warmer—it will move and be changed, and makes this the basis of his system of ventilation, by wind-sails or chimneys of canvas or iron. Chapter ii. tells us of the coolie emigrant ships. In the iron ship *Oasis* 1116 tons, out of 446 coolie emigrants between Garden Reach and Demerara, the entire voyage taking 105 days, there were *forty-two deaths.* Carefully drawn up tables give the details of this sad story. Dr. Pearse says the "coolie is an ill rice-fed, ague-suffering animal." He adds that "in writing on such subjects, we plunge into a large and dark region." When he tells us of the coolie emigrant's diet, we scarce wonder at the willingness with which the latter leaves a daily *régime* of sixteen varieties of condiments, including mustard oil, coriander seeds, and tumeric. When will English people believe that a Hindoo is not a parrot, and that he would far prefer beef to "dholl" (a kind of pea), and that the very reason he is emigrating is because he is sick of dholl and wants beef? We would endorse the following remarks:— "I feel, in justice to my patient's hope of life, I would do nothing in cholera except in relieving his most pressing wants and supplying him with whatever his instinct might seek or point to . . . the freest supply of cold water if asked for . . . but whatever the patient asked for should be given, and watch made for some gleam from his instinctive desires which might give light or analogy towards a true remedy." "Sad is the fact of the non-efficacy of all treatments. . . . Should I find in any epidemic of cholera that at any period the cases showed a nearer approach to the intermittent course than cholera usually does, *quinine* would be the remedy used." This sufficiently indicates Dr. Pearse's view of treating cholera, but we cannot refrain from quoting the following:—"Our efforts to cure by treating symptoms are of a method worthy only of the very earlier capacity of human intelligence. The mind should seek rather to perceive what *want* there may be, what changed relation *in man's composition*; for this is the potential parent of the first fact or act whose natural and necessary consequences are the series of symptoms we call cholera." "Not viewing an outbreak of cholera on shipboard occurring soon after sailing as in any way related to any 'poison' or 'thing,' I should seek to give the feeble coolie's system rest, quiet, warmth, and sufficient ventilation, carefully avoiding excessive currents of atmosphere, and should act on the same general principles, which would be just in guarding his system's passage into any other somewhat varied deviations, as fever, dysentery, bronchitis, etc." Dr. Pearse speaks most highly of the value of fresh fruits and vegetable acids, and treats the notion of their being causes of cholera as an old woman's delusion. His observations, though obscurely expressed, appear to us often of great value. Diarrhœa and cholera may be expressions of a feebleness—of a want of something to make flesh and blood of healthy composition, just as the oozings of eczema indicate debility and feebly-constituted flesh and blood, and cease on the administration a minute quantity of arsenic. Dr. Pearse treats the search for a "cause" as often mere superstition. The fact is, that the man as he is does not agree with the condition he is in, of diet, temperature, etc. The disease is one of the phenomena indicating discordance. To get rid of the disease, you must not attempt to banish an isolated "cause," but you must put the man into a state to agree with the surroundings, or alter these to agree with the man. Dr. Pearse gives for two shillings a great luxury, and one necessary for mental health —a few new ideas.

Dr. Anstie's dainty little volume is a reprint of an article which appeared in the January number of the *British Quarterly Review*, which he has enlarged. At p. 105, after treating of typhus, the disease of the city, and typhoid, its provincial relative, he tells us of the *transit* of cholera, how it follows closely the lines of most frequent human communication, but how also it appeared in lone St. Kilda, where, Dr. Anstie says very truly, "there seems to have been a complete absence of any possibility of human intercourse with the main land;" and in Coventry, in 1838, where in the middle of winter, when cholera was not prevailing in the county, fifty-five persons perished very rapidly. Dr. Anstie gives a painfully vivid picture of the cholera patient, and with regard to "cures," says it is a noteworthy fact that diarrhœa does not always precede cholera. He tells us also that scarlet fever is always at our doors, and may justify a panic far better than the threatened return of cholera to England.

We notice Dr. Walter Goodyear Barker's volume in this place, for although it is chiefly devoted to diseases of the respiratory organs, he has a section on the relation of influenza to cholera. He regards them (if we understand aright) as parallel or, more properly speaking, convertible diseases—what would be cholera in hot weather becoming influenza in cold. He believes both to be affairs of temperature, and not of poison; in fact, he is so severe on persons who believe in atmospheric poisons that it is evident he has not read the "Third Report of the Cattle Plague Commissioners." Moreover, he is somewhat inconsistent, for he ascribes various diseases to "emanations," and surely these are poisonous. Otherwise, Dr. Barker's is a sensible treatise on diseases of the air-passages produced by cold.

Dr. Greenwood believes that there is an epidemic poison, and that this is malaria, and that this is capable, under different circumstances, of producing all the kinds of epidemic disease. He believes the state of the blood in cholera to be one of thickening, from loss of its watery parts; hence he deprecates stimulants in the stage of collapse, as goading the organs to circulate blood not fit for circulation. Careful nursing, free ventilation, light coverlids, cold water for drink, no friction heat or stimulants, and a grain of calomel every hour are Dr. Greenwood's remedies; and all we can say is, that if we had blue cholera ourselves we should be inclined to send for Dr. Greenwood. On the theory of the disease he says little; but what he says accords with Dr. Macpherson. The extreme collapse, he says, is "not cholera at all, but a sequel, and very fatal one." The profuse incipient diarrhœa, antecedent to collapse, *is* true cholera, and for the treatment of this he gives calomel and opium and aromatics.

Mr. Rowell gives us a useful pamphlet. His point is, that mere low level, floods, and moist site are not causes of unhealthiness *per se;* and he attempts to prove it by showing that the high and dry villages near Oxford are less healthy than the low and wet ones. The greater prevalence of cholera in Oxford in some institutions and places than in others is traced not to level, but to impurity of the drinking water. On this point Mr. Rowell has an observation which is new and striking. He says that if the public can afford to water the streets for the comfort of the rich, they may afford to supply the poor gratis with wholesome water for drinking.

The *Memorandum* drawn up by the Metropolitan Medical Officers of Health seems to have been very carefully revised. It contains a dogmatic statement of the best way to stamp out cholera and a *resumé* of the duties of Boards of Guardians, Town Councils, etc., in the face of a cholera epidemic; with copies of handbills for distribution. Such a publication extensively circulated would tend to allay panic by showing the public what they ought to do to defend themselves.

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***Photographs (Coloured from Life) of the Diseases of the Skin.*** **Second series, Nos. 1, 2, 3. By Balmanno Squire, M.B. Lond., Surgeon to the West London Dispensary for Diseases of the Skin, &c.**

In our last notice of Mr. Balmanno Squire's photographs of skin diseases we praised his illustrations as far more truthful and "life like" than any representations of skin diseases previously published, and some as specially admirable, and hoped that Dr. Squire would feel encouraged to continue his labours. We find the advice we then gave has been followed. In the present series of photographs Mr. Squire has managed to enlarge his scale, without at all sacrificing his clearness of definition. In the first number, one that specially calls for this remark, is represented the face of a man suffering from a so-called *tertiary* syphilitic eruption. In his description of this "tertiary" eruption Mr. Squire thus contrasts the two:

"In comparing this example of cutaneous syphilis with the one previously illustrated, it may be remarked how much more chronic the separate items of the tertiary eruption are, and over how much longer a period the course of the disease extends. It may be noticed, too, that the crusts produced by it are considerably thicker, and that the traces it leaves are far more conspicuous than those of the secondary eruption. In the previous example the general health was not impaired in any perceptible degree; in the present one, the disease was attended with considerable emaciation and debility. The wandering rheumatic pains felt by the subject of the secondary disease are here replaced by the fixed aching pain of the syphilitic node, and by the shooting pains across both temples, which subsided on the appearance of an eruption on the forehead.

"Although the tertiary eruption has, in this instance, *appeared as soon after infection as the secondary disease* did, it is by no means usual for it to do so. In the majority of cases, a year or more intervenes between the period of infection and the evolution of either of the syphilides represented in the photograph."

Why use such words as "secondary" and "tertiary" at all? As Mr. Squire admits, they do not mean what they seem to mean—*i.e., succession*—but only *quality* of eruption, which surely were better expressed by other terms. We would ask Mr. Squire to look back to the earliest article on "Modern Syphilography" which appeared in the *Medical Times and Gazette*, and to Dr. Wilks's argument against the term "secondary."

The second number illustrates a secondary eruption, to which Mr. Squire gives the name of "Ringed Herpoid Syphilide," and he defends his nomenclature thus:—"The eruption," he says, "resembles herpes circinatus in its centrifugal character, and in the fact that its widening rings are surmounted either by vesicles, or (more commonly) by minute scales. In the parasitic disease, however, the area enclosed by the raised circle is, until it heals, harsh, scurfy, and of a pink colour, and the scales present, under the microscope, evidence of the parasitic nature of the eruption; whereas, in the syphilide, the area within the circle is smooth, and, though at first of a pink colour, soon acquires a tawney-grey tint. Furthermore, a microscopical examination of the scurf on the rings shows that no vegetable parasite is concerned in their production."

The third illustration represents a disease to which Mr. Squire is known to have devoted considerable attention. "Prurigo senilis," he says, "is a contagious disease; its duration is indefinite; in a large proportion of the examples that the author has met with it has lasted for several years; in such cases it is often considerably mitigated in winter and exacerbated in summer. It is most common in old persons, commoner in the middle aged than in the adolescent, and least common in children. The author has, however, noted its occurrence at four years of age. It is associated often with cachexia and debility, and is far commoner with the poor than with the rich. The essential cause of the disease is the *Pediculus corporis*. This parasite is, however, not always easy to find: its presence is often unsuspected by the patient, and when known to him is as often denied; hence its invariable co-existence with this form of eruption has, until very recently, escaped the notice of observers. This constant relation of the parasite to the disease, as cause to effect, was first pointed out by the author in 1864."(a)

We have already expressed our admiration of the positive, downright, matter-of-fact tone adopted by Mr. Squire in his explanation and treatment of this form of prurigo.

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*Surgical Appliances and Minor Operative Surgery.* By Thos. Annandale, F.R.C.S. Edin., etc. Maclachlan and Stewart, Edinburgh. 1866. Pp. 246.

A useful handbook, with illustrations; but surely there was *Heath* enough in Scotland without it.

## GENERAL CORRESPONDENCE.

### THE ELECTION AT THE ROYAL COLLEGE OF SURGEONS.

Letter from Mr. Campbell de Morgan, F.R.S.

[To the Editor of the Medical Times and Gazette.]

Sir,—I am reminded by the approaching election of members into the Council of the College of Surgeons of a duty which I owe to myself as well as to the many friends who have been so good as to urge me to allow myself to be put in nomination.

Why I decline now, as I did last year, to do so may be thought a matter of little consequence to any one but myself, but it involves questions which are of wider interest, and will probably exercise an important influence on the future of the Council.

I confess I much regret that I cannot become a candidate. Very many years ago, I wrote a letter to the Council, pointing out how very inefficient and injurious must be a system which compelled the attendance upon lectures on a large number of subjects, but did not require any evidence whatever of attention to them—for the Council will give no power to the Lecturers to certify to a student's proficiency; and on the subjects of Chemistry, Materia Medica, Medicine, and Midwifery, while attendance on lectures is enforced—no examination takes place at the College. Indeed, the fair conclusion seems to be that, so far as the College is concerned, the students are made for the lecturers, for if a knowledge of these subjects is essential to a Surgeon, surely a licence to practise should not be given unless the licensing body is satisfied that the candidate possesses it. But if it be not essential, why oblige a student to sit on a hard bench for so many hours a day? His time might surely be better employed. Here, however, lies the difficulty. The Court of Examiners, as now constituted, is hardly in a position to examine on the subjects referred to. Hospital Surgeons of some years' standing might very readily be plucked in Chemistry or Materia Medica by any tolerably intelligent second-year student, and it would not be quite right that an examiner should have to learn up his subject for the occasion. Hence, if examinations are held at all on these subjects, there must of necessity be some exoteric examiners, and the system would be broken up.

I should certainly be glad to have an opportunity of advocating in the Council a considerable change in the present system, for some years' additional experience has only the more convinced me of its utter failure, so far as a large majority of students is concerned. And it is only for the majority that enactments need be made at all. The minority will learn what they want to learn if left to themselves.

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(a) *Vide* note to the letter-press of No. III. of the former series.

But I would not be a party to a mode of election which seems to me degrading to the candidate and injurious to the character of the Council. There should, I think, be some difference between the election into the Council of a great scientific and educational body and into a parish vestry. What a strange thing to demand of candidates of between 50 and 60 years of age that they should get six of their fellows, who will be for the most part their juniors, to certify that they are fit and proper persons to be elected. Would there be the slightest risk of any one getting in who could not get fifty Fellows to sign such a paper if they were canvassed to do so? If a man is not well enough known to the Profession to secure a very large amount of support, independent of these recommendations (provided the elections are otherwise properly conducted), no signatures will help him. The recommendation papers are useless, and they are therefore worse, for they jar on a man's self-respect.

There are, however, other and stronger objections to the plan as at present worked. The first is that elections have been secured by canvassing. It will hardly be conducive to the ultimate welfare of the Council if its members obtain their seats by the activity of their friends, whether exerted in the way of private canvassing or of public advocacy by the press. It is, of course, within the province of the journals to point out fairly and impartially the position of the various candidates; but they go beyond their province if they become the partisans of any one candidate. The system of private canvassing is, however, far more objectionable. Those who will not resort to it will be indisposed to put themselves in competition with those who see no objection to such a proceeding.

This electioneering system has carried with it another evil, which is pronounced to be legal under the Charter—that of plumping. The obvious duty of the electors is to fill up all vacancies, not to force a favoured candidate into the Council by indirect means.

These evils may be inevitable necessities, but they inevitably lead to a disinclination to become candidates in some who would value a seat at the Council Board, not for any dignity it would confer on them, but for the opportunity it would give them of aiding the cause of true education, which I believe never wanted aid more than at the present moment.

These causes prevent my offering myself. Some of them unfortunately are preventing others, whose services would be more important, from taking a seat on the Council of the College. I am, &c.

Campbell de Morgan, F.R.S.

## DR. MUSPRATT'S CHALYBEATE AT HARROGATE.

### Letter from Dr. Muspratt.

[To the Editor of the Medical Times and Gazette.]

Sir,—In your ably-conducted journal of May 12 I find an exhaustive and very interesting article upon "The Medicinal Springs of Harrogate," by Dr. George Kennion, F.R.C.P. In the commencement of his "observations" he kindly alludes to my "important discovery," in July last, of chloride of iron ($\mathrm{FeCl}$) in one of the springs belonging to the "Royal Chalybeate Spa." The presence of this salt in a potable water is *unique;* "thus constituting it a chalybeate water of very great therapeutic value, and one which, in respect to this constituent, is without a prototype." Since the true nature of this spring became patent, its water has been prescribed by Dr. Kennion, Dr. Whitehead, Dr. Herapath, Mr. Baker Brown, Dr. Myrtle, Dr. Bennett, and other leading Physicians and Surgeons, in cases of anæmia of all kinds, whether the result of general cachexia, excessive hæmorrhage, chlorosis, anorexia, incipient phthisis, or from that produced by chronic disease, as gout or rheumatism, or albuminaria; and Dr. Kennion writes:—"Amongst other obvious cases where it may be used with advantage is fatty degeneration of the heart." Dr. Myrtle has found it of service, he tells me, in lupus. In writing of this chloride of iron spring he remarks:—"The curative value cannot be over-estimated in all cases of debility arising from impoverishment of the blood, from whatever cause, is unrivalled. The various forms of scrofula, whether of the system at large or of special organs, may by its means be combated with the best possible results. Above all, chronic glandular swellings seem to yield to its influence, when taken steadily for a period varying from three weeks to three months. It is also speciably serviceable in many forms of weak digestion and dyspepsia, in all functional derangements of the nerves, such as tic, neuralgia, chorea, some forms of epilepsy, and most hysterical affections, and last, not least, in that numerous class of cases termed poor gout, this spa has proved itself to be a most invaluable restorative of health and comfort."

Dr. Herapath designates it "the most extraordinary chalybeate in existence."

Dr. Thomas Scott, of Ben Rhydding, writes, "That it must be a most excellent chalybeate is at once apparent, not only from the amount of iron which it contains, but more especially from the particular *form* in which it is presented, rendering it so easy of assimilation, a matter of paramount importance, inasmuch as while many cases appear before us Medical men in which iron is undoubtedly the remedy required, yet at the same time we are prevented prescribing it in the usual forms on account of the difficulty in assimilating them. In your spring, however, this is remedied, and I feel sure its value will be fully appreciated in the treatment of that large class of diseases in which iron in some form or other is usually administered."

The ferruginous compounds are contained in a gallon of the water as under, and upon these its hygienic effects will almost solely depend:—

| | July, 1865. Dr. Muspratt. | Nov., 1865. Dr. Miller. | Mean. |
|---|---|---|---|
| Chloride of iron. . | 16·011 | 14·490 | 15·250 |
| Carbonate of iron . | 10·842 | 11·620 | 11·231 |

The other salts are chlorides of sodium, potassium, calcium, magnesium, lithium, barium, strontium, &c.

The latter three I find now in several of the waters. The Kissingen or Montpellier saline chalybeate gives strong indications of these metals. Hoping you will give insertion to these remarks, I am, &c.

Sheridan Muspratt, M.D., &c.,
Professor of Chemistry.

College of Chemistry, Liverpool, June 14.

## MEDICAL NEWS.

◆

**Apothecaries' Hall.**—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, June 21, 1866:—

Richard Matthews Pryce, Caersws, Montgomery; Duncan Turner, Peter-street, Islington; Richard Wilson Wilcox, 34, Torrington-square; Edward Lodewyk Crowther, Hobarton, Tasmania; Thomas Sanders, Plymouth; Mowbray Jackson, Bowbrickill, Bucks; Barnabas Walter Lamb, Stourport; John Quick, Penzance.

The following gentleman also on the same day passed his First Examination:—

Henry Bland, King's College.

### APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

**Barker**, W. L., L.R.C.P., has been appointed Assistant to the Obstetric Physician, St. George's Hospital.

**Fouracre**, R. P., M.R.C.S.E., has been appointed Surgeon to the Holloway Dispensary.

**Nichol**, J. G., M.D., has been appointed House-Surgeon to the Chorley Dispensary.

**Pollock**, A. Julius, M.D., M.R.C.P., has been elected one of the Physicians to Charing-cross Hospital.

**Salter**, W. Hyde, M.D., has been appointed Physician to Charing-cross Hospital.

### BIRTHS.

**Child.**—On June 23, at Oxford, the wife of G. W. Child, M.D., of a son.

**Davidson.**—On June 19, at Erith, the wife of James Davidson, M.D., R.N., of a son.

**Diplock.**—June 22, at Western House, Oakley-square, S.W., the wife of T. B. Diplock, M.D., of a daughter.

**Munro.**—On June 26, at Moffat, Dumfriesshire, the wife of James Munro, M.D., of a son.

**Valpy.**—On June 24, the wife of W. H. Valpy, M.D., of George-street, Hanover-square, of a son, stillborn.

## MARRIAGES.

Barnett—Irvine.—On June 20, at the parish church, Clontarf, County Dublin, O. Barnett, Esq., Assistant-Surgeon 11th Hussars, to Lizzie, third daughter of the late Dr. Irvine, Irvinestown, County Fermanagh.

Blaker—Renshaw.—On June 20, at Broadwater, Sussex, E. Shaw Blaker, L.R.C.P. Edin, of Portland, to Julia, daughter of J. Renshaw, Esq., of Dunedin, New Zealand.

Brown—Brown—On June 20, at Biggar, N.B., A. Brown, L.R.C.P., M.R.C.S., of Edinburgh, to Marion Shiels, only daughter of Alexander Brown, Esq.

Gordon—Gregory.—On June 21, at All Saints' Church, Finchley-road, H. D. Gordon, M.D., Surgeon-Major 69th Regiment, to Elizabeth, youngest daughter of the late A. E. Gregory, Esq.

Fulton—Fotheringham.—On June 20, at 127, Queensberry-place, Glasgow, John Fulton, L.F.P.S. Glas, to Mary Bremner, only daughter of T. Fotheringham, Esq., of Glasgow.

Parsons—Sprye.—On June 20, at Kensington Church, C. Parsons, M.D., of Dover, to Venetia Digby Sprye, youngest daughter of Captain Richard Sprye, of Kensington.

Richmond—Marr.—On June 20, at Alderstone House, Midcalder, N.B., Sylvester Richmond, M.D., of Northallerton, to Agnes Bruce, eldest daughter of the late James Marr, M.D., of Alderstone.

Saunders—Byass.—On June 19, at the Church of the Holy Trinity, Cuckfield, Sussex, C. E. Saunders, M.D., to Edith, youngest daughter of T. S. Byass, M.D., of Cuckfield.

Salomon—Sampson.—On June 4, at Stockholm, E. C. Victor Salomon, to Caroline Sarah, daughter of the late John Shaw, Esq., of the Mauritius.

Wales—Leaviss.—On June 20, at St. Mark's Church, John Wales, Assistant-Surgeon, Royal Artillery, to Helen Jane, only child of the late Charles Leaviss, of Wilmington.

Weeks—Holman.—On June 21, at East Hothley, Sussex, H. Weeks, of Old Brompton, Kent, to Harriet, youngest daughter of H. Holman, Esq., of East Hothley.

## DEATHS.

Argent, S, M.R.C.S., at Hinckley, Leicestershire, on June 18, aged 72.

Birnie, M., M.R.C.S., at Old Aberdeen, on May 31, aged 80.

Blenkinsop, Henry, F.R.C.S.E., at Coton End, Warwick, on June 20, aged 53.

Griffith, Alfred Rawlinson, M.D., at Dickson County, Tennessee, North America, on May 18, aged 37.

Jackson, Henry, F.R.C.S., at St. James's-row, Sheffield, on June 25, aged 60.

Lizars, Alexander J., M.D., F.R.C.S.E. (late Professor of Anatomy in the University of Aberdeen), at Ambleside, Westmoreland, on June 12.

Macfarlane, A. S., at George Town, Demerara, on June 4, aged 58.

Newmarch, Henry, M.S. (late Surgeon Bengal Army), at 74, Micklegate, York, on June 22, aged 68.

Whitty, D. J., M D., at Briton Ferry, on June 15, aged 41.

## POOR-LAW MEDICAL SERVICE.

⁂ The area of each district is stated in acres. The population is computed according to the last census.

### RESIGNATIONS.

*Hinckley Union.*—The Barbage District is vacant; area 11,035; population 4179 salary £60 per annum.

*Lancheste Union.*—Mr. Henry W. Watson has resigned the Tanfield District; area 10,297; population 7562; salary £30 per annum.

*Reading Union.*—Mr. T. L. Walford has resigned the St. Lawrence District; area 349; population 4737; salary £30 per annum.

### APPOINTMENTS.

*Banbury Union.*—Thomas J. Fitzpatrick, L.R.C.S. Ire., L.K. and Q. Coll. Ire., L.M., to the Hornton District.

*Bridgwater Union.*—Charles Young, M.R.C.S.E., L.S.A., L.M., to the Chilton Polden District.

*Croydon Union.*—Walter H. Cope, M.R.C.S.F., L.S.A., to the Fourth District.

*Faversham Union.*—George F. Pritchard, L. K. and Q. Coll., Ire., M.R.C.S.E., L.M., to the Fourth District.

*Morpeth Union.*—Edward A. Hedley, M.R.C.S.E., L.S.A., to the Fourth District.

College of Physicians.—On Wednesday evening the President and Fellows of the Royal College of Physicians gave a *conversazione*, which was attended by a numerous and distinguished company. Amongst the visitors were the Lord Bishop of Oxford, Sir R. Murchison, Prof. Tyndall, Prof. Daubeney, Sir R. Martin, presidents of various learned societies, etc. In the library of the College a number of scientific inventions were exhibited. Among them were Professor Wheatstone's means of communication between carriages on railroads; Professor Abel's specimens of gun cotton, and a lead-coated projectile showing results produced by electrolytic action; Mr. Ansell's apparatus for detecting fire-damp in mines by the diffusion of gases; Oersted's condenser, for showing the liquefaction of gases by pressure and the compressibility of water, sent in by Mr. H. M'Leod. Dr. Lionel Beale and Dr. J. B. Sanderson exhibited specimens and tracings illustrating the anatomy of the liver and the heart. On one of the tables were specimens of Dr. Hassall's flour of meat for the immediate preparation of beef-tea, soups, and other articles of diet. One of these specimens consisted of bran and meat biscuits, and another of meat lozenges in the form of jujubes. Some samples of meat preserved in paraffin by means of Redwood's process attracted considerable attention. This process consists in the immersion of fresh meat in melted paraffin at a temperature of 240 Fahrenheit for a sufficient time to effect a concentration of the juices of the meat and the complete expulsion of air, after which the meat in its condensed state is covered with an external coating of paraffin, with the view of excluding air and preventing decomposition.

The Coming Election at the Royal College of Surgeons.—We are authorised to state that Mr. Spencer Smith, actuated by the wish not to divide the votes of the Liberal party, has determined on not going to the poll this year.

It is stated that 176 persons fell ill of cholera at Stettin on Saturday and Sunday week, of whom half had died.—*Guardian.*

Election of Dr. Hooker at the Académie des Sciences.—Hereditary merit has, we are happy to find, been amply acknowledged in the person of the most scientific of our botanists—Dr. Joseph Hooker. He might easily have succeeded his father as Director of Kew Gardens, even had his capabilities for the office not been so remarkable, as such successions are almost a matter of course with us; but his election by the Académie des Sciences as corresponding member in the Botanical Section, left vacant by his father's death, by thirty-two of the thirty-seven voters present, is an acknowledgment of merit about which there can be no mistake, and an almost unprecedented occurrence in the annals of the Academy.

Queckett Microscopical Society.—The usual monthly meeting was held at University College on Friday last, P. Le Neve Foster, Esq., in the chair. A paper was read by Mr. N. Burgess, "On the Pigment-cells of Plants in some of their Varied Forms and Structure." The author gave the results in full detail of his microscopic researches and numerous dissections, arguing against the almost universally received opinion that the floral organs are modified leaves, the author believing them to be morphologically distinct. The paper occasioned an interesting discussion. Subsequently, Mr. M. C. Cooke introduced to the notice of the Society a micrometer made by Mr. Collins, in which the whole field was graduated, and by which tedious adjustment of objects to the scale can be avoided. After the meeting the usual microscopic conversazione followed.

Cattle Plague in Ireland.—We understand that the Mansion House Cattle Plague Committee (Dublin) have requested the Government to procure the assistance of Dr. Andrew Smart, of Edinburgh, and of Professors Simonds and Gamgee, of London, for the purpose of investigating any other cases of suspected Rinderpest which may arise. The *Irish Times*, in a leader on this subject, remarks:—"We trust that Professor Simonds, Professor Gamgee, and Dr. Smart, of Edinburgh, or, if not all three, one of them, will be commissioned to examine the cases supposed to have occurred here. All who are interested in the prosperity of Ireland will bow to the decision of the gentlemen we have named. They are men of European reputation, and of the most independent and honourable character. At present there exist very serious doubts whether we have had a case of cattle plague in Ireland. . . . . It is financially of great importance that the doubts entertained should be resolved by indisputable authority. If such eminent men as Professor Simonds, or Professor Gamgee, or Dr. Smart pronounce the cases at Drumra and Drennan to be cattle plague, all will determine not to despair, but to co-operate to the very utmost of their power with the Goverment, and to stamp it out whatever be the cost or sorrow. We are confident that even if the disease at Drumra is proved to be cattle plague, the report of the Commissioners will declare that it is of an exceedingly mild form. If, on the other hand, there is good ground, as we believe there is, for deciding that the disease is not cattle plague, confidence will be restored and an immense loss of property be avoided." —*Daily Review, June* 22.

National Association for the Promotion of Social Science.—The annual business meeting of the members of the Association will be held on Thursday, the 5th of July, at 1, Adam-street, Adelphi, at half-past three o'clock, p.m., to receive a Report from the Council and to elect the officers and standing committees for the ensuing year. The Rev. W. L.

Clay has been appointed by the Council Secretary to the Association. The tenth annual meeting will be held in Manchester, from the 3rd to the 10th of October next. The following are amongst the special questions chosen by the standing Committees of the several departments for discussion at the meeting which have most interest to Medical men:—"What are the best means of extending and securing an international law of copyright? What is the duty of the mother country as regards the protection of inferior races in her colonies and dependencies? What conditions or limitations ought to be imposed upon the power of disposing in perpetuity of property, real or personal, for charitable or other public purposes? Is it desirable to carry out life sentences to the utmost? and if so, in what cases, and under what form of discipline? What are the best means of preventing infanticide? In what other public institutions besides gaols is it expedient that coroners should be required to hold inquests in all cases of death? What means ought to be adopted to prevent the production of smoke in large towns? How can the pollution of rivers, by the refuse and sewage of towns, be best prevented? What legislative or other measures should be employed more effectually to prevent the adulteration of food? Upon what conditions and by what authorities ought licences for the sale of alcoholic liquors to be granted? What measures, legislative and other, should be adopted in order to supply better dwellings for the labouring classes? What means ought to be adopted for improving the management of workhouses?"

ASSOCIATION OF METROPOLITAN POOR-LAW MEDICAL OFFICERS.—At a preliminary meeting of Poor-law Medical Officers held on June 20, 1866 (Dr. Rogers, of the Strand Union, in the chair), it was moved, seconded, and unanimously resolved:—"1. That an association be formed to be called 'The Metropolitan Poor-law Medical Officers' Association.'" "2. That the following form of address be printed and sent to every parochial Medical Officer within the metropolitan district." "3. That the following gentlemen be appointed officers of the association *pro tem.*:—Dr. Rogers, president; F. Godrich, Esq., treasurer; Dr. Dudfield, hon. secretary."

"Dear Sir,—An Association of Metropolitan Union and District Poor-law Medical Officers has been formed with the object of mutual assistance in difficulties arising out of our duties, and also for the purposes of urging upon our respective local Boards, the Poor-law Board, and the public such revision of our position, as public servants, as our status as members of a learned and scientific Profession demands.

"The present moment is peculiarly opportune for the formation of such an association, inasmuch as recent revelations have clearly demonstrated the absolute necessity of some change in the system of Poor-law Medical relief, and the public are prepared to urge some alteration on the Legislature. Under these circumstances for us to remain quiescent is to allow those who would aid us to form the conclusion that we are indifferent to the just claims of the sick poor, and careless of our position as State servants.

"We consider that a small annual subscription will be sufficient to cover our working expenses.

"Should you feel disposed to join us, you will kindly signify the same to one of the undersigned at your earliest convenience. "We are, etc,

"JOSEPH ROGERS, M.D., President *pro tem,*
"FRANCIS GODRICH, Treasurer *pro tem,*
"T. ORME DUDFIELD, Hon. Sec. *pro tem.*

"P.S.—Another meeting will be shortly held, of which due notice will be given."

EPIDEMIOLOGICAL SOCIETY.—At the annual meeting of the Society the following office bearers were elected for session 1866-67:—*President.*—Dr. Jenner, F.R.S., Physician in Ordinary to Her Majesty the Queen. *Vice-Presidents.*—The Earl of Shaftesbury, K.G.; Lord Lyttleton; Right Hon. W. Cowper, M.P.; Sir John Thwaites; Dr. Gavin Milroy; Henry W. Acland, M.D., F.R.S., Regius Professor of Medicine in the University of Oxford; Alex. Bryson, M.D., F.R.S., R.N., Director General Navy Medical Department; Edwin Chadwick, Esq., C.B.; William D. Chowne, M.D., F.R.C.P., Physician to the Charing-cross Hospital; James Copland, M.D., F.R.S.; William Farr, M.D., F R.S.; J. Brown Gibson, M.D., C.B., Director General Army Medical Department; Sir J. Ranald Martin, C.B., F.R.S., Physician to the Council of India; Charles Murchison, M.D., F.R.C.P., Physician to the London Fever Hospital; Alex. Nisbett, M.D., R.N., Inspector-General of Fleets and Hospitals; John Simon, Esq., F.R.S., Medical Officer of the Privy Council; Sir Andrew Smith, M.D., K.C.B.; Thomas Watson, M.D., F.R.S., President of the Royal College of Physicians. *Treasurer.*—William Camps, M.D., F.S.S., F.L.S., 40, Park-street, Grosvenor-square, W. *General Secretary.*—J. N. Radcliffe, Esq., 70, Guilford-street, Russell-square, W.C. *Secretary for Navy.*—Dr. Mackay, R.N., F.R.S E., Admiralty, Somerset House, W.C. *Secretary for Army.*—Dr. Francis Bowen, late of the Coldstream Guards, 62, Upper Berkeley-street, Portman-square, W. *Foreign and Colonial Secretaries.*—Belgium and France, Dr. Waller Lewis; Germany and Russia, Dr. Hermann Weber; Sweden, Norway, and Denmark, Dr. W. Daniel Moore; Portugal and the Brazils, Dr. Donnett, R.N.; Egypt and Syria, Dr. Camps; East Indies—Bengal Presidency, Dr. John Jackson; Bombay Presidency and Madras Presidency, Dr. Morehead; West Indies and North America, Dr. Dickson, R.N.; China and the Pacific, Dr. Smart, R.N. *Other Members of Council.*—Dr. Aldis; F. J. Burge, Esq.; Staff-Surgeon Crawford, M.D.; Ernest Hart, Esq.; Dr. Hayward; Dr. Letheby; C. F. J. Lord, Esq.; J. F. Marson, Esq.; Dr. Odling, F.R.S.; Dr. Richardson, Dr. Seaton; Dr. J. Burdon Sanderson.

FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.—INAUGURATION OF PORTRAIT OF DR. WILLIAM WEIR.—A numerous meeting of the fellows of the Faculty of Physicians and Surgeons, both resident and non-resident, and of Dr. Weir's friends, was held in the Faculty Hall, on 19th June, for the purpose of inaugurating a portrait of Dr. Wm. Weir, which is in future to hang in the hall. Dr. J. G. Fleming, President of the Faculty, occupied the chair, supported on the right by Dr. Weir. Dr. Fleming proposed "The health of the Queen," which was duly honoured. Mr. W. H. Hill (clerk) then read the following minute of meeting of Faculty, of date 5th February:—"It was moved by the President, seconded by Dr. Anderson, and carried by acclamation, that as Dr. William Weir completes his fiftieth year of Fellowship on this day, the Faculty resolve to request him to sit for his portrait, to hang in the hall, to mark the appreciation which the Fellows of Faculty entertain of the deep interest he has always taken in the affairs of the corporation, and of the many efficient services he has rendered to it. [The covering which concealed the portrait was removed, and the likeness revealed to view, which was the signal for a general outburst of applause.] Dr. Fleming concluded a speech highly complimentary to Dr. Weir as follows:—"This portrait is most valuable to us as an excellent likeness of our friend, and as enabling us at least to acknowledge that we owe him a debt of gratitude. It will also serve, along with the portrait of our revered friend, Dr. Watson, to show to our successors that this generation at least were not unmindful of good and faithful services. To Dr. Weir that picture must be very valuable, but this demonstration, if I may use the term, must be more so, as indicating to him the respect and esteem in which he is held by his Professional brethren and fellow-citizens. Dr. Weir must have had the usual share of the cares and joys of life. I have no doubt he has often

'Found mankind an unco squad,
And little to be trusted.'

And that his best-laid schemes and most arduous endeavours have come to nought or been ill-requited; but I hope he may consider that some of the bread he cast upon the waters he has this day found—(applause)—and that he experiences the enviable satisfaction of feeling that the compliment we now pay him is an earnest manifestation on our part to his worth and integrity as a man, his accomplishments as a Physician, and to his useful and well-spent life. (Applause.) Before I propose health and happiness to Dr. Weir, I wish to express the hope—and I am sure all present will join with me—that the day may be far distant before any of us who may then be here will require to repair to that portrait to recall more vividly to their memories the characteristic features, and the expression of intelligence, thoughtfulness, and earnestness of purpose which are so truthfully depicted on that canvas." (Applause.) The toast of Dr. Weir's health having been heartily pledged, Dr. Weir made a very feeling reply, in the course of which he said:—"It strikes me with something akin to reverence and awe to think that many years hence, long after I might otherwise have been forgotten, it is possible that some of the Fellows of Faculty of future generations—perhaps a century after the present day—when looking at this memorial of your kindness to me, may say, 'This is the portrait of one of our old members,' or 'William Weir, who occupied the president's chair so far back as the year 1847 and 1848;' and should such an affair ever occur in the unborn far-distant future it would assuredly be followed by this further remark—" And it was the last production from the pencil of the justly celebrated artist, John Graham Gilbert, who flourished in Scotland during the first half of the nineteenth century.'" "*Floreat Res Medicina*" was then given from the chair, after which the proceedings terminated. The portrait, which is a striking likeness, is executed in the lamented artist's best manner. It hangs on the west wall of the Faculty Hall, close to the portrait of Dr. Watson.

THE following are the last week's Cattle Plague Returns.

| Census Divisions. | 1. Attacked. | | | Back cases reported in the week ending June 16, 1866. | 2. Result of reported Cases from the Commencement of the disease. | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Week ending June 2. | Week ending June 9. | Week ending June 16. | | Attacked. | Killed. | Died. | Recovered. | Unaccounted for. |
| Metropolitan Dist. | 8 | 10 | 3 | .. | 7896 | 3416 | 3712 | 318 | 450 |
| South Eastern Co. | 2 | 5 | 10 | .. | 4873 | 1700 | 2538 | 465 | 170 |
| South Midland Co. | 133 | 99 | 50 | 3 | 20545 | 8551 | 10068 | 1540 | 386 |
| Eastern Counties | 37 | 21 | 9 | .. | 11395 | 5373 | 4837 | 789 | 396 |
| South Western Co. | 6 | .. | .. | .. | 1756 | 656 | 822 | 207 | 71 |
| West Midland Co. | 135 | 96 | 117 | 4 | 14626 | 6115 | 6091 | 1512 | 908 |
| North Midland Co. | 170 | 111 | 67 | 1 | 18800 | 10773 | 6265 | 1218 | 544 |
| North Western Co. | 311 | 536 | 190 | 392 | 70815 | 23848 | 35013 | 8237 | 3687 |
| Yorkshire | 76 | 40 | 33 | 7 | 34510 | 7862 | 18350 | 5936 | 2362 |
| Northern Counties. | 33 | 21 | 9 | .. | 8031 | 4926 | 2013 | 974 | 118 |
| Monmouthshire & Wales | 25 | 36 | 27 | .. | 8279 | 1134 | 5791 | 1057 | 297 |
| Scotland | 24 | 12 | 18 | .. | 46839 | 6243 | 28037 | 10706 | 1803 |
| Totals | 960 | 987 | 533 | 407 | 248965 | 80597 | 124187 | 32989 | 11192 |

This Return shows that 533 attacks were reported to have occurred during the week ended June 16, being a decrease of 454 on the previous week.

Correcting the total by adding an estimated average of attacks commencing during the week, but which may be subsequently included under the heading "Back Cases," the number for the week will be 666.

*Note.*—8 Inspectors who reported cases last week have not reported in time for this return—viz., for the county of Bucks, 1; Chester, 1: Cumberland, 1; Lancaster, 2; Leicester, 1; and Lincoln, 2. These inspectors reported 88 cases last week.

## NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

*Medicus.*—Apply at the Austrian Embassy.

*King's.*—The *Illustrated London News* will give an engraving of the epergne, etc., presented as a testimonial to Sir Wm. Fergusson.

*Associate, King's College.*—The operation for popliteal aneurism was first done by Hunter in 1785. He died in 1793.

*Small-pox.*—Inoculation was introduced in 1722 by the celebrated Lady Mary Wortley Montague.

*A Young Writer.*—You will derive great assistance in consulting Dr. Roget's Thesaurus of English Words and Phrases.

*A Young Practitioner.*—Your object might be accomplished through the means of a freehold land and building society.

*Obstetrician.*—If you consult our advertising columns you will find answers to all the questions. For the other information write to the Secretary.

*An Old Fellow by Examination.*—The diplomas have since been altered. They now contain the autographs of the ten examiners. The elected Fellows' diploma remains the same. The colour is given to detect erasures.

*A Fellow.*—If you will refer to your notice, you will find that Thursday next, the 5th, is the day appointed for the election of Fellows into the Council of the College.

*Dr. Hammerton.*—It was a mistake on the part of our contemporary; the only life members of the Council of the College of Surgeons are Messrs. Lawrence, Swan, and South. The latter is removeable from the Court of Examiners by the Council.

*Middlesex Hospital.*—Dr. William Hunter and Sir Charles Bell were both members of the staff of your Hospital; the former demonstrated the hernia congenita in 1755, the same year in which the Hospital was founded.

*Hunter's Chairs.*—A leader on the subject of the sale of John Hunter's chairs by the Council of the College of Surgeons appeared at the time in this journal. The wood of which they were made is unknown; it was brought to this country by the celebrated circumnavigator, Captain Cook. Mahogany was first introduced by a Dr. Gibbons in 1718.

### THE OCULIST'S VADE-MECUM.

Nor fell catarrh, trichiasis, or speck,
Can love subdue or fervent feeling check;
Dense staphyloma with protrusive stare
May vision quench and palpabræ impair,
Or cornea conical contract the view,—
Iritic lymph turn vivid pristine blue,—
Glaucoma green, or yellow growth lie back,
Or white of cataract, or brown or black,
Advance obtrusive; still, with glowing pride,
I'll turn to thee, and claim thee for my bride.
Should cysticerci those bright orbs invade,
And revel in their nidus Nature-made,
No jealous feelings would my bosom share
That other beings had found favour there.
Though brilliant sparks of retinitis try
With glare to dazzle and distract thine eye,
Yet shalt thou find my constancy unswerve,
Fixed as the entrance of the optic nerve,—
Strong as sclerotic,—in attachment far
Closer than Bowman's 'lastic lamina;
Retentive as its cordage, and, in growth,
Continued as the cells o'erlaying both;
With age increasing, like the senile arcs,
Which fondly meet, and join in circling marks;
Tho' time impress'd, new pleasures yet shall spring,
Bright as the yellow spot of Soemmering,
To sweeten life;—then, dearest maiden, fly!—
Thou my chaste lens,—protective capsule, I.

### GRIFFIN TESTIMONIAL FUND.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—The subjoined subscriptions have been further received on behalf of the above fund. The testimonial will be presented at the Freemasons' Tavern at 3 p.m. of Thursday, July 5, and I hope a drawing of it will be found in the *Illustrated London News* of the Saturday or Saturday week following:—

| | | | |
|---|---|---|---|
| R. Fendick, Esq., Bristol | £0 | 5 | 0 |
| M. A. Robinson, Esq., West Ashford .. .. | 0 | 5 | 0 |
| Geo. Bury, Esq., Barnet | 0 | 5 | 0 |
| R. Ceely, Esq., Aylesbury | 1 | 1 | 0 |
| J. Rand, Esq., Woodbridge | 0 | 10 | 0 |
| Dr. C. Hall, Burton-on-Trent | 0 | 2 | 0 |
| Dr. Hewgill, ,, | 0 | 10 | 0 |
| Dr. F. Hawthorn, Uttoxeter | 0 | 10 | 6 |
| R N. Robson, Esq., Durham | 0 | 10 | 6 |
| W. F. Brook, Esq., E. Ashford | 0 | 10 | 0 |
| R. Smith, Esq., Epsom .. | 0 | 5 | 0 |
| W. Carruthers, Esq., Runcorn | 0 | 10 | 6 |
| Ed. H. Ambler, Esq., Hemel Hempstead .. .. | 0 | 10 | 0 |
| E. G. Varenne, Esq., Witham | 0 | 10 | 0 |
| Dr. A. Pearse, Hartismere | 0 | 5 | 0 |
| Dr. S. Drew, Wortley .. | 0 | 10 | 0 |
| R. Wilding, Esq., Church Stretton (2nd donation) | 0 | 5 | 0 |
| Dr. W. J. Tubbs, Wisbeach | 0 | 5 | 0 |
| Dr. T. T. Smart, Bedminster | 0 | 10 | 0 |
| C. W. Wood, Esq., Barrow-on-Soar .. .. .. | 0 | 5 | 0 |
| Dr. Wm. Parry, Newtown and Llanidloes .. .. | 0 | 5 | 0 |
| Dr. R. Gill, Alston .. | 0 | 10 | 0 |
| Dr. J. Hembrough, Castor and Louth .. .. | 0 | 10 | 0 |
| J. M. Cunningham, Esq., Hailsham .. .. | 0 | 5 | 0 |
| H. Lambden, Esq., Bourne | 0 | 10 | 0 |
| P. Martin, Esq., Abingdon | 0 | 10 | 6 |
| Dr. H. J. Collett, Worthing | 1 | 1 | 0 |
| H. Taylor, Esq., Thingoe | 0 | 10 | 0 |
| Messrs. Barton & Turnour, Castor .. .. .. | 0 | 10 | 0 |
| W. D. Ditchett, Esq., Louth | 1 | 0 | 0 |
| C. H. Perry, Esq., Aylsham | 0 | 10 | 0 |

| | | | |
|---|---|---|---|
| F. H. Marshall, Esq., Brixworth .. .. .. | £0 | 5 | 0 |
| Dr. C. Harris, Esq., Rye and Battle .. .. | 0 | 10 | 6 |
| T. G. Wales, Esq., Downham | 0 | 10 | 0 |
| F. S. Garlick, Esq., Halifax | 0 | 5 | 0 |
| Dr. G. Z. Thorne, Swanage | 0 | 2 | 6 |
| T. R. C. Downes, Esq., Church Stretton .. | 1 | 1 | 0 |
| E. M. Thompson, Esq., Sleaford .. .. .. | 0 | 5 | 0 |
| W. C. Arnison, Esq., Hexham | 0 | 10 | 0 |
| L. Wooldridge, Esq., Whitechurch .. .. .. | 0 | 5 | 0 |
| Dr. O. Andrews, Monmouth | 0 | 10 | 6 |
| J. Ness, Esq., Helmsley .. | 0 | 10 | 0 |
| G. O. Rogers, Esq., Newport Pagnel .. .. .. | 0 | 5 | 0 |
| J. R. Bedwell, Esq., Northleach .. .. .. | 0 | 10 | 0 |
| Dr. E. Pierce, Denbigh .. | 0 | 10 | 0 |
| L. M. Bennet, Esq., Brigg | 0 | 2 | 6 |
| A. W. Owen, Esq., Black Torrington .. .. | 0 | 5 | 0 |
| J. Ward, Esq., Penstone (2nd donation) .. .. | 1 | 1 | 0 |
| H. Beck, Esq., Bosmere and Claydon .. .. | 0 | 10 | 6 |
| Sam. Burrows, Esq., Southmolton and Tiverton .. | 0 | 10 | 0 |
| H. B. Goold, Esq., Portsea Island .. .. .. | 0 | 10 | 6 |
| Dr. S B. Bucknill, Rugby | 1 | 1 | 0 |
| G. Gibson, Esq., Ulverstone | 0 | 5 | 0 |
| Dr. J. Wilson, Guisborough | 0 | 5 | 0 |
| Amount previously announced .. .. .. | 137 | 2 | 3 |
| Received at *Lancet* Office | 13 | 11 | 6 |

I am, &c.,
ROBERT FOWLER, M.D., Treasurer and Hon. Sec.
145, Bishopsgate Without, June 27, 1866.

P.S.—Medical students are respectfully invited to attend the meeting on July 5 proximo.

(Copy.)

"Dear Sir,—I sent my subscription to the Griffin testimonial twelve months ago. I am grieved and ashamed so small a sum has been subscribed to the testimonial. Although a poor man with a large family, I shall be willing to subscribe a further sum of five pounds if two hundred other gentlemen will do the same to make up a testimonial worthy the labour Mr. Griffin has bestowed upon the cause which interests us all

"I am, dear Sir,
"Yours respectfully,
"Eccles, June 25, 1866. "RICHARD ROE.
"Dr. Fowler."

### POOR-LAW MEDICAL REFORM ASSOCIATION.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—It would be prudery on my part to pretend ignorance of the honour to be paid me on July 5, and therefore permit me space to say I hope the meeting will not be confined to the donors of the testimonial only, but that all Poor-law Medical Officers who can spare the time will attend, in order that I may take that opportunity of personally consulting them as to the steps they desire to pursue in future in regard to Poor-law Medical reform. I am, &c.,

12, Royal-terrace, Weymouth, June 25, 1866. RICHARD GRIFFIN.

P.S.—The meeting will be held at the Freemasons' Tavern, Great Queen-street, on Thursday, July 5, at 3 p.m. If any members of Parliament would honour the meeting with their presence they would be enabled to ascertain the feelings of the Profession on the subject of the Medical relief of the poor.

### THE PROPOSED MEDICAL CLUB.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I was glad to observe in your impression of Saturday last an announcement of a Medical club, happily designated the "Sydenham." As I happen to have had personal knowledge and experience of the Indian Clubs referred to in the prospectus, I rejoice to find that the "Sydenham" is to be conducted on a similar principle. As this principle, however, may be novel to many of your readers, a statement of the rates of subscription at the Madras Club, of which I was formerly a member, may not be unacceptable.

These were—to residents at Madras 4 Rupees, or 8s., a month; to non-residents, 1 Rupee, or 2s. a month.

From the nature of society in India, being composed almost entirely of the civil and military officers of the various Government services, it follows that an immense majority of the members of the Club were non-residents, and 1 Rupee subscribers. These individual subscriptions, however, so small as to be scarcely felt by the payers (many of whom did not visit the club for years), formed collectively a large annual revenue, and in fact constituted the main-stay of the institution.

A corresponding relation, it is evident, must always obtain between any Medical club whatever that may be established in the Metropolis and its non-resident members, whose actual use of their club must necessarily be limited to those brief holidays that fall to the lot of our Profession.

To these the sleeping accommodation will no doubt prove a most attractive feature, as it is already in the Indian Clubs. Wishing the movement every success, I am, &c.

AL. MAC LEOD, Surgeon-Major Madras Army.

Oriental Club, June 21.

### WIDOW OF A DECEASED SURGEON.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—We beg to acknowledge, with many thanks, the following further contributions for the "Widow of a Deceased Surgeon":—Dr. H. Stirling, £1; Anonymous (Portsmouth), 5s.; Le Gros Clark, Esq., £3 3s.; H. L., £1; W. Bowman, Esq., £2 2s.; George Critchett, Esq , £1 1s.; Dr. Armstrong (Gravesend), £2 2s.; W. Fairlie Clarke, Esq., 10s. 6d.

We are, &c.,
Signed for HENRY LETHEBY,
W. SPENCER WATSON.

27, Montague-street, Russell-square, June 27.

**COMMUNICATIONS** have been received from—

Dr. R. FOWLER; R. GRIFFIN, Esq.; JAMES KEENE, Esq.; T. HUNT, Esq.; A. MACLEOD, Esq.; MEDICO-CHIRURGICAL SOCIETY; A. STEINMETZ, Esq.; Dr. J. E. SMYTH; R. LAWSON TAIT, Esq.; Dr. DUDFIELD; JOHN WITHERFIELD, Esq.; APOTHECARIES' HALL; Dr. ANDREW SMART; J. W. J.; Dr. FLEMING; OBSTETRICAL SOCIETY; LUMLEY EARLE, Esq.; MEDICUS; W. SPENCER WATSON, Esq.; EPIDEMIOLOGICAL SOCIETY; Mr. J. CHATTO; Dr. MUSPRATT; Dr. NEALE; Mr. E. BELLAMY; Dr. SUCKLING; Mr. J. HUTCHINSON.

**NEWSPAPERS RECEIVED—**

The Edinburgh Daily Review.

## VITAL STATISTICS OF LONDON.

*Week ending Saturday, June* 23, 1866.

### BIRTHS.

Births of Boys, 997; Girls, 946; Total, 1943.

Average of 10 corresponding weeks, 1856-65, 1774·4.

### DEATHS.

| | Males. | Females. | Total. |
|---|---|---|---|
| Deaths during the week .. .. .. | 688 | 607 | 1295 |
| Average of the ten years 1856-65 .. .. | 574·7 | 524·1 | 1098·8 |
| Average corrected to increased population.. | .. | .. | 1208 |
| eaths of people above 90 .. .. .. | .. | 1 | 1 |

### DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

| | Population, 1861. | Small pox. | Measles. | Scarlatina. | Diphtheria. | Whooping-cough. | Typhus. | Diarrhœa. |
|---|---|---|---|---|---|---|---|---|
| West .. | 463,388 | 4 | 10 | 9 | — | 12 | 8 | 10 |
| North .. | 618,210 | 13 | 9 | 9 | 2 | 13 | 7 | 6 |
| Central .. | 378,058 | 3 | 5 | 3 | — | 2 | 5 | 6 |
| East .. | 571,158 | 17 | 25 | 8 | 4 | 7 | 11 | 14 |
| South .. | 773,175 | 8 | 20 | 10 | 2 | 20 | 11 | 7 |
| Total .. | 2,803,989 | 45 | 69 | 39 | 8 | 54 | 42 | 43 |

## METEOROLOGY.

*From Observations at the Greenwich Observatory.*

| | |
|---|---|
| Mean height of barometer .. .. .. .. .. .. | 29·705 in. |
| Mean temperature .. .. .. .. .. .. .. | 58·1 |
| Highest point of thermometer .. .. .. .. .. | 79 2 |
| Lowest point of thermometer .. .. .. .. .. | 42·2 |
| Mean dew-point temperature .. .. .. .. .. | 51·1 |
| General direction of wind .. .. .. .. .. .. | S.W. |
| Whole amount of rain in the week .. .. .. .. | 1·12 |

### BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, June 23, 1866, in the following large Towns:—

| Boroughs, etc. | Estimated Population in middle of the Year 1866. | Persons to an Acre. (1866.) | Births Registered during the week ending June 23. | Deaths. | | Temperature of Air (Fahr.) | | | Rain Fall. | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Corrected Average Weekly Number.* | Registered during the week ending June 23. | Highest during the Week. | Lowest during the Week. | Weekly Mean of the Mean Daily Values. | In Inches. | In Tons per Acre. |
| London (Metropolis) | 3067536 | 39·3 | 1943 | 1400 | 1295 | 79·2 | 42·2 | 58·1 | 1·12 | 113 |
| Bristol (City) . . | 163680 | 34·9 | 94 | 73 | ‡152 | 75·5 | 42·6 | 56·0 | 0·49 | 49 |
| Birmingham (Boro') | 335798 | 42·9 | 273 | 163 | 101 | 74·6 | 41·7 | 56·5 | 0·98 | 99 |
| Liverpool (Borough) | 484337 | 94·8 | 371 | 281 | 336 | 72·0 | 48·1 | 57·7 | 0·97 | 98 |
| Manchester (City) . | 358855 | 80·0 | 268 | 203 | ‡182 | 79·0 | 40·0 | 55·7 | 1·21 | 122 |
| Salford (Borough) . | 112904 | 21·8 | 62 | 57 | 45 | 79·5 | 40·2 | 53·1 | 1·10 | 111 |
| Sheffield (Borough) . | 218257 | 9·6 | 141 | 115 | 104 | 75·4 | 41·0 | 52·7 | 1·80 | 182 |
| Leeds (Borough) . | 228187 | 10·6 | 217 | 116 | 129 | 81·0 | 36·8 | 54·9 | 1 38 | 139 |
| Hull (Borough) . | 105233 | 29·5 | 71 | 49 | 41 | .. | .. | .. | .. | .. |
| Nwcastl-on-Tyne, do. | 122277 | 22·9 | 84 | 65 | 58 | 73·0 | 42·0 | 54·2 | 0·14 | 14 |
| Edinburgh (City) . | 175128 | 39·6 | 126 | 84 | 98 | 75·7 | 38·0 | 57·2 | 0·10 | 10 |
| Glasgow (City). . | 432265 | 85·4 | 377 | 252 | 230 | 66·7 | 34·9 | 52·6 | 0·71 | 72 |
| Dublin (City and some suburbs) . | 318437 | 32·7 | 166 | †156 | 142 | 70·4 | 39·0 | 55·8 | 1·64 | 166 |
| Total of 13 large Towns . . . | 6122894 | 34·4 | 4193 | 3014 | 2813 | 81·0 | 34·9 | 55·4 | 0·97 | 98 |
| | | | | | Week ending June 9. | Week ending June 9. | | | | |
| Vienna (City) . . | (1863)<br>560000 | .. | .. | .. | 415 | .. | .. | §<br>67·6 | .. | .. |

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·705 in. The pressure of the atmosphere was 29·35 in. at the beginning of the week, and 30·02 in. at the end of it.

The general direction of the wind was S.W.

---

* The average weekly numbers of births and deaths in each of the above towns have been corrected for increase of population from the middle of the ten years 1851-60 to the present time.

† Registration did not commence in Ireland till January 1, 1864; the average weekly number of births and deaths in Dublin are calculated therefore on the assumption that the birth-rate and death-rate in that city were the same as the averages of the rates in the other towns.

‡ The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

§ The mean temperature at Greenwich during the same week was 61·0°.

## APPOINTMENTS FOR THE WEEK.

### *June* 30. *Saturday* (*this day*).

*Operations* at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free Hospital, 1½ p.m.

### *July* 2. *Monday*.

*Operations* at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 9 a.m. and 1.30 p.m.

### 3. *Tuesday*.

*Operations* at Guy's, 1 p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; St. Peter's Hospital for Stone, 3 p.m.

### 4. *Wednesday*.

*Operations* at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's, 1½ p.m.

OBSTETRICAL SOCIETY OF LONDON (Council, 7 p.m.), 8 p.m. Dr. Routh, "On a New Mode of Treating Epithelial Cancer of the Cervix Uteri and its Cavity." Dr. Tilt, "On the Present Surgical Tendency of Uterine Pathologists, and on Division of the Cervix Uteri." And other Papers.

### 5. *Thursday*.

*Operations* at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.: West London Hospital, 2 p.m.

### 6. *Friday*.

*Operations*, Westminster Ophthalmic, 1½ p.m.

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## LIST OF ERRATA.

Page 110. Note on Mr. Wells's 72nd case of ovariotomy

Page 126, col. 1, line 23, *for* "Professor Brun's," *read* "Dr. Brück"

Page 159, col. 2, line 2 from bottom, *for* "Mr. Gascoyen," *read* "Mr. Gaskoin"

Page 243. Note from Dr. Damant

Page 277, col. 1, last line, *for* "Dr. Phipps," *read* "Dr. Helps"

Page 507. Quotation from Ovid, *for* "Lib. xx.," *read* "Lib. xv."

## END OF VOLUME I. 1866.

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